



ALTERNATIVE ACADEMIC
CALENDAR
HIGHER SECONDARY STAGE



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HIGHER SECONDARY STAGE



राष्ट्रीय शैक्षिक अनुसंधान और प्रशिक्षण परिषद्
NATIONAL COUNCIL OF EDUCATIONAL RESEARCH AND TRAINING



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MESSAGE

At present, many countries of the world including India have been facing the outbreak of Covid-19 with courage. Our teachers and students are currently in homes to prevent the spread of this virus. Many efforts have been made by the Ministry of Human Resource Development to continue the learning of students even at home through on-line resources. Class wise e-resources and e-textbooks are available on various online platforms such as e-pathshala, NROER, SWAYAM and Diksha, so that students in higher classes can self-learn, and students in elementary classes can learn under the guidance of their teachers and parents. In view of this, we have taken a new initiative of developing an Alternative Academic Calendar for our school students. Following this calendar, students of all classes can receive school education systematically at home with the help of their teachers through available technological and social media tools till their schools get open. Parents of primary and upper primary students will be guided by teachers about the activities to be conducted with children using mobile phone, SMS, radio, television or various other social media. These activities are related to their syllabus and learning outcomes. Teachers will also be able to guide students by establishing contact with them through mobile phones or social media. This calendar has been developed by the NCERT in such a manner that it provides adequate space to the State contexts.

I hope that all the States and Union Territories will implement this and provide a new dimension to the learning of school students. I am also very much hopeful that in this difficult time, our teachers will not only be able to reduce the stress and worries of the children but also will be successful in motivating children to learn with interest in the conducive and participatory learning environment created at home by their parents.

(Ramesh Pokhriyal 'Nishank')



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Foreword

In this period of Covid-19, which is declared as a global pandemic, our teachers, parents and students have to remain at homes to prevent its spread in the community. In this situation, it is our responsibility to provide them with multiple alternative ways of learning at home through interesting activities. It is necessary because in the present environment of stress, we not only have to keep our children busy but also maintain continuity of their learning in their new classes. In this context, NCERT has developed an *Alternative Academic Calendar* for all the stages of school education.

Initially, this calendar is prepared for four weeks, which may be extended further. In this calendar the themes/topics have been selected from syllabus and are linked with the learning outcomes. Guidelines have been developed for conducting interesting activities based on these learning outcomes. But it is a matter of fact that many teachers and parents only have simple mobile phones as a tool available at their homes and all the teachers and students do not have virtual classroom facility. In view of this the activities are designed and presented in such a way that many activities can be conducted by the parents and students on their own after talking to the teachers over phone. The teachers can contact parents and students using a range of tools starting from simple mobile phones to internet based diverse technological tools for giving them the appropriate guidelines for conducting these activities given in the calendar.

This calendar includes not only generic guidelines and subject specific activities, but also detailed material on the use of different technological and social media tools as well as strategies for reducing stress and anxiety in the present time. This guideline also contains activities related to art education and health and physical education. It also includes reference of many learning resources along with textbooks.

This calendar is flexible and suggestive. The teachers can implement this taking into consideration the contexts and needs of the State/UT. This calendar has been developed by the faculty members of all the constituent units of the NCERT including NIE, CIET, PSSCIVE and all the five RIEs using on-line platforms such as WhatsApp, Google Hang-out, Zoom, etc., for discussion and feedback. Their hard work is commendable.

For implementing this calendar, SCERT and the Directorate of Education may form teams including faculty members from DIETs and School Principals, who can continuously follow-up and provide support to teachers using mobile phones and other accessible technological tools and social media.

I hope, this calendar will be useful for teachers and parents in creating a very conducive learning environment at home for the students so that they can learn in a very meaningful and joyful way.

Suggestions of the concerned stakeholders are welcomed for further improving this calendar. Suggestions and feedback may be sent to director.ncert@nic.in and cgncert2019@gmail.com.

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HRUSHIKESH SENAPATY
Director
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ALTERNATIVE ACADEMIC CALENDAR FOR LEARNERS, STUDYING AT HOME, AT THE HIGHER SECONDARY STAGE

Guidelines for Teachers, Parents and School Principals

INTRODUCTORY NOTE

India and the world are facing an enormous crisis due to COVID-19. While India as a whole is under lockdown most cities and states in the world too are observing lockdown measures. Medical care professionals, security personnel and people related to delivering essential services are working round the clock to tide over the crisis. Schools, colleges and universities have been closed. Learners are confined to their homes, and so are teachers and parents. Teacher educators, teachers and parents need to find ways to deal with this unprecedented situation arising out of lockdown in order to engage students meaningfully through educational activities at home. While we are making every effort to flatten the epidemic curve, the 'learning curve' of learners must continue upwards. This is only possible by facilitating learning at home.

How should this be done? This question would be uppermost in the minds of teachers and parents. The first thought would perhaps be homework or home assignments. However, the concept of homework is that of a task done individually; moreover, it carries with it the pressure of completion rather than that of joyful learning. Further, as educationists, we prefer not to recommend homework over a long duration for very young learners. We have to therefore seek alternative methods.

Currently, there are various technological and social media tools available for imparting education in fun-filled, interesting ways, which can be used by learners to learn, while at home. Yet, we understand the need to structure it for you. Keeping in mind the varying levels of access to such tools and the variety of their content, NCERT has developed General Guidelines for Implementing the Weekly Plan (for four weeks) for Learners at

Higher Secondary Stage. This entails the use of a commonly used, simple instrument, i.e., the mobile.

Fortunately, almost everyone owns a mobile. Additionally, many people use it for social media such as SMS, WhatsApp, Telegram, Facebook, Twitter as well as Google mail and Google Hangout. These tools have the advantage of providing us with the facility to connect with more than one student and parent at a time.

There is, of course, the possibility that many of us may not have internet facility on the mobile or may not be able to use all the above-mentioned social media tools. In that event, the solution is that students may be guided through SMS on mobile phones or mobile call. Parents' help can also be sought for, if needed by the learners.

A week-wise plan for the highersecondary stage (for Classes XI and XII) has been developed, keeping in view the availability of tools with the teachers. The week-wise plan consists of interesting activities and challenges, with reference to the themes and chapters taken from the syllabus or textbook across the subject areas. Most importantly, it maps the themes with the learning outcomes. It may be mentioned here that the activities are suggestive in nature, not prescriptive, nor is the sequence mandatory. Learners may opt to do the activities that they are interested in, irrespective of the sequence. In the case of learners in the same family studying in different classes, siblings may jointly be involved in the same activity; if the activities cater to different cognitive levels, the elder sibling can guide the younger.

The purpose of mapping of themes with learning outcomes is to facilitate teachers and parents to assess the progress in students' learning. This may be done in a variety of ways i.e., asking questions, encouraging interaction, suggesting another activity of a similar kind, observing the learner's interest and participation in the activity, etc. Further, teachers may design activities on more themes (if required) based on the given learning outcomes. However, it is reiterated that the focus should be on learning, rather than testing for scores.

Learners at the higher secondary stage have well developed language skills and can study on their own with very little guidance from teachers. Therefore, teachers may create a WhatsApp group or SMS to a group of students and guide them on various interesting activities designed for them.

In case of Children with Special Needs or children who need their parents' support, parents may be guided on the activities to be conducted at home.

Links for e-resources have been provided along with the activities. Yet, if it is not possible for the learners to access these resources, the teacher may guide them through a mobile to other reference sources such as a dictionary, an atlas, news headlines, storybooks, etc.

In case tools, such as, WhatsApp, Google Hangout, etc., are being used, teachers may use the audio and video calling facility with a group of students and hold discussions with them in small groups or with all of them together. Teachers may also guide students for peer learning or group learning through these tools. Detailed guidelines for using different technological tools and social media along with precautions to be taken while using online tools are given in Annexure-I.

WhatsApp Group Call

To start a group call on WhatsApp, first, you have to create a group with parents' numbers and then initiate a conversation on the WhatsApp group by clicking on the phone icon on the top right of the screen. Once your contact has picked up the phone you can then click on the + icon on the screen and select multiple contacts to connect to a group call.

In cases where the teacher is using the mobile only for calling/receiving calls and messaging, connecting with individual students or parents on a day-to-day basis may be difficult. The teacher may opt for calling students or parents in a phase-wise manner for interacting, explaining and assessing. Hence, it is suggested that this may be done in smaller groups. For instance, a teacher may call 15 students in a day (Day 1) and explain the work expected from them. On Day 2, she can call 5 out of the 15 students to ascertain the progress of their learning. The progress of the remaining 10 would be ascertained on Day 3 (5 students) and Day 4 (5 students). On the same day (Day 2) she may call an additional 10 students to explain the work expected. This cycle would continue, so that a class of 40 students would be covered in 8-10 days. The teacher can do the same for another set of students. The teacher can also send one collective SMS containing activities to a large group of parents and students simultaneously. Subsequently, parents can also respond to teachers through SMS. Thus, in case of non-availability of the internet, mobile call, SMS are

some of the means through which a teacher can connect with parents and students.

General Guidelines for Implementing Weekly Plan (for four weeks) for Learners at the Higher Secondary Stage

- Higher secondary stage learners are at a late adolescence age. They usually prefer learning by themselves. They may require less support from their parents. Therefore, first, teachers are advised to call up parents of the students to apprise them about the conduct of the suggested activities. Later, the teachers may directly contact their higher secondary stage learners for further interventions.
- In this time of crisis, we are all expected to remain at home (as is the case with our learners) for the welfare of self and society. We do not want their learning to be adversely affected due the loss of academic days. For this we need to adapt to the Flipped Classroom model. Even before the learners are exposed to content learning, we need to equip them with the skill of acquiring knowledge of the content through various activities which they can do on their own. Project and activity-based learning allows students to create projects that facilitate learning of the content as well as honing of the 21st-century skills.
- In case access to the Internet is not possible at a student's home, then teachers can explain to the students and parents about each activity over the phone, through SMS and Voice Recorded messages. Teachers must continuously ensure that the activity has been conducted through a follow-up later.
- In case of availability of an Internet connection and active WhatsApp, Facebook, Google Hangout, Google Mail, Telegram, etc., the teacher can forward the guidelines to parents or even students with a brief explanation.
- Teachers should stress the point that learners should not, in any way, be forced to do the activities. Rather, parents should support learners by creating a friendly atmosphere.
- Week-wise activities are given in the guidelines with overall learning outcomes, as learning outcomes should not be linearly divided. Resources are also mentioned wherever possible.

- Teachers may ask parents to observe changes in children’s behaviour as given in the learning outcomes. Parents or siblings may, through interaction, questions, or similar kinds of activities ensure that the learners are indeed making progress in their learning. Examples are given in the table itself.
- The activities mentioned are suggestive and can be modified based on the availability of resources and prior knowledge of the learner.
- At the higher secondary stage, teachers may encourage learners to undertake more and more self-study, readings, and learning-by-doing under the supervision of parents with resources available at home.
- The week-wise plan too is flexible. The teacher can guide parents and students knowing the strengths, limitations and contexts of the families as well as the interests of the children.
- Observant and active questioning on the part of teacher and parent, as the student progresses in the activity, will be required.
- Also, many activities cater to different concepts and skills which have to be developed in the learner. A watchful integration of the concepts and prior understanding is required on the teachers’ and parents’ part.
- **Clear and sufficient verbal and visual instructions are to be given by teachers and parents so that all children, including Children with Special needs, are able to follow the activities suggested.**
- **To overcome difficulties of access with respect to learning mathematics or other subjects, some learners may require tactile, and others specialised, equipment for work related to shape, geometry, calculations, etc. Some may require simpler language or more pictures. Others may need help in interpreting data in graphs, tables, or bar charts. There may be children who may need help in interpreting oral directions or while making mental calculations.**
- Opportunities are to be given to the student for logical reasoning and language proficiency (in terms of expression of thought). Asking good questions and encouraging the student to think would help to achieve this objective.
- Appropriate worksheets can also be created aligned with these activities and those given in the textbooks.

- Chapter wise e-content is available on the e-pathshala, NROER, SWAYAM and DIKSHA portal of the Government of India; these may be made use of.
- Before beginning the week-wise alternative academic interventions, teachers need to have a talk with parents on 'Reducing Stress and Anxiety'. For this, the teacher needs to go through the Guidelines on 'Reducing Stress and Anxiety' annexed at Annexure-2 and accordingly develop points for a discussion, keeping in view the stage and level of students, and conduct it through a WhatsApp conference call or Google Hangout session with a large number of parents.
- In this Calendar, experiential learning, i.e., Art and Physical Education are integrated into subjects such as languages, science, mathematics and social sciences. Yet, in the interest and for the benefit of learners, activities related to curricular areas such as Arts Education and Health and Physical Education have also been given special space.
- Before the teachers begin explaining these activities, they must counsel to guardians and learners the reasons for and merits of using this calendar.

TRANSACTIONAL STRATEGIES

- ✓ More focus should be on helping students becoming self-learners.
- ✓ Teachers may create WhatsApp groups or other social media teams for different classes. Instead of directly providing resources to learners, this can be done as per the demand of the content.
- ✓ For any concept or topic, the teachers may ask learners in the group to go through a particular portion of a chapter after which they may initiate a discussion related to that portion and ask students to deliberate on that. This may help teachers to know their students' thought process or approach towards a problem.
- ✓ Teachers may highlight only important points during the discussion and the rest of the work may be done by the students themselves. The teacher may intervene only when necessary. They may provide the link of available resources which can help in clarifying the doubts of the students.
- ✓ As in the regular classroom, teachers facilitate learners to understand concepts by involving them in certain activities in groups. Similarly,

they may form subgroups on WhatsApp involving different students. Each group may be assigned different tasks and they may be asked to get back to the teacher.

Exemplar

For the teacher (How to conduct Reading Activity — guiding students through mobile)

The process would involve pre reading, while reading and post reading activities.

Pre-reading

Learners learn from their previous knowledge and they respond with understanding and interest if they can connect their prior knowledge and experiences to the tale being told. Some pre reading activities that can be used are:

- asking questions related to the theme of the story, showing pictures to generate ideas and related vocabulary,
- teaching new vocabulary or expressions that will appear in the story, and giving some listening activity for learners related to the theme.

While reading

- Depending on the length of the text divide it into parts and while reading it, check the comprehension of the learners for each part. Comprehension check can be conducted by using true/false, matching, multiple choices, short answer type questions, filling the gaps, completion type, word attack questions and table completion type questions, etc. Along with questions and answers, activities on all the four skills can also be given.

Post reading

- Post reading activities can focus on topics beyond the text. For example -
 - ✓ Grammar in context
 - ✓ Writing activities
 - ✓ Points for debate
 - ✓ Writing dialogues for role play
 - ✓ Arrange the sentences in a paragraph
 - ✓ Group retelling
 - ✓ Creating their own ending
 - ✓ Story mapping
 - ✓ Story boarding
 - ✓ Reflecting

Suggestions for Engagement and Assessment of Learners

Assessment needs to be an integral part of the teaching-learning process; whether through face-to-face or distance mode. Learners may be motivated for self-assessment. Following are some activities through which learners at any stage can do self-assessment under the guidance of teachers and

parents. Teachers need to keep in view that the activities must be interesting and challenging for the learners.

Assignments can be given to students having—

- ✓ Multiple Choice Questions
- ✓ Short Answer Type Questions
- ✓ Long Answer Questions
- ✓ Activity Based Questions
- ✓ Open Book questions

Learners may be motivated to —

- solve crossword puzzles.
- participate in online quizzes by using Kahoot!
- construct models or devices related to the concept learnt.
- discuss some questions posed by the mentor or any query raised by any learner.
- write slogans or create any poem on the concept learnt.
- create games on the concept learnt.
- prepare a spider or a hierarchical type of a Concept Map of the lesson learnt.
- prepare a list of 21st century skills/values learnt from the lesson.
- prepare two questions each for understanding, application, and higher order thinking from the lesson learnt.

SUBJECT-WISE WEEKLY ACADEMIC CALENDAR

The subject-wise weekly academic calendar starts with Learning Outcomes. Learning Outcomes may be understood as changes in the behaviour of students which may be observed during the process of learning, leading to development of competencies and skills in Learners. They may ask questions, construct sentences, develop stories, think of innovative methods to solve problems, etc., during their learning process. Their responses or changes in the process of learning lead to the development of competencies and skills. These responses and changes are not fixed, in the sense that they may vary depending on the pedagogy that the teacher uses. However, they are all inter-linked and cumulative in nature. They need not be measured,

rather they need to be observed and if required, supported, particularly if a gap in learning is identified. It is reiterated that these are not textbook dependent. These require focus on a student's day-to-day experiences. Teachers and parents need to know about Learning Outcomes, so that they can observe the progress in the learning of their children as a process rather than take learning as a product and forcing children to go through a test for scores.

The next column is titled 'Resources'. This column contains references to textbooks, chapters, themes, e-resources, some web links, etc., for teachers, to be referred to if they want to design contextual activities for learners. These are also helpful for parents to understand the activities they are going to conduct with their children. It may be mentioned here that there is no one-to-one mapping of activities with the learning outcomes. Yet, while conducting these activities, parents and teachers can observe changes in students in terms of their questions, discussions, their actions such as classification of objects, etc. These changes relate to the Learning Outcomes, and ensure that the student is learning. The activities given here are exemplar. Additionally, teachers and parents may design their own activities that focus on these learning outcomes.

This Calendar contains class-wise and subject-wise activities in tabular forms. It contains a calendar for science subjects such as Physics, Chemistry and Biology. Likewise, under social sciences, it covers History, Political Science, Economics, Geography, Psychology and also Sociology. In some subject areas such as History and Geography, the textbooks are NCERT's textbooks that are printed in 2 or 3 parts. This calendar contains activities from each of the parts of textbooks in these subject areas. Since, these subjects have taken the form of a discipline at this stage, it is necessary to encourage rigor in students for these subject areas.

SCIENCE

BIOLOGY (CLASS XI-XII)

Biology (Class-XI)

Learning Outcomes	Sources/ Resources	Suggested Activities (to be guided by teachers)
<p>The learner</p> <ul style="list-style-type: none"> – differentiates organisms, phenomena and processes based on certain characteristics and salient features such as living and nonliving, acellular, unicellular and multicellular; different groups of organisms, etc. – identifies and classifies organisms based on certain characteristics / salient features systematically in more scientific and organised manner; such as five kingdom classification, several levels of organisation of classification of Plant and Animal Kingdom, taxonomic categories, etc. – efficiently explains systems, relationships, processes and phenomena, such as, systematic binomial nomenclature of organisms; basis and systems of biological classification and their characteristics; life cycles of various plants and animals; importance of 	<p>NCERT/State Textbook</p> <p>All flip textbooks of NCERT are available on the following website https://epathshala.nic.in/process.php?id=students&type=eTextbooks&ln=en</p> <p>QR codes on the <i>Textbook of Biology, Class XI</i> for e-resources</p> <p>E-resource available on NROER National Repository of Open Educational Resources (NROER) https://nroer.gov.in/home/e-library/</p> <p><i>Exemplar Problem – Biology, Class XI</i> http://ncert.nic.in/ncerts/1/Keep401.pdf</p> <p>http://ncert.nic.in/ncerts/1/Keep402.pdf</p>	<p>WEEK 1</p> <p>Unit I Diversity in Living World</p> <p>Chapter 1: Living World</p> <ol style="list-style-type: none"> 1. Learners in biology class may be involved using the available resources, such as, textbooks available on e-pathshala, e-resources available on QR codes etc., in making a survey of literature and explore their surroundings and differentiate life forms on the basis of their defining features, such as, growth, reproduction, metabolism, consciousness, etc. 2. Learners may explore videos on YouTube to find out various life forms on the earth to understand diversity in life forms; the biodiversity. 3. Learners may be involved to enlist organisms in their surroundings and may be allowed to surf internet to find out the generic and specific names of the organisms enlisted by them. Later they may be assessed for the importance of naming the plants and how to write the generic and specific names of an organism. 4. Learners may be involved in an activity such as collecting data about any common plants having two species under the same genus, two genera under the same family, and other taxonomic categories and so on to understand the hierarchical arrangement of these taxonomic categories and submit a report. 5. Learners may be involved in an investigatory project on the topic “Taxonomical Aids and their importance” using various resources and make a presentation for five minutes on Zoom or any video conferencing platform.

<p>taxonomical aids, Biodiversity, etc.</p> <ul style="list-style-type: none"> - draws labelled diagrams, flow charts, concept maps, and graphs, such as, structure of various organisms; life cycles of various plants and animals, systematic classification, etc. - plans and conducts investigations and experiments to arrive at and verify the facts, principles, phenomena, or to seek answers to queries on their own, with organisms in nature to verify their lifecycle and seek answer to the queries on their own, such as, bryophytes and pteridophytes follow haplo-diplontic life cycle, etc. - applies scientific concepts in daily life and solving problems, such as, conserving and using medicinal plants or products for maintaining health and wellbeing, etc. - handles laboratory and agricultural tools, and apparatuses, instruments and devices properly for performing activities/ experiments/ investigations, such as, developing a kitchen garden/ vertical garden, etc. - draws conclusion from activities/ experiments and investigatory projects they perform, 	<p>http://ncert.nic.in/ncerts/1/Keep403.pdf</p> <p>http://ncert.nic.in/ncerts/1/Keep404.pdf</p> <p><i>Laboratory Manual of Biology, Class XI</i> http://ncert.nic.in/ncerts/1/kelm301.pdf</p> <p>http://ncert.nic.in/ncerts/1/kelm302.pdf http://ncert.nic.in/ncerts/1/kelm303.pdf</p> <p>NCERT Official – YouTube https://www.youtube.com/channel/UCT0s92hGjqLX6p7qY9BBrSA</p> <p>Live telecast on Swayam Prabha Channel for various concepts of Biology</p> <p>MOOCs at Swayam</p> <p>ITPD package on Biology developed for teachers at Higher Secondary Stage</p>	<h2 style="color: purple;">WEEK 2</h2> <h3 style="color: purple;">Chapter 2</h3> <p>Classification of Living Organisms</p> <ol style="list-style-type: none"> 1. Learners may be encouraged to watch YouTube video on five kingdom classification and draw a concept map in the form of a tree showing all five kingdoms with their characteristic features. 2. Learners may be encouraged to work on computer and using paint and brush they may be encouraged for making colored drawing and painting of different organisms with proper labelling with important features and organise them under five kingdom classification and make an e-book and pdf version of the e-book may be shared with peers. The e-book may later be compiled by all learners of Class XI and kept for reference for all school learners. 3. The learner may be facilitated with the YouTube video links and to surf the internet to collect the information about the acellular and may be encouraged to self-assess with the interactive assessment items. <h2 style="color: purple;">WEEK 3 AND 4</h2> <h3 style="color: purple;">Chapter 3: Plant Kingdom</h3> <ol style="list-style-type: none"> 1. Learners may be encouraged for surfing internet on given topics related to Plant Kingdom, '<i>Plantae</i>' in groups and develop a power-point presentation and share with all on google group. After an incubation period of one day teacher may initiate discussion on the given investigatory projects on WhatsApp group where learners will find the opportunity to argue, discuss, share and assess their own thoughts. 2. The learner may be facilitated to make a herbarium of 10 common weed plants in their area. Using herbarium sheets, write their systemic positions and share with peers. 3. Learners must be facilitated to collect five cereals, five pulses, five spices and condiments, three oil yielding and two beverages from their kitchen. With the help of internet, write their
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<p>such as, there are a variety of life forms on the earth; a group of organisms like those under <i>plantae</i> or <i>animalia</i> may have many similar characteristics; etc.</p> <ul style="list-style-type: none"> - communicates the findings and conclusions effectively, such as, takes part in the discussion over ZOOM platforms or WhatsApp media about characteristics of different phyla under animal kingdom; or methanogens are present in guts of ruminants and they play an important role in biogas production, etc. - exhibits creativity in designing models using eco-friendly resources/preparing charts/paintings/sketching, etc., on different topics, such as, role of plants or animals in environmental conservation or structure of an insect, etc. - exhibits values of honesty, objectivity, rational thinking and freedom from myth and superstitious beliefs while taking decisions, such as, reports and records experimental data accurately, reveals respect for life by 		<p>levels of organisation of classification and prepare a poster under the topic “Plants Products in Daily Life”. Discuss and share it with peers.</p> <ol style="list-style-type: none"> 4. Each Learner may be assigned to draw/trace life cycle of any one plant from any of the five groups under <i>plantae</i> and be allowed to discuss the type of alternation of generation of each of the plants. Later all learners relate the presence of the type of alternation of generation in algae, bryophytes, pteridophytes, gymnosperms and angiosperms. 5. Learners may be allowed to plant five indoor plants and conserve them. Take their pictures and make a poster on power point and write their classification using internet. They may be allowed to share their work with peers. <p>WEEK 4</p> <p>Chapter 4: Animal Kingdom</p> <ol style="list-style-type: none"> 1. Learners may be divided in 11 groups and each group is allowed to work on 11 different <i>phyla</i> of <i>animalia</i>. They may be encouraged to record their salient features such as, level of organisation, symmetry, <i>coelom</i>, etc., and member animals belonging to that particular <i>phylum</i> and put colored pictures from internet with their classification. The report of each group may be presented by the group members using Zoom/Google platform and circulated for review among all 11 groups for comparison with other phyla and comments. Later the learners may be encouraged to draw a concept map of different phyla and share with peers for discussion and improvement. 2. The learner may be called upon at ZOOM/Google platform to debate upon the topic ‘Role and Importance of Animals in Biodiversity Conservation’, or ‘Role of methanogens in biogas production’, where all learners are encouraged to share their views. Learners were allowed to work as reporters in each others’ sessions and they may be encouraged to make a brief report.
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<p>conserving plants and animals, etc.</p> <ul style="list-style-type: none"> - makes efforts to conserve environment realising the inter-dependency and inter-relationship in the biotic and abiotic factors of environment, such as, by appreciating conservation of medicinal plants and rearing of pets etc - applies scientific concepts in daily life and solving problems, such as, by maintaining aquarium, conserving medicinal plants, etc. 		<p>The report may be kept in the school library as reading material.</p>
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Biology (Class XII)

Learning Outcomes	Sources/ Resources	Suggested Activities (to be guided by teachers)
<p>The learner</p> <ul style="list-style-type: none"> - appreciates limited life span of organisms and therefore the need of the reproduction process for sustenance of a species over a long period of time - comprehends and able to explain the processes of reproduction i.e., asexual and sexual in different organisms - comprehends and able to explain various strategies adopted by different organisms for asexual reproduction, e.g., binary fission, budding, sporulation, vegetative propagation, fragmentation etc. - appreciates the similar fundamental pattern of sexual reproduction in all such organisms where it occurs, in which germ cells of two different organism produces male and female gametes and after 	<p>NCERT/State Textbook</p> <p>Theme Reproduction in Organisms Content discussed in the textbook</p> <ul style="list-style-type: none"> ✓ Concept of life span of an organism and its sustenance by the process of reproduction ✓ Methods of Reproduction: Asexual and Sexual ✓ Asexual Reproduction: Binary Fission, Encystment, Sporulation, Budding, Gemmule formation, Vegetative propagation (in plants), Fragmentation ✓ Similarity in the pattern of sexual reproduction in organisms: Vegetative and Reproductive phase ✓ Events in Reproductive phase: Pre-fertilisation, Fertilisation and Post Fertilisation Events ✓ Pre-fertilisation Events: Gametogenesis i.e., formation of male and female gametes in male and female reproductive parts or organism ✓ Transfer of gamete and Fertilisation 	<p>Remember that for any of the activities or exploration learners must not venture out of their home due to the Covid-19 pandemic. All explorations are to be done at home if materials are available, otherwise online exploration should be done.</p> <p>WEEK 1</p> <ul style="list-style-type: none"> ✓ Explore the life span of different organisms from different sources including textbook of Biology for Class XII (Chapter 1) and other online resources ✓ Compare the lifespan of any organism with its sustenance over a long period of time on earth. You will realise that such sustenance of any organism is possible only by leaving progeny after death. ✓ The strategy adopted by an organism to continue by producing its progeny is called reproduction. ✓ Click and open following links to understand different strategies adopted by organisms for reproduction. ✓ Reproduction methods: https://opentextbc.ca/biology/chapter/24-1-reproduction-methods/; https://samagra.kite.kerala.gov.in/uploads/12/botony/916/1716/12_Ch916_12151/main.html <u>Asexual Reproduction</u> https://ciet.nic.in/swayam_biology03_module01.php <p>Activity 1: Prepare list of plants and animals which are capable of reproducing—</p> <ul style="list-style-type: none"> ✓ Only asexually

<p>fertilisation offspring is produced.</p> <ul style="list-style-type: none"> - comprehends and appreciates the process of gametogenesis to produce gametes in which number of chromosomes are reduced to half (diploid to haploid) - comprehends and appreciates that fertilisation restores the diploid condition in offspring - appreciates the fact that sexual reproduction brings variability among offspring - comprehends and appreciates that the process of fertilisation may be internal or external with its features and significance - understands different mechanisms of early development i.e., embryogenesis in different organisms mainly plants and animals - understands and explains oviparity and viviparity among animals 	<ul style="list-style-type: none"> ✓ Post fertilisation events: Zygote formation, Embryogenesis <p>Resources</p> <ul style="list-style-type: none"> ✓ E-Resources developed by NCERT, which are available on NROER and also embedded in QR Code in textbooks of NCERT. ✓ Live telecast of various science concepts at Swayam Prabha Channel https://www.youtube.com/channel/UCT0s92hGjqLX6p7qY9BBrSA <p>Links of resources given below</p> <ul style="list-style-type: none"> ✓ About Reproduction methods: https://opentextbc.ca/biology/chapter/24-1-reproduction-methods/; https://samagra.kite.kerala.gov.in/uploads/12/botony/916/1716/12_Ch916_12151/main.html ✓ Asexual Reproduction: https://ciet.nic.in/swayam_biology03_module01.php ✓ Binary fission in prokaryotes: https://bio.libretexts.org/Bookshelves/Microbiology/Book%3AMicrobiology_(Boundless)/6%3ACulturing_Microorganisms/6.6%3AMicrobi 	<ul style="list-style-type: none"> ✓ Only sexually ✓ Both asexually and sexually ✓ (Also compare the life span of asexually and sexually reproducing organisms) <p>Activity 2: Identify various events taking place during asexual reproduction (different methods) and sexual reproduction from the book or other online resources.</p> <ul style="list-style-type: none"> ✓ Click and open the following links to understand different types of asexual reproduction strategies in different types of organisms: ✓ Binary fission in prokaryotes: https://bio.libretexts.org/Bookshelves/Microbiology/Book%3AMicrobiology_(Boundless)/6%3ACulturing_Microorganisms/6.6%3AMicrobial_Growth/6.6A%3ABinary_Fission ✓ Sporulation as reproduction process: https://www.microscopemaster.com/sporulation.html <p>Activity 3: Students can grow bread mould or may observe developing mould or fungus on bread pieces left for few days at a humid place. They may observe some of these mould or fungus using their magnifying lenses. Think from where these fungi have appeared.</p> <ul style="list-style-type: none"> ✓ Vegetative propagation in plants: https://www.sciencelearn.org.nz/resources/1662-vegetative-plant-propagation <p>Activity 4: Children can observe some of the potatoes available in their home. They may keep two-three old potatoes at a humid place. After a few days they may observe germinating eye buds and if left for few more days they may even observe growth of roots and shoot.</p> <ul style="list-style-type: none"> ✓ Fragmentation: https://www.biologyonline.com/dictionary/fragmentation ✓ Study about all asexual reproduction strategies adopted by different plants and animals.
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	<p>al_Growth/6.6A%3A_Binary_Fission</p> <ul style="list-style-type: none"> ✓ Sporulation as a reproduction process: https://www.microscopemaster.com/sporulation.html ✓ Vegetative propagation in plants: https://www.sciencelearn.org.nz/resources/1662-vegetative-plant-propagation ✓ Fragmentation: https://www.biologyonline.com/dictionary/fragmentation ✓ Sexual Reproduction: https://www.biologyonline.com/dictionary/sexual-reproduction ✓ Gametogenesis: https://bio.libretexts.org/Bookshelves/Introductory_and_General_Biology/Book%3A_General_Biology_(Boundless)/43%3A_Animal_Reproduction_and_Development/43.3%3A_Human_Reproductive_Anatomy_and_Gametogenesis/43.3C%3A_Gametogenesis_(Spermatogenesis_and_Oogenesis) 	<p>Find out whether all such strategies are adopted by all the organisms mentioned in the book or given links or online resources which you could explore. If no, then try to explore the reasons.</p> <ul style="list-style-type: none"> ✓ Draw neat and labeled diagrams of various asexual reproduction strategies in plants and animals ✓ Communicate with your peers or teacher in case of any query or to share experience and understanding. <p>WEEK 2</p> <ul style="list-style-type: none"> ✓ Study events of sexual reproduction process from your textbook and try to conceptualise the necessity of these events. ✓ Click to open the following links to know more about different gamete formation in unicellular organisms, plants and animals: Sexual Reproduction: https://www.biologyonline.com/dictionary/sexual-reproduction ✓ Now when you have understood the importance of gamete in the process of sexual reproduction, try to explore the part of plants or animals where gametes are produced. <p>Activity 5: List names of plants in which flowers are unisexual and bisexual.</p> <p>Activity 6: Prepare a list of animals which do not exhibit sexual dimorphism (separate male and female) and explore the process of fertilisation in them.</p> <ul style="list-style-type: none"> ✓ Correlate the process of gametogenesis and fertilisation with meiotic cell division ✓ Explore the process of embryogenesis and production of offspring in plants and animals.
<ul style="list-style-type: none"> • understands flower as the organ of sexual reproduction and role of its different parts. • explains structure of different parts of androecium and 	<p>Theme Reproduction in Flowering Plants Content discussed in the textbook</p> <ul style="list-style-type: none"> ✓ Flower as reproductive structure of angiosperm plants ✓ Structure of stamen, 	<p>WEEK 3</p> <ul style="list-style-type: none"> ✓ Observe the different parts of any flower available in any plant in

<p>gynoecium (male and female parts of the flower) and their functions.</p> <ul style="list-style-type: none"> explains different structural variation and arrangement of male and female parts of the flower (androecium and gynoecium) in different flowering plants. comprehends and appreciates the pre-fertilisation events in male and female parts of the flower. understands the process of development of microspores (pollen) and megaspores (ovule). understands and appreciates the process of pollination and appreciate its significance. appreciates the role of different pollinating agents especially insects. understands post pollination events, fertilisation, embryogenesis and seed development. appreciates the role of pre-fertilisation, pollination and 	<p>microsporangium and pollen grains</p> <ul style="list-style-type: none"> ✓ Microsporogenesis ✓ Structure of pollen grain ✓ Structure of pistil, megasporangium and embryo sac ✓ Megasporogenesis ✓ Pollination strategy in flowering plants ✓ Double Fertilization ✓ Endosperm and embryogenesis ✓ Plant seed and fruit ✓ Apomixis and Polyembryony <p>Resources</p> <ul style="list-style-type: none"> ✓ E-Resources developed by NCERT, which are available on NROER and also attached as QR Code in textbooks of NCERT. ✓ Live telecast of various science concepts at <i>Swayam Prabha</i> Channel https://www.youtube.com/channel/UCT0s92hGjqLX6p7qY9BBrSA <p>Online links of resources</p> <ul style="list-style-type: none"> ✓ Flower reproductive parts: Fertilisation: https://www.ncbi.nlm.nih.gov/books/NBK26843/ ✓ Reproductive development structure: https://bio.libretexts.org/Bookshelves/Introductory_and_General_Biology/Book%3A_General_Biology_(OpenStax)/6%3A_Plant_Structure_and_Funct 	<p>your house, if available. (Please do not venture out of your house premise due to lockdown)</p> <ul style="list-style-type: none"> ✓ Identify the reproductive parts, i.e., stamen and pistil in the flower ✓ Study about the parts of flowers from different sources including <i>Textbook of Biology for Class XII</i> (Chapter 2) and other online resources ✓ Click and open following links to understand the reproductive structure of flower: ✓ Flower reproductive parts—Fertilization: https://www.ncbi.nlm.nih.gov/books/NBK26843/ ✓ Reproductive parts of flower and test items: https://bio.libretexts.org/Bookshelves/Introductory_and_General_Biology/Book%3A_General_Biology_(OpenStax)/6%3A_Plant_Structure_and_Function/32%3A_Plant_Reproduction/32.E%3A_Plant_Reproduction_(Exercises) ✓ Study about the structure of stamen, microsporangium, process of microsporogenesis from <i>Biology Textbook Class XII</i> (Chapter 2) and other resources. <p>Activity 7: Draw neat and labeled diagrams of a section of young and mature anther.</p> <ul style="list-style-type: none"> ✓ Study about the structure of pistil, megasporangium, process of megasporogenesis from the <i>Class XII Biology textbook</i> (Chapter 2) and other resources. <p>Activity 8: Draw neat and labelled diagrams of different stages of megaspore and embryo sac.</p> <ul style="list-style-type: none"> ✓ Online Link: Reproductive development structure: https://bio.libretexts.org/Bookshelves/Introductory_and_General_Biology/Book%3A_General_Biology_(OpenStax)/6%3A_Plant_Structure_and_Function/32.1%3A_Reproductive_Development_and_Stru
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<p>post-fertilisation event in artificial hybridisation for crop improvement and parthenocarpy.</p> <ul style="list-style-type: none"> • understands the structure of fruit and seed. • comprehends and appreciates a few rare methods of reproduction like Apomixis and polyembryony 	<p>ion/32%3A_Plant_Reproduction/32.1%3A_Reproductive_Development_and_Structure</p> <ul style="list-style-type: none"> ✓ Pollination and fertilization: https://courses.lumenlearning.com/biology2xmaster/chapter/pollination-and-fertilization/ ✓ Pollination: https://www.intechopen.com/books/pollination-in-plants/introductory-chapter-pollination ✓ Fertilization, embryogenesis and seed development in plants: http://bio1520.biology.gatech.edu/growth-and-reproduction/plant-reproduction/ ✓ Fertilisation: https://www.ncbi.nlm.nih.gov/books/NBK26843/ ✓ Pollination: https://www.intechopen.com/books/pollination-in-plants/introductory-chapter-pollination ✓ Fertilisation, embryogenesis and seed development in plants: http://bio1520.biology.gatech.edu/growth-and-reproduction/plant-reproduction/ 	<p>cture</p> <ul style="list-style-type: none"> ✓ Study the process of pollination in different plants from the Biology textbook and other resources including the following links: ✓ Pollination and fertilisation: https://courses.lumenlearning.com/biology2xmaster/chapter/pollination-and-fertilization/ ✓ Pollination: https://www.intechopen.com/books/pollination-in-plants/introductory-chapter-pollination ✓ Study about different strategies adopted by plants having bisexual flower for cross pollination <p>Activity 9: Search different examples of pollination mechanisms and list with example.</p> <ul style="list-style-type: none"> ✓ List advantages of cross pollination in plants <p>WEEK 4</p> <ul style="list-style-type: none"> ✓ Study about pollen-pistil interaction and post pollination events in flower ✓ Write about the importance of artificial hybridisation for crop improvement and strategy adopted for this ✓ Study about the process of double fertilisation in angiosperm flower in the Biology textbook and other resources including the following link: ✓ Fertilisation, embryogenesis and seed development in plants: http://bio1520.biology.gatech.edu/growth-and-reproduction/plant-reproduction/ ✓ Pollination and fertilisation: https://courses.lumenlearning.com/biology2xmaster/chapter/pollination-and-fertilization/ ✓ Post fertilisation event: <ul style="list-style-type: none"> ▪ Endosperm development
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		<ul style="list-style-type: none"> ▪ Embryogenesis and formation of embryo in dicot and monocot ✓ Study about seed formation and its type from the Biology textbook and other resources ✓ Write about your understanding on fruits and seeds. <p>Activity 10: Prepare a list of edible parts of 20 different types of fruits</p> <ul style="list-style-type: none"> ✓ Parthenocarpic fruit ✓ Study about formation of seeds without fertilisation (apomixis) ✓ Understand about polyembryony with example ✓ Draw labelled diagrams of different types of seed ✓ Test your understanding by solving problems given in the book entitled, “Exemplar Problem in Biology for Class XII” and solve problems given to test your understanding
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CHEMISTRY (CLASSES XI-XII)

Chemistry (Class XI)

<i>Learning Outcomes</i>	<i>Sources/Resources</i>	<i>Suggested Activities (to be guided by teachers)</i>
<p>The learner</p> <ul style="list-style-type: none"> understands and appreciates the contribution of ancient chemistry of India and its role in different spheres of life such as, <i>Rasayan Shastra, Rastantra, Ras Kriya or Rasvidya</i>, etc. Identifies and appreciates the modern principles of chemistry in different spheres of life such as weather patterns, functioning of brain and operation of a computer, production in chemical industries, manufacturing fertilisers, alkalis, acids, salts, dyes, polymers, drugs, soaps, detergents, metals, alloys, etc. explain the characteristics of three states of matter such as solids, liquids and gases classifies different substances as elements, compounds and mixtures uses SI Units, symbols, definitions, nomenclature of physical quantities and formulations as per international standards, such as, length (m), mass (kg), etc. 	<p>NCERT/State Textbook Chemistry Part I</p> <p>Theme Some Basic Concepts of Chemistry Contents discussed in the textbook</p> <ul style="list-style-type: none"> Importance of chemistry Nature of matter Properties of matter and their measurement Uncertainty in measurement Laws of chemical combinations Dalton atomic theory Atomic and molecular masses Mole and Molar mass percentage composition Stoichiometry and stoichiometric calculations <p>E-Resources developed by NCERT, which are available on NROER and also attached as QR Codes in textbooks of NCERT http://ncert.nic.in/ncerts/1/khepsol.pdf https://www.youtube.com/watch?v=DN8SINM9y9U</p>	<p>WEEK 1</p> <p>The Learners are told to use textbooks / web resources to explore the following:</p> <ul style="list-style-type: none"> Ancient chemistry vs Modern chemistry Importance of chemistry in everyday life Issues which affect our environment such as effects of pesticides, acid rain, green houses gases, use of heavy metals, etc. Compile the report and share with your classmates on Zoom, a Googlegroup or WhatsApp group Open the given link https://www.youtube.com/watch?v=DN8SINM9y9U https://www.youtube.com/watch?v=1JKT3DSZUd0&list=PL00tFIH2_OK3dKPk0YY-jTihD9IUi3NXo Observe the videos and try to solve problems given in your textbook related to these concepts. If you have any doubts, discuss with your friends or teacher. Solve the various types of questions given in <i>Exemplar Problems for Class XI Chemistry</i>, prepared by NCERT, on a daily basis. Involve yourself in some indoor activities like yoga, meditation, etc. Get enrolled on the NROER CIET platform, use other e-resources available on NROER, e-pathshala <p>WEEK 2</p> <p>Open the given links. These videos discuss so-me basic concepts of</p>

<ul style="list-style-type: none"> • differentiates between precision and accuracy; • explains various laws of chemical combination such as Law of conservation of mass, Law of multiple proportion etc. • plans and conducts investigations and experiments to arrive at and verify the facts or principles to seek answers to queries on their own, such as, to verify various Laws of Chemical Combinations, etc. • takes initiative to know about scientific discoveries and inventions, such as, Antoine Lavoisier, Joseph Proust, Joseph Louis for discovering various Laws of Chemical Combinations • calculates and appreciates significance of atomic mass, average atomic mass, molecular mass and formula mass, stoichiometric calculations, etc. • handles laboratory apparatus instruments, and devices properly, such as, analytical balance, graduated cylinders, volumetric flask, burette, pipette, etc. • communicates the findings and conclusions effectively (orally and written form) • realises and appreciates the 	<p>https://www.youtube.com/watch?v=lJKT3DSZUd0&list=PL0OtfIH2_0K3dKPkoYY-jTihD9IUi3NXo</p> <p>https://www.youtube.com/watch?v=3JhpUt3CMM</p> <p>https://www.youtube.com/watch?v=40OiAt2t658</p> <p>https://www.youtube.com/watch?v=sSlObBndH-A&list=PLDAj64x1PE-nVzv4Kn-7uOIRCR7RITsF3</p> <p>https://www.youtube.com/watch?v=OqUSjzJ_wng</p> <p>https://www.youtube.com/watch?v=bOzArOtRtSY</p> <p>https://www.youtube.com/watch?v=L9JHyT9wvbs</p> <p>https://www.youtube.com/watch?v=hhMO7GPi3VI</p> <p>https://www.youtube.com/watch?v=WpMYlBk_utE</p>	<p>chemistry.</p> <p>https://www.youtube.com/watch?v=3JhpUt3CMM</p> <p>https://www.youtube.com/watch?v=40OiAt2t658</p> <p>https://www.youtube.com/watch?v=sSlObBndH-A&list=PLDAj64x1PE-nVzv4Kn-7uOIRCR7RITsF3</p> <p>https://www.youtube.com/watch?v=OqUSjzJ_wng</p> <p>https://wwwtube.com/watch?v=bOzArOtRtSY</p> <p>https://www.youtube.com/watch?v=L9JHyT9wvbs</p> <p>https://www.youtube.com/watch?v=hhMO7GPi3VI</p> <p>https://www.youtube.com/watch?v=WpMYlBk_utE</p> <p>After watching these videos, read the chapter from your textbook. Try to solve the questions given at the end of the chapter in your notebook.</p> <ul style="list-style-type: none"> • Try to develop assignments based on the concepts given in the chapter and exchange them with your friends. Discuss the innovative questions developed in this process with your friends. • Prepare some simple activities of your own on mole concept, states of matter, etc. • Identify some homogeneous and heterogeneous mixtures present in your home/ surroundings. • Read and find out more about scientists and their experiments based on chemistry. Prepare the report and share with your friends. You can carry the report to school once it is open. The report can be placed in the library as an example for other learners. • Balance some chemical reactions given in NCERT Textbook. • Try to read some research papers
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<p>interface of chemistry with other disciplines, such as Biology, Physics, Mathematics, etc.</p> <ul style="list-style-type: none"> • applies concepts of chemistry in day-to-daylife while making decisions and solving problems • takes initiatives to know and learn about the newer research, and inventions in Chemistry • appreciates the role and impact of Chemistry and technology towards the improvement of quality of human life. • exhibits values of honesty, objectivity, rational thinking, while sharing experimental results. 		<p>which interest you based on these concepts.</p> <ul style="list-style-type: none"> • Involve yourself in various indoor fitness activities
<ul style="list-style-type: none"> • understands about the discovery of electron, proton and neutron • takes initiative to learn about the Thomson, Rutherford and Bohr atomic models • understands features of the quantum mechanical model of atom • understands properties of electromagnetic radiations and Planck's quantum theory • explains photoelectric effect and atomic spectra • understands de Broglie relation and Heisenberg uncertainty principle • learns about quantum numbers 	<p>Theme Structure of Atom Content discussed in the textbook</p> <ul style="list-style-type: none"> • Sub-atomic particles • Atomic models • Developments leading to the Bohrs atomic model of atom • Bohr model for hydrogen atom • Quantum mechanical model of the atom <p>https://www.youtube.com/watch?v=RhiDeoQYHR0 https://www.youtube.com/watch?v=4dXlkdThEfM https://www.youtube.com/watch?v=VAMMvv7UG3k</p>	<p>WEEK 3</p> <p>Learners are told to use the textbook / web resources and try to explore the following:</p> <ul style="list-style-type: none"> • discovery of electron, proton and neutron • Thomson, Rutherford and Bohr atomic models • quantum mechanical model of atom • electromagnetic radiations and Planck's quantum theory • photoelectric effect and atomic spectra • de Broglie relation and Heisenberg uncertainty principle • quantum numbers • Aufbau principal, Pauli exclusion principle and Hund's rule of maximum multiplicity • write electronic configuration of atoms <p>Open the links which are given</p>

<ul style="list-style-type: none"> • understands Aufbau principal, Pauli exclusion principle and Hund's rule of maximum multiplicity • takes initiative to know and learn about electronic configuration of atoms • exhibits values of honesty, objectivity, rational thinking, while sharing experimental results. 		<p>https://www.youtube.com/watch?v=RhiDeoQYHR0 After watching the video discuss it with friends and teachers online and try to find solutions to your queries. Solve Exemplar problems for Class XI in Chemistry prepared by NCERT and also use E-resources available on NROER and e-pathshala.</p> <p>Try to understand the gas discharge tube, determination of e/m of cathode rays, Millikan's oil drop experiment.</p> <p>Read about Madame Curie, James Chadwick, Thomson, Rutherford and their discoveries</p> <p>WEEK 4</p> <p>Open the links which are given here</p> <p>https://www.youtube.com/watch?v=4dXlkdThEfM https://www.youtube.com/watch?v=VAMMvv7UG3k and try to understand the concepts which you have seen in videos.</p> <p>Understand the nature of light and various developments related to it</p> <p>Learn about Black body radiations, Photoelectric effect, dual nature of light and atomic spectrum and solve Exemplar problems for Class XI in Chemistry prepared by NCERT and use E-resources available on NROER and e-pathshala.</p> <p>Involve yourself in various indoor fitness activities.</p>
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Chemistry (Class XII)

Learning Outcomes	Sources/Resources	Suggested Activities (to be guided by teachers)
<p>The learner</p> <ul style="list-style-type: none"> — describes importance of solid state in daily life — describes general characteristic s of solid state; — distinguishes between amorphous and crystalline solids; — classifies crystalline solids on the basis of the nature of binding forces; — defines crystal lattice and unit cell; — distinguish between unit cells of different types of crystal lattices; — explains close packing of particles — describes different types of voids and close packed structures — calculates the packing efficiency of different types of cubic unit cells — correlates the density of a substance with its unit 	<p>WEEK-1</p> <p>Link-1 Video Lecture (Episode-1): (Amorphous and crystalline solids, Classification of solids) https://nroer.gov.in/55ab34ff81fccb4f1d806025/file/57cfea6516b51c6b39a806b5</p> <p>WEEK-2</p> <p>Link-2 Video lecture (Episode 2) (Unit cell and crystal lattice, number of atoms in a unit cell) https://nroer.gov.in/55ab34ff81fccb4f1d806025/page/57cfeac316b51c6b39a806d7</p> <p>Link-3 Animation (Crystal lattice and unit cells) https://www.youtube.com/watch?v=VPCDSmoomGk</p> <p>Link-4 Animation (Number of atoms in unit cells) https://www.youtube.com/watch?v=qAeaHYSX0hs</p> <p>WEEK-3</p> <p>Link-5 Video lecture (Episode-3): (Packing and closed pack structures,</p>	<p>Unit -1: Solid State</p> <p>Twelve learning outcomes are expected to be covered in this unit. Remember we are not moving out of our homes due to COVID-19 therefore, we are required to work at home and make the best use of the time available to us .</p> <p>Solid State is the first unit in the textbook of chemistry. It provides insight into the structure of solids. It also tells us how the properties of solids are affected by the arrangement of atoms, molecules and ions involved in the formation of structure of solid. Understanding the topic requires a lot of abstract thinking and concentration. Yoga and pranayam can help in keeping one's focus on a topic for a longer time. After understanding the topic, learners may become interested in knowing how can one proceed to develop materials of required properties.</p> <p>We can plan the time schedule for learning the topic as follows:</p> <p>WEEK 1</p> <p>Learners may try to make a list of the solids used at home for various purposes. Now they may think of the property that makes the solids in the list useful for the particular purpose for which these are used. This will make students realise the importance of solids in the daily life. After that they may see the Video lecture (Link-1) and classify the solids in the list prepared by them as crystalline and amorphous. After seeing the video, they may go through the text material in the textbook of chemistry for Class XII published by NCERT and read it up to section 1.3. This will help them to classify solids as amorphous and crystalline. They will be able to classify solids on the basis of nature of binding forces. Also, they may make a WhatsApp group with their classmates and discuss the topic learnt. They may make the list of common difficulties and mail it to the teacher or connect her/him through</p>

<p>cell properties; — describes the imperfections in solids and their effect on — Properties correlates the electrical and magnetic properties of solids and their structure</p>	<p>packing efficiency) https://nroer.gov.in/55ab34ff81fccb4f1d806025/page/57cfeb0d16b51c6b39a806f9</p> <p>Link-6 Animation (Hexagonal close packed structure) https://www.youtube.com/watch?v=uKpr-9vmgsc</p> <p>Link-7 Animation (Close packed structures in three dimensions) https://www.youtube.com/watch?v=liwX_ILb2ds</p> <p>Link-8 Animation (Packing efficiency in crystals) https://www.youtube.com/watch?v=Wlcb1WfJvJc</p> <p>WEEK-4</p> <p>Link-9 Video lecture (Episode-4) (Defects and imperfections) https://nroer.gov.in/55ab34ff81fccb4f1d806025/file/57cfeb8516b51c6b39a8071b</p> <p>Link-10 Text A brief on Semiconductors https://nroer.gov.in/55ab34ff81fccb4f1d806025/file/5b4c84cc16b51c01e1912483</p>	<p>WhatsApp or any other mode suggested by her/him to get the solution of their problems. For more clarification of the concepts learnt, they may solve problems related to the concepts learnt using exercise given in the end of chapter. Also, they may solve problems given in the book 'Exemplar Problems' for Class XII, published by NCERT for more clarification of the concepts learnt.</p> <p>WEEK 2</p> <p>They may see the links-2, 3 and 4 these links will cover Section 1.4 and Section 1.5 of the textbook. These links will give insight into the concepts of crystal lattice and unit cell, types of unit cells and number of atoms per unit cell in a crystal lattice. Students may prepare the models for different lattice systems. For example they may prepare the model of sodium chloride crystal using beads of two different colours and sizes and the sticks if available or any other material available. This will help them understand the meaning of face centred cubic lattice. In case material for making models is not available, links of Animations will help them understand the concept.</p> <p>They may discuss the concepts learnt with their classmates in the WhatsApp group and may make the list of common difficulties and mail it to the teacher or connect her/him through WhatsApp or any other mode suggested by her/him to get the solution of their problems. For more clarification of the concepts learnt, they may solve problems related to the concepts learnt using exercise given in the end of chapter. Also, they may solve problems given in the book 'Exemplar Problems' for Class XII, published by NCERT for more clarification of the concepts.</p> <p>WEEK 3</p> <p>Links 5,6,7,8 cover Section 1.6, 1.7 and 1.8 of the textbook. Concepts covered are close packing of particles, different types of voids and close packed structures, packing efficiency and calculations involving unit cell dimensions. This will allow learners understand the patterns of packing of</p>
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		<p>particles which form different types of lattices. They will be able to locate different types of vacant spaces in the close packing and make them recognise the shape of different vacant spaces in the packing. They will be able to recognise the pattern in which particles are most closely packed. After seeing links students may read the Section 1.6, 1.7 and 1.8 of the textbook. They will be able to solve the problems related to the concepts given in these Sections. Problems given at the end of the Unit in the Textbook of Chemistry may be solved for deep insight into the concepts. Also, problems given in the Book- <i>Exemplar Problems in Chemistry</i>, Class XII, published by NCERT may be solved. Learners may discuss the topic with their classmates on WhatsApp.</p> <p>One can use fruits like orange or any other material available with them for making packing patterns to get more clarity of the concepts. They may get solution of Their problems as they did in the first weak.</p> <p>WEEK 4</p> <p>Links 9 and 10 cover sections 1.9 and section 1.10 of the textbook. These give insight about the imperfections left in the crystals during the process of crystallisation. After going through the links, students will be able to explain the importance of imperfections in making semiconductors.</p> <p>Learners may discuss the topic with their classmates on WhatsApp and contact the teacher through mode suggested by her to get the solution of their difficulties.</p>
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PHYSICS (CLASSES XI-XII)

Physics (Class XI)

Learning Outcomes	Sources/ Resources	Suggested Activities (to be guided by teachers)
<p>The learner</p> <ul style="list-style-type: none"> – explains that the disciplinary approach of Physics is a transition from general sciences. – analyses the observations from the surroundings to appreciate the basic conceptual understanding of physics. – promotes process-skills, problem-solving abilities and applications of concepts/content in Physics, useful in real-life situations for making Physics learning more relevant, meaningful and interesting. – explains the fact that the theory and experiments go hand in hand in physics and help each other's progress. – explains domains of interest in physics: macroscopic (classical physics), mesoscopic and microscopic. Also, understands the scope and excitement of physics. – explains the scientific methods for developing the hypothesis, axioms, models and laws. – analyses through examples, the connection between physics, technology and society; and physics-related technological/industrial aspects to cope up with changing demand of society committed to the use of physics, technology and informatics. 	<p>NCERT/State Physics Textbook for Class XI; Part - I</p> <p>http://ncert.nic.in/textbook/textbook.htm?keph1=0-8</p> <p>Physics - PheT Simulations https://phet.colorado.edu/en/simulations/category/physics</p> <p>NCERT Official – YouTube https://www.youtube.com/channel/UC70s92hGjqLX6p7qY9BBrSA</p> <p>National Repository of Open Educational Resources (NROER) https://nroer.gov.in/home/e-library/Apply filter for Level (Higher Secondary) and Subject (Physics) to view the relevant e-resources.</p> <p><i>Laboratory Manual of Physics, Class XI, Published by the NCERT</i> http://www.ncert.nic.in/exemplar/labmanuals.html http://ncert.nic.in/ncerts/l/kelm101.pdf http://ncert.nic.in/ncerts/l/kelm102.pdf</p>	<p>WEEK 1</p> <p>Unit I Physical World and Measurement</p> <p>Chapter 1 Physical World Using the resources, learners may be asked to explore and learn about</p> <ol style="list-style-type: none"> 1. Science, Natural Science, Physics, Experiments and Theory in Physics and overlaps of Physics with other natural sciences 2. Scope and excitement of physics; Interrelationship of physics with technology, society and informatics. 3. Nature of fundamental forces; Unification of forces 4. Nature of physical laws <p>Project Learners may prepare life sketches of prominent physicists. Using the Internet and other reference books. A learner is envisaged as reading about the explanations and demonstrations of some classic experiments in physics.</p> <p>WEEK 2</p> <p>Chapter 2 Units and Measurements Using the resources, learners may be asked to explore and learn about</p>

<ul style="list-style-type: none"> - explains the fundamental forces in nature – gravitational, electromagnetic, strong and weak nuclear forces; and unification of forces. - explains the nature of fundamental laws such as conservation laws, etc. - uses international system of units (SI Units), symbols, nomenclature of physical quantities and formulations; SI base and derived quantities and their units. - derives methods of measurement of lengths – large as well as small; measurement of mass; and measurement of time. - explains the range of lengths, masses and time intervals. - explains the need of accuracy, precision, errors and uncertainties in measurement; and classify errors. - explains the rules for arithmetic operations with significant figures; rounding off the digits. - derives dimensional formulae and dimensional equations using the dimensions of physical quantities. - applies understanding of dimensional analysis in checking the dimensional consistency of relations and deducing the relations between different physical quantities. - gets acquainted with the Greek alphabet; Common SI prefixes and symbols for multiples and sub-multiples; Important constants; Conversion factors; Mathematical formulae; SI derived units 	<p>Bibliography of physics books for additional reading on the topics covered (reference: <i>Physics, Textbook for Class XI, Part II</i>, p. 405 – 406, Published by the NCERT http://ncert.nic.in/textbook/textbook.htm?keph2=an-7</p> <p>A list of 14 websites for downloading textbooks free of charge can be obtained at https://www.ereader-palace.com/14-sites-download-textbooks-free/</p> <p>Another website for downloading books free of cost is www.pdfdrive.com</p> <p>Textbook contains QR codes and one can access e-resources linked to those QR codes by following step by step guide given at the beginning of textbook.</p>	<ol style="list-style-type: none"> 1. Need of standard units; base and derived units; different unit systems and relationship between corresponding units of different physical quantities; SI system of units; SI base quantities and units (with their definitions as per new IAPAP rules). 2. Measurement of length – large distances (parallax methods) and very small distances (indirect methods); Measurement of mass and time intervals; Range and orders of lengths, masses, and time intervals. 3. Accuracy, precision, certainty and errors in measurements of physical quantities; Systematic, random and least count errors; Absolute, relative and percentage errors; Combination of errors. 4. Significant figures; Rules for arithmetic operations with significant figures; Rounding off digits in measurements (or calculations); Determining the uncertainties in expressing results. 5. Dimensions of physical quantities; Dimensional formulae and dimensional equations; Applications of dimensional analysis. 6. Appendices: The Greek alphabet; Common SI prefixes and symbols for multiples and sub-multiples; Important constants; Conversion factors; SI derived units (expressed in SI base units); SI derived units with special names;
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<p>(expressed in SI base units); SI derived units with special names; Guidelines for using symbols for physical quantities, chemical elements and nuclides; Guidelines for using symbols for SI units etc.; Dimensional formulae of physical quantities.</p> <ul style="list-style-type: none"> - explains motion as change in position with time. - differentiates between distance and displacement; speed and velocity; rectilinear and curvilinear motions; kinematics and dynamics; inertial and non-inertial frames of references; average, relative, and instantaneous velocity and speed etc. - derives (graphically) kinematic equations for uniformly accelerated motion - explains elementary calculus (both differential and integral) that is required to describe motion. - plans and conducts investigations and experiments to arrive at and verify the equations of motion of bodies under uniformly accelerated motions. - handles tools and laboratory apparatus properly; measures physical quantities using appropriate apparatus, instruments, and devices, such as, scales, balances, watches, etc. (optional) - analyses and interprets data, graphs, and figures, and draws conclusion about the state of motion, speed (and velocity), 		<p>Guidelines for using symbols for physical quantities, chemical elements and nuclides; Guidelines for using symbols for SI units etc.; Dimensional formulae of physical quantities.</p> <p>7. Revision, doubt clearing and practice solving problems</p> <p>Project</p> <p>Learners may be given the suggestion to measure astronomical distances, such as, the distance between earth and an identified star etc., using the parallax method.</p> <p>Learners may be advised to look at the BIPM/IAPAP website to prepare a chart on the definitions of SI base units.</p> <p>Using vernier callipers/screw gauze/spherometer learners may perform activities and experiments to measure small lengths and radius of curvature, etc. (optional)</p> <p>WEEKS 3 AND 4</p> <p>Unit II Kinematics</p> <p>Chapter 2 Motion in a Straight Line</p> <p>Learners may be asked to make observations about their surroundings and use the following resources to learn about:</p> <ol style="list-style-type: none"> 1. State of motion; Frames of reference; Position,
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<p>acceleration (uniform and non-uniform), distances (and displacements) covered, etc.</p> <p>Learning Outcomes cut across different themes</p> <p>The learner</p> <ul style="list-style-type: none"> - communicates the findings and conclusions effectively. - applies concepts of physics in daily life while making decisions and solving problems. - takes initiatives to learn about the newer research, discoveries and inventions in Physics. - realises and appreciates the interface of Physics with other disciplines, such as with Chemistry as various materials. - develops positive scientific attitude, and appreciates the role and impact of Physics and technology towards the improvement of quality of life and human welfare - exhibits values of honesty, objectivity, rational thinking, and freedom from myth and superstitious beliefs while taking decisions, respect for life, etc. 		<p>path length and displacement</p> <ol style="list-style-type: none"> 2. Elements of Calculus (Appendix 3.1) 3. Mathematical Formulae (Appendix A5 placed at the end of textbook) 4. Average velocity and average speed 5. Instantaneous velocity and instantaneous speed 6. Acceleration; Solving problems; and discussion on learners' doubts 7. Kinematic equations for uniformly accelerated motion – graphical method; 8. Free fall; Reaction time; and Relative velocity 9. Solving problems <p>Project</p> <p>Ask children to calculate their own reaction time.</p>
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Physics (Class XII)

Learning Outcomes	Sources/ Resources	Suggestive Activities (to be guided by teachers)
<p>The learner</p> <ul style="list-style-type: none"> • explains processes and phenomena with the understanding of the relationship between nature and matter on scientific basis, such as, force between charges, electric field and potential due to charges; force on charges in an electric field. • derives formulae, equations, and laws, such as, torque on a dipole in uniform electric field, effective capacitance of combination of capacitors in series and in parallel, energy stored in a capacitor. • plans and conducts investigations and experiments to arrive at and verify the facts, principles, phenomena, or to seek answers to queries on their own, such as, to estimate the charge induced on each one of the two identical Styrofoam balls 	<p>The following list of resources is suggestive. In addition to these, the teachers may curate more resources from internet for sharing with their Learners.</p> <ul style="list-style-type: none"> • <i>Physics, Textbook</i> for Class XII, Part I, Published by NCERT <ul style="list-style-type: none"> – http://ncert.nic.in/textbook/textbook.htm?l_1=1-8 – http://ncert.nic.in/textbook/textbook.htm?l_1=2-8 • Many web links are given in the side margins of the above-mentioned textbook. These may also be accessed. • In addition, the textbook contains QR codes and one can access e-resources linked to those QR codes by following step by step guide given at the beginning of textbook. The links of those e-resources are 	<p>WEEK 1</p> <p>Unit I: Electrostatics</p> <p>Chapter 1: Electric Charges and Fields</p> <ul style="list-style-type: none"> • Using Gmail group as well as a WhatsApp group of all learners in the class, the teacher may encourage the learners to attempt to explore and understand the following concepts on their own, using the textbook and the web resources— <ul style="list-style-type: none"> – electric charges; conservation of charge, – Coulomb's law - force between twopoint charges, – forces between multiple charges; superposition principle, continuous charge distribution, – electric field, electric field due to a point charge, – electric field lines, electric flux • The learners may be facilitated to use PhET interactive simulations to explore the concepts of static electricity, electric charges and fields. They can also observe how changing the sign and magnitude of the charges and the distance between them affects the electrostatic force. • Learners should also attempt to solve concept-based problems given in the resources on a daily basis (in-text examples, exercises at the end of the chapter in textbook, and in Exemplar problems) • The learners may do an Investigatory Project 'To estimate the charge induced on each one of the two identical Styrofoam (or pith) balls suspended in a vertical plane by making use of Coulomb's law' and share their findings with each other. • The learners may collect information from internet and explain in their own words for 'How did the scientist Coulomb arrive at the inverse square law?'

<p>suspended in a vertical plane. analyses and interprets data, graphs, and figures, and draws conclusion, such as, field due to a uniformly charged thin spherical shell is zero at all points inside the shell.</p> <ul style="list-style-type: none"> • communicates the findings and conclusions effectively. • uses SI Units, symbols, nomenclature of physical quantities and formulations as per international standards, such as, coulomb (C), farad (F). • applies concepts of physics in daily life while decision-making and solving problems, such as, if a certain capacitance is required in a circuit across a certain potential difference then suggesting a possible arrangement using minimum number of capacitors of given capacity which can withstand a given potential difference. • exhibits creativity and out-of-the-box thinking in solving problems, such as, will a 	<p>given below also</p> <ul style="list-style-type: none"> – https://www.youtube.com/watch?v=FpzlZq_wDL4 – https://nroer.gov.in/55ab34ff81fccb4f1d806025/file/5b20ab8616b51c01f44555f0 – https://h5p.org/h5p/embed/181155 – https://www.youtube.com/watch?v=GDvecCS6UXk – https://www.easel.ly/index/embedFrame/easel/6186012 • Exemplar Problems – Physics, Class XII, Published by NCERT – http://ncert.nic.in/ncerts/1/leep101.pdf – http://ncert.nic.in/ncerts/1/leep102.pdf • Laboratory Manual of Physics, Class XII, Published by NCERT – http://ncert.nic.in/ncerts/1/elm314.pdf • Physics - PhET Simulations – https://phet.colorado.edu/en/simulation/balloons-and-static-electricity – https://phet.colorado.edu/en/simulation/charges-and-fields 	<ul style="list-style-type: none"> • Using the ideas given at the suggested web link, the learners may make toys using ordinary throw away stuff at home to further explore science concepts and deepen their understanding • The learners may be encouraged to enroll in MOOCs on Swayam portal for Physics Class XII developed by NCERT. • Using desktop, laptop, tablet or mobile handset, the teacher may develop videos in regional language as per the context of learners, each video corresponding to roughly one period of the school timetable. These videos may be shared with the learners, one video per day. (In Physics at higher secondary level, lots of figures and mathematical equations are involved, and hence, for developing the videos, the teacher may develop power point presentations superimposed with her/his voice explaining the concepts. Or if the teacher happens to have a white board at home, she/he may record a video of her/him explaining on the white board, the way she/he does in the class). • Then the learners can post their doubts on the group the same day by a certain time fixed by the teacher. Some time may be allocated for the Learners clear any doubts amongst them by interacting with each other via online group discussion. The teacher may also be part of this to ensure that the discussion remains on track. • Finally, the teacher can have a face to face interaction with learners via Skype facilitating the clarification of doubts. • If it is possible to connect to all the learners simultaneously for a longer duration via skype, the teacher may also take a live class online. • All through this the teacher should be continuously assessing learners' learning progress while motivating and keeping their morale up. <p>WEEK 2</p> <p>Unit I: Electrostatics Chapter 1: Electric Charges and Fields (contd.)</p> <ul style="list-style-type: none"> • Following the same approach as of the first week, the teacher may facilitate the
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<p>man get an electric shock if he touches the large aluminium sheet fixed outside his house on the top of a two-metre-high insulating slab?</p> <ul style="list-style-type: none"> • takes initiative to learn about the newer research, discoveries and inventions in Physics, such as, research on the possibility of static electricity charging electronic devices. • recognises different processes used in Physics-related industrial and technological applications, such as, using electrostatic shielding in protecting sensitive instruments from outside electrical influences. • realises and appreciates the interface of Physics with other disciplines, such as with Chemistry as various materials give rise to interesting properties in the presence or absence of electric field. • develops positive scientific attitude, and appreciates the role and impact of Physics and technology 	<ul style="list-style-type: none"> – https://phet.colorado.edu/en/simulation/coulombs-law – https://phet.colorado.edu/en/simulation/capacitor-lab-basics – https://phet.colorado.edu/en/simulation/legacy/capacitor-lab • National Repository of Open Educational Resources (NROER) https://nroer.gov.in/home/e-library/ Apply filter for level (higher secondary) and Subject (Physics) to view the relevant e-resources. • MOOCs at Swayam https://swayam.gov.in/nd2_nce19_sc07/preview • NCERT Official – YouTube channel https://www.youtube.com/channel/UCT0s92hGjqLX6p7qY9BBrSA • Arvind Gupta Toys http://www.arvindguptatoys.com/electricity-magnetism.php 	<p>learners' attempt to explore and understand—</p> <ul style="list-style-type: none"> – Electric dipole, electric field due to a dipole, – Torque on a dipole in uniform electric field, – Continuous Charge distributions, Statement of Gauss' theorem, – Applications of Gauss' Law to find field due to infinitely long straight uniformly charged wire and uniformly charged infinite plane sheet, – Uniformly charged thin spherical shell (field inside and outside) <ul style="list-style-type: none"> • Using PhET interactive simulations, the learners may arrange positive and negative charges in space and view the resulting electric field. They may also create models of electric dipole. • Learners should also attempt to solve concept-based problems given in the resources on a daily basis. • The learners may be encouraged to read up (using internet) on the ongoing research on the possibility of static electricity charging electronic devices. They may then have an online discussion amongst themselves. <p>WEEK 3</p> <p>Unit I: Electrostatics Chapter 2: Electrostatic Potential and Capacitance</p> <ul style="list-style-type: none"> • Following the same approach as of the first week, the teacher may facilitate the learners' attempt to explore and understand the following— <ul style="list-style-type: none"> – electric potential, potential difference, electric potential due to a point charge; – electric potential due to an electric dipole – electric potential due to a system of charges, – equipotential surfaces, relation between field and potential, – electrical potential energy of a system of charges, – potential energy of a single charge and of a system of two charges in an external field;
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<p>towards the improvement of quality of life and human welfare.</p> <ul style="list-style-type: none"> exhibits values of honesty, objectivity, rational thinking, and freedom from myth and superstitious beliefs while taking decisions, respect for life, etc. 		<ul style="list-style-type: none"> The learners may plot equipotential lines and discover their relationship to the electric field using PhET interactive simulations The learners should also attempt to solve problems given in the resources on a daily basis The learners may collect information about 'Faraday cage' from internet. They may then develop a theoretical idea for an innovative application of Faraday cage in daily life. <p>WEEK 4</p> <p>Unit I: Electrostatics Chapter 2: Electrostatic Potential and Capacitance (contd.)</p> <ul style="list-style-type: none"> Following the same approach as of the first week, the teacher may facilitate the learners' attempt to understand the following— <ul style="list-style-type: none"> potential energy of electric dipole, in an external field; electrostatics of conductors; dielectrics and electric polarisation, capacitors and capacitance, capacitance of a parallel plate capacitor with and without dielectric medium between the plates; combination of capacitors in series and in parallel, energy stored in a capacitor; Using PhET interactive simulations, the learners can explore how a capacitor works. They can change the size of the plates and the distance between them; add a dielectric to see how it affects capacitance. They can also change the voltage and see charges build up on the plates. Learners should also attempt to solve problems given in the resources on a daily basis Learners may be encouraged to find out where capacitors are used in daily life and for what purpose, by collecting information from internet.
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MATHEMATICS (CLASSES XI-XII)

Mathematics (Class XI)

Learning Outcomes	Sources/ Resources	Suggested Activities (to be guided by teachers)
<p>The learner</p> <ul style="list-style-type: none"> develops the idea of Set from the earlier learnt concepts in Number System, geometry, etc. identifies relations between different sets. 	<p>NCERT Textbook (NCERT Textbook for Class XI)</p> <p>Theme 1-Sets Theme-2 Relations and Functions</p> <p>E-resources- Link for textbook/ Laboratory Manual/Exemplar problem book— ncert.nic.in – publications--- PDF (I to XII); ncert.nic.in – publications--- Exemplar problems; ncert.nic.in – publications--- science laboratory manuals</p> <p>(Other mentioned at the bottom)</p>	<p>WEEK 1</p> <ul style="list-style-type: none"> The discussion about sets can begin by asking learners to send lists of collections of objects around them, for example, on a table, in a room, etc. The meaning of well-defined collections can then be discussed. Collections that do not form sets may also be discussed, such as, collection of best mathematicians in the world. The discussion may now shift to collections of mathematical objects like collection of Natural numbers, collection of shapes with three/four sides, solutions of equations, collection of big numbers etc. Learners should be motivated to generate many such collections. The concept of Set can then evolve after getting online responses from Learners. Formal symbolism related to sets can then be discussed. For e.g. set of Natural numbers is denoted by N, etc. <p>WEEK 2</p> <ul style="list-style-type: none"> Different Sets may be formed, and Learners may be encouraged to observe the relationships between these sets. They may search and send those sets whose elements are also present in another set. For example, all elements of N (natural numbers) are present in W (whole numbers), etc. The concept of subsets and related notions can then be discussed. Use of Venn diagrams for visual representations of sets can be explored and discussed. Learners may be encouraged to refer to the e-resources available on NROER related to sets. The learners may be motivated to extend the analogy of operating upon numbers by way of different operations to that of operating on sets by way of their union, intersections, etc. Teachers may encourage Learners to attempt exercises and circulate among other Learners. The group members may discuss the questions through emails/mobiles and get their queries resolved.

- Activities (Activity 1 to 4) relevant to Sets from the Laboratory Manual of Class XI, available online may be done by the learners and shared with the other learners. After every activity they should write what they learnt from that activity.
- Exemplar Problem Book which is available on the NCERT website can be used to solve and discuss more problems for getting a better idea of the concept of Sets and their applications.
- Assessment of Learners can be done by observing their responses. Appropriate feedback can then be given.

WEEK 3

- Learners may be asked to send a list of relations that they observe in their day-to-day life. For e.g. Relation between mother and children, relation between teacher and Learners etc. This list can be compiled and sent to all the Learners online for their comments. This list can now be extended to mathematical objects for which Learners need to apply their previously learnt knowledge of numbers, geometrical objects, etc.
- The idea of ordered pairs can then evolve initially from daily life examples and then from mathematical objects.
- The relevance of sets can then be discussed and concept of relations can then evolve after understanding the importance of relation between objects.
- Teachers may encourage Learners to attempt exercises and circulate among other Learners. The group members may discuss the questions through emails/mobiles and get their queries resolved.
- Particular cases for relations can be seen and conditions can be discussed leading to the concept of Functions.

WEEK 4

- Different notions like Domain, Range, co-domain of functions may then be discussed. Learners may be motivated to form a function and show these mathematical objects. After learners send their examples of functions teacher may change their domain or co-domain and ask whether it still remains a function or not. For example, $f: R^+ \rightarrow R$ such that, $f(x) = \sqrt{x}$ is function, but will it remain a function if co-domain R is replaced by N ? Many such examples may be sent by the teacher. Also, learners

		<p>may be encouraged to form such examples and send to other learners. In this way a live interaction can take place.</p> <ul style="list-style-type: none"> • Learners may be encouraged to sketch graphs of functions. After constructing the graph of a function, they may be encouraged to comment on its nature. Activities (Activity 5 to 6) relevant to Relations and Functions from the Laboratory Manual of Class XI, available online may be done by the learners and shared with the other learners. • Exemplar Problem Book which is available on the NCERT website can be used to solve and discuss more problems for getting a better idea of the concept of Sets. • Assessment of learners can be done by observing their responses. Appropriate feedback can then be given. • Learners may be encouraged to use e-resources related to relations and functions available on the NROER website.
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Mathematics (Class XII)

Learning Outcomes	Sources/ Resources	Suggested Activities (to be guided by teachers)
<p>The learner</p> <ul style="list-style-type: none"> identifies different types of relations and functions. explores the values of different inverse trigonometric functions. 	<p>NCERT Textbook (for Class XII)</p> <p>Theme 1 Relations and Functions</p> <p>Theme-2 Inverse Trigonometric Functions</p> <p>E-resources Link for textbook/Laboratory Manual/Exemplar problem book—</p> <p>ncert.nic.in – publications---PDF (I to XII);</p> <p>ncert.nic.in – publications---Exemplar problems;</p> <p>ncert.nic.in – publications---science laboratory manuals</p> <p>(Other mentioned at the bottom)</p>	<p>WEEK 1</p> <ul style="list-style-type: none"> Learners may be given different examples of relations including reflexive, symmetric and transitive and may be asked to differentiate between them. Note that at this juncture the types of different relations should be evolved by the students and not to be told by teachers on the group. Learners after observing the relations should send their comments to the teacher. The discussion on these comments should lead to different types of relations. The concept of equivalence relations can then be discussed. Learners should create examples of such relations and crosscheck their correctness. Exercises in the textbook and exemplar problem book for Class XII may be discussed. This will help in deepening the understanding of concepts. <p>WEEK 2</p> <ul style="list-style-type: none"> Similar activities as done in Week 1 for relations may be done for the concept of function. <p>WEEK 3</p> <ul style="list-style-type: none"> Trigonometric functions on different domains like $(0, \pi)$ or $(-\pi, \pi)$ may be discussed. Learners may comment on which domain the trigonometric function is one-one and onto, one-one or simply onto. The exchange of ideas can lead to the concept of inverse trigonometric functions. Learners may be motivated to make decisions and give reasons for that. This will ensure their involvement in the process of learning. Learners may trace curves for the inverse trigonometric functions in the e resources available on NROER and comment on their nature. Questions may be put to them like what graph can be seen if the domain of $\cos^{-1} x$ is restricted to $(-1, 1)$? Students may download the open source software, GeoGebra and try exploring the graphs of different functions including trigonometric functions.

		<p>WEEK 4</p> <ul style="list-style-type: none"> • Problems from textbook for Class XII and Exemplar Problem Book may then be discussed. The generation and sharing of ideas will clarify the concepts and Learners will become confident in posing and solving problems. • E-resources will help in visualising the concepts better.
<p><i>E-resources that include Geogebra</i></p> <p>Class XI</p> <p>https://nroer.gov.in/CIET%2C%20NCERT/video/details/55ddc14781fccb28d8d932a8?nav_li=55b1f72181fccb7926fe5451,55b1f73981fccb7926fe5523,55b1f73981fccb7926fe5526</p> <p>Class XII</p> <p>https://nroer.gov.in/CIET%2C%20NCERT/topic_details/55b1f73a81fccb7926fe552b?nav_li=55b1f72181fccb7926fe5451,55b1f73981fccb7926fe5523,55b1f73a81fccb7926fe552b</p>		

LANGUAGES

हिंदी (कक्षा 11)

सीखने के प्रतिफल	स्रोत/संसाधन	सुझावात्मक क्रियाकलाप/गतिविधियाँ (शिक्षकों द्वारा निर्देशित)
<p>भाषाकौशल एवं दक्षता(पढ़ना, लिखना, सुनना और बोलना)</p> <ul style="list-style-type: none"> कहानी को फिर से अपनी अपनी तरह से लिख सकते हैं। कहानी का अंत और शुरुआत नए तरीके से कर सकते हैं। कहानी में आए विशेष शब्दों और वाक्यों को अपने ढंग से प्रयोग कर सकते हैं। कहानियों की लेखन शैली में अंतर कर सकते हैं। विधागत अंतर को समझ सकते हैं। अभिनय के जरिए कहानी को अभिव्यक्त कर सकते हैं। <p>(यह सब करते हुए आप कहानी लिखने की कला से वाकिफ़ हो रहे हैं।)</p>	<ul style="list-style-type: none"> संबंधित अधिगम सामग्री एनसीईआरटी के यूट्यूब चैनल और एनआरओईआर (NROER) पर भी देख सकते हैं। एनसीईआरटी की किताबों में दिए क्यूआर कोड (QR code) में भी आपको भी बहुत कुछ मिलेगा। https://youtu.be/X4I0jzxnm4 (ये सबकुछ तो हम सब कर सकते हैं) एनके लाइव .टी.आर.ई.सी. बातचीत कार्यक्रम में “कहानी पढ़ते हुए विषय” पर प्रोफ़सर संध्या सिंह द्वारा की गई चर्चा को देखें। https://www.youtube.com/watch?v=X4I0jzxnm4&t=5s अभिव्यक्ति और माध्यम में कैसे लिखे और कहानी पढ़ें। http://ncert.nic.in/textbook/textbook.htm?kham1=0-16 आरोह भाग 2 http://ncert.nic.in/textbook/textbook.htm?lhar1=0-18 	<p>आपमें भी एक कहानीकार है!</p> <p>साथियों, इस कठिन समय में भी हमारे साथ अभी भी बहुत कुछ ऐसा है जिसे संजो लेना है। अगर ध्यान से देखें तो हमारे चारों ओर बहुत सी कहानियाँ बिखरी पड़ी हैं। ज़रूरत यह है कि इस एकांत में उन्हें सुनने की कोशिश करें। कलम उठाएँ और कुछ लिख भी डालिए। हर दिन एक कहानी। कुछ आप लिखें कुछ हम। चलिए कुछ तैयारी कर लें। सबसे पहले अपनी किताब की किसी भी एक कहानी को ले लीजिए।</p> <p>पहला और दूसरा सप्ताह</p> <p>(समझ कर सुनते, बोलते, पढ़ते और लिखते हुए)</p> <ul style="list-style-type: none"> कहानी को पढ़कर अपने घर वालों और साथियों को सुनाया जा सकता है। कहानी को आप स्काइप (skype) पर रिकॉर्ड करके ईमेल भी कर सकते हैं। कहानी में आए अलग प्रयोग वाले शब्दों और वाक्यों को रेखांकित करके अपनी दिनभर की बातचीत में प्रयोग कर कहानी का आनंद ले सकते हैं। उसी लेखक की कुछ अन्य कहानियों को पढ़कर कहानी की लेखन शैली को समझ सकते हैं, जैसे— कुछ कहानियाँ संवादात्मक हैं, तो कुछ कहानियाँ वर्णनात्मक होती हैं। कहानी को नाटक में बदल सकते हैं। अभिनय करके भी कहानी कही जा सकती है। अगर संभव हो तो यह भी लिखें कि कहानी को नाटक में बदलते समय आप किस तरह के भाषिक प्रयोगों पर बल देते रहे हैं। इसके अतिरिक्त आपकी पढ़ी किसी भी कहानी की समीक्षा कर सकते हैं। समीक्षा के कुछ बिंदु-

		<ul style="list-style-type: none"> - कथानक और परिवेश - भाषा कहानीकला <p>तीसरा और चौथा सप्ताह</p> <ul style="list-style-type: none"> ● वर्तमान समय के अनुसार कहानी को बदल कर देखें। उदाहरण के लिए आज के कोरोना महामारी के समय में फणीश्वरनाथ रेणु की कहानी 'पहलवान की ढोलक'को फिर पढ़कर देखिए। उस कहानी में भी एक महामारी का वर्णन हुआ है, साथ ही उस महामारी से निपटने में पहलवान की ढोलक पर उसकी थाप उस उदासी, निराशा और भयावहता के माहौल में एक संजीवनी का संचार करती है। यह कहानी कक्षा बारह की पुस्तक आरोह भाग 2 में शामिल है। आप इसे यूट्यूब पर भी खोज कर सकते हैं। ● अपनी पाठ्यपुस्तक की सभी कहानियों को इसी तरह पढ़ें।
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हिंदी (कक्षा 12)

सीखने के प्रतिफल	स्रोत/संसाधन	सुझावात्मक क्रियाकलाप/गतिविधियाँ (शिक्षकों द्वारा निर्देशित)
<ul style="list-style-type: none"> ● सामाजिक, सांस्कृतिक और आर्थिक सजगता को सृजनात्मक लेखन में अभिव्यक्त करते हैं। ● परिवेशीय सजगता का विकास करते हुए अपने आस-पास के वेंडर, खेती-किसानी, मजदूरों के प्रति संवेदना रखते हुए और भाषा प्रयोग में संवेदनशीलता और 	<ul style="list-style-type: none"> ● अभिव्यक्ति और माध्यम http://ncert.nic.in/textbook/textbook.htm?kham1=0-16 ● कविता शिक्षण https://www.youtube.com/watch?v=nILz_E1J7Ac 	<p>पहला और दूसरा सप्ताह</p> <p>कोरोना महामारी के समय में शारीरिक/सामाजिक दूरी बनाए रखते के लिए नई कहावतें प्रयोग की जा रही हैं, जैसे— सटे तो मिटे, पसंद नहीं कब्र तो घर पे करो सब।</p> <p>ऐसे कुछ अन्य कहावतों को संकलित करें और आप स्वयं भी कुछ कहावतें, स्लोगन लिखने का प्रयास करें।</p> <ul style="list-style-type: none"> ● स्लोगन की लयात्मकता को ध्यान में रखते हुए कोई कविता लिखने का प्रयास करें। आप यह भी कर सकते हैं कि सुबह उठकर अपने आस-पास होने वाली गतिविधियों का बारीकी से अवलोकन करें और सभी गतिविधियों को ज्यों का त्यों अभिव्यक्त करें। यानि जैसा आपने देखा वैसा ही लिखने का प्रयत्न आप पाएँगे कि यह एक कविता का रूप ले चुकी है।

<p>अभिव्यक्तकरते हैं।</p> <ul style="list-style-type: none"> ● अपने समय और समाज में प्रयुक्त होने वाली भाषा और घटनाओं का विश्लेषण करते हैं। 	<p>हर बड़ा कवि भाषा से खेलते हुए यह करता रहा है। वह भाषा से खेलते हुए शब्दों को उलटता-पलटता है यानि अलग-अलग स्थानों पर नए-नए प्रयोग करके देखता है। साथ ही नए तरीके से वाक्य की संरचना कर नए अर्थ निर्माण करता है। यानी एक ही बात को कहने और लिखने के अलग-अलग तरीके ढूँढते हुए आप भी यह कर सकते हैं।</p> <ul style="list-style-type: none"> ● सब्जीवाले, दूधवाले, अखबार वाले से बातचीत कर सकते हैं। कुछ बिंदु इस प्रकार हो सकते हैं— ✓ पहले और आजकल की आमदनी और खर्च में अंतर। ✓ लोगों तक सामान पहुँचाने की पूरी यात्रा के विवरण पर बातचीत। ✓ उनके जैसे अन्य सहयोगी की दिनचर्या जानने की कोशिश करना। ✓ शारीरिक दूरी का अपने जीवन में कैसे (सामाजिक दूरी) निर्वाह करते हैं। <p>(जो आपको उचित लगे ऐसे कुछ अन्य बिंदु लें)</p> <h3>तीसरा और चौथा सप्ताह</h3> <ul style="list-style-type: none"> ● अपने मोहल्ले को ध्यान में रखते हुए 'मोहल्ला लाइव' नाम से एक हफ्ते के सभी दिनों की डायरी लिखने की कोशिश करें। जिसमें इन बिंदुओं पर ज़रूर लिखें— ✓ लॉकडाउन के कारण बदलता परिवेश, आपसी रिश्ता, खान-पान, रहन-सहन और सामाजिक संपर्क के साधन। आप चाहें तो अपने घर-परिवार, मोहल्ले के लोगों से सामाजिक दूरी का पालन करते हुए बात कर सकते हैं। ● वर्तमान समय में घरेलू सहयोगियों के जीवन पर अपनी कल्पना से कोई लेख/कहानी/कविता लिख सकते हैं। ● ध्यान रहे कि जो कुछ आपने लिखा है उसे थोड़ा रुककर एक बार पढ़ें और जहाँ कहीं आवश्यक हो उसे संपादित भी करें। <p>अपने लेखन का संपादन करते समय भाषा संबंधी गलतियों पर तो ध्यान देने के साथ ही इस बात का ध्यान रखें कि आपकी लिखी हुई रचना लिखने के बाद सिर्फ आपकी नहीं रह जाती उसका एक पाठक भी होता है। यानी पाठक की संवेदनाओं, आवश्यकताओं, समस्याओं और अभिरुचियों पर भी आपका ध्यान जाना चाहिए।</p>
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English (Class XI)

Learning Outcomes	Sources/ Resources	Suggested Activities (to be guided by teachers)
<p>The learner</p> <ul style="list-style-type: none"> • listens and reflects to communicate through speech and writing. • develops authentic, accurate, useful content for online platforms. • expresses opinions and views independently . • listens patiently to contradictory points of view on online platforms and answers logically in agreement/ disagreement • writes and collects, appreciates narratives and short poems. • speaks fluently and convincingly using authentic evidences. • identifies and uses 	<p>1. <i>We Heard the Bells – The Influenza of 1918</i></p> <p>This documentary focuses on communities and groups disproportionately affected by the 1918 influenza epidemic. The 1918 influenza continues to provide lessons for the present, including about how epidemics can foster stigma and discrimination. Available on YouTube https://www.youtube.com/watch?v=XbEefT_M6xY</p> <p>2. <i>How we conquered the deadly smallpox virus - Simona Zompi</i></p> <p>https://www.youtube.com/watch?v=yqUFyt4MIQ&t=2s</p> <p>https://share.nearpod.com/cRozKYULw6</p>	<p>WEEK 1</p> <ul style="list-style-type: none"> • Listen with concentration; this will sustain your interest. • View the visuals and try to connect them with the audio version of the script. • You can read/listen to the captions also for understanding. • Try to recall if you have read something related to the video earlier. • Make notes from the video and also note down ideas, thoughts, information experiences, etc. This will help in writing your answers. <p>Learners may be asked to do self-assessment and peer-assessment. Some rubrics may be developed to facilitate this.</p> <p>Please note</p> <p>Assessment should incorporate the use of ICT. For example, familiarity with ICT tools, online portals, platforms, skill to browse and collect authentic material as well as following the guidelines for online interaction.</p> <p>Some communication guidelines for online interactions are:</p> <ol style="list-style-type: none"> a. Give space to all for expressing their views. b. Be logical and overcome biases. c. Be polite but firm in your expression d. Read more before offering rebuttals e. Be active online for learning to share and accept new ideas.

<p>appropriate online resources.</p> <ul style="list-style-type: none"> • prepares notes while reading. • infers meanings from contexts and describes with clarity. • identifies the similarities and dissimilarities between the two texts. • develops write ups with clarity, using appropriate vocabulary and thoughts. • writes creatively and shows sensitivity towards issues/ people in his/her writing. • may share and add their learning experiences as they learn from each other while sharing their work online. 		<p>WEEK 2</p> <p>You can use Skype App or mobile calling (if feasible). You can create an audio file, video or PDF script to share via email and/or WhatsApp.</p> <p>What measures were taken to deal with the situation?</p> <p>How were the events reported and how was information made available to the public?</p> <p>It is important to learn from history. (You can highlight some key researches on the treatment of influenza and smallpox in your writing.)</p> <p>Keeping in view the present pandemic, develop notices, advisories, and infographics based on facts for sharing with peers and teachers, parents, elderly, and other learners online.</p> <p>You can add authentic pictures in your presentations.</p> <p>List the uses of Arogya Setu App.</p> <p>Listen to the interviews of medical experts and economists on the prevention of Covid 19.</p> <p>Look at the graphs, diagrams, etc., shown in the news. Write the description.</p> <p>WEEK 3</p> <ol style="list-style-type: none"> 1. Read the given texts/article. Have you noticed the title suggests that though it is about an expedition, yet it is so different from the first text? Share how it is so? 2. Read the following three excerpts from <i>We're not afraid...</i> and choose one of them to describe why you
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	<p>1. <i>We're not afraid to die...if we can all be together</i></p> <p>2. <i>Mountaineers can teach us about isolation.</i> Mint. April 18,2020 Saturday vi.14No.96</p>	<p>like it or dislike it?</p> <ol style="list-style-type: none"> a. My brain switched to survival mode. It taught me how to stay strong when you have failure staring at your face. b. If you need to survive these moments of uncertainty. You need to be in harmony with the team. c. I suppose the important thing in isolation is to cherish your companions, to try and enjoy the moment and to be positive. <p>You can share your experience of being alone in a time of difficulty.</p> <p>WEEK 4</p> <ol style="list-style-type: none"> 1. You have read both the texts, the idea common to both is - <ol style="list-style-type: none"> a. man's desire and pride to explore nature, b. to accept challenges of nature c. to know the mystical world of nature. d. nature is tender and caring but furious too at times. <p>You can add more ideas/views.</p> <p>Now summarise the above creatively and add more ideas and views. You can refer to poems, films, paintings, etc in your write up.</p> <p>You have read two texts and explored these texts for activities.</p> <p>Now, explain the present situation (pandemic, Covid-19 and lockdown) in the context of <i>isolation</i> and <i>being together</i>.</p>
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		<p>You can also do the following activities while reading and after reading the text—</p> <ol style="list-style-type: none"> 1. While reading make notes as per the dates. 2. Find out the way the text has been organised; sequencing of incidents, concrete details, no reliance on memory, focus on surroundings and the intelligence of the family in dealing with it, etc. 3. While reading the text you must have seen how well prepared were they for the journey; count the details/ objects, etc. 4. Describe the following in your words. <ol style="list-style-type: none"> a. for the past 16 years we had spent all our leisure time honing our seafaring skills. b. The first indication of impending disaster came at about 6 p.m., with an ominous silence. c. We were getting no replies to our Mayday calls. <p>You can locate the above excerpts in the text— <i>We're not afraid...</i> Read in order to understand the meaning.</p> <p>Words and Vocabulary</p> <ol style="list-style-type: none"> a. Make as many compound words as you can with -ship which have different meanings. b. List the words which are used to describe the different parts of the ship. c. What is <i>Wavewalker</i> as mentioned in the text? d. Find out words, expressions which convey bravery, courage and positive attitude of the characters.
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English (Class XII)

Learning Outcomes	Sources/ Resources	Suggestive Activities
<p>The learner</p> <p>a. explores genuine online resources.</p> <p>b. Listens/views online resources and expresses through writing and speech.</p> <p>c. critically analyses historical events through writing and sharing of</p>	<p>Read the story <i>The Last Lesson</i> from NCERT Class XII Textbook <i>Flamingo</i>. You can read it online at www.ncert.nic.in.</p> <p>You can access the audio of the text using the QR code provided in textbook- <i>Flamingo</i>.</p> <p>Explore the links</p>	<p>WEEK-1</p> <p>Alphonse Daudet in the story <i>The Last Lesson</i> highlights the important place of language in the lives of people.</p> <p>The story focuses on the major historical event, i.e., the Franco-Prussian War (1870-1871) which affected life in the school where M Hamel, a French teacher took a lot of pains to teach children the French language.</p> <p>What was the routine of the school?</p> <p>Who said the following and why?</p> <p>“My friends, said he, I -I”, but something choked him.</p> <p>“<i>Vive la France</i>”</p>

<p>ideas and opinions with peers, teachers etc.</p> <p>d. develops and shares views/opinions on contemporary issues making use of interdisciplinary knowledge .</p> <p>expresses opinions on issues related to children in difficult circumstances quotes in discussion, etc., rights of children and legal provisions for the children.</p> <p>e. explains graphs, tables and data related to the issues of children.</p> <p>f. participates in activities like poster making, speech, debate</p>	<p>https://commons.wikimedia.org/wiki/File:French_soldiers_in_the_Franco-Prussian_War_1870-71.jpg</p> <p>https://commons.wikimedia.org/wiki/Category:Franco-Prussian_War</p> <p><i>Text</i></p> <p>Lost Spring Anees Jung</p> <p>Class XII-Flamingo</p> <p><i>Films</i></p> <p>Paperboy – an awardwinning film</p> <p>https://www.youtube.com/watch?v=neWPK3fRg5c</p> <p>Stories and endeavours by ILO(International Labour Organisation), UNICEF and NGO's</p>	<p>WEEK 2</p> <p>History is witness to some of the examples wherein the wars had demonised the victorious. One glaring example was when children in the schools of Alsace and Lorraine (districts in France) were prevented from learning French. This was because Germany had taken control of these districts after defeating them in war in 1870.</p> <ul style="list-style-type: none"> • M.Hamel the French teacher was deeply disturbed when the order for not teaching French in school was issued. What according to you would have been his fear? • Languages are communities; they embody the soul of the culture, capturing a people's history and dreams. Write your views and discuss with your group online. • How many languages do you know and in what contexts do you use them? • Watch videos based on the Franco-Prussian War of 1870. <p>You will find that there is a language of war too. The war lexicon plays a role for the warring armies. There is military terminology, coded signals, names of the machinery used in war, etc. There are war cries to encourage and motivate the soldiers. You will agree that it creates an impact on a prevailing situation.</p> <p>a. Now describe the war scenes as viewed in the video. Listen to the audio to understand the language of war.</p> <p>Discuss with your online group - <i>Wars bring heartrending misery on the planet earth</i>. Add experiences, stories, facts, news, etc in the discussion. c. Select three passages from the text and find out the tense forms used.</p> <p>WEEK 3</p> <p>a. In the period of pandemic, due to spread of Covid-19, there are heartrending stories of children who have to undergo hardships and have even lost their lives. Collect such stories, read them and draw conclusions based on them.</p> <p>b. Why are children so susceptible to crime and hard labour?</p> <p>Are the measures taken enough?</p>
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<p>etc., for creating awareness about the marginalisation of children in difficult circumstances.</p>		<p>Read efforts taken by ILO, UNICEF and NGOs like <i>Bachpan Bachao Andolan</i>.</p> <ol style="list-style-type: none"> c. Initiate an online discussion on-<i>Streets are no place for a child</i>. d. Write the character sketches of Saheb-e-Alam and Mukesh. e. Write diary entries to describe your experience of staying at home; how have you utilised your time ; what changes would you like to bring in your routine in the future? f. Since you are not going to school you can find time to do interesting and entertaining activities. We are making some suggestions; g. observe and draw sunrise/sunset scenes, compose a poem/song/wrap, try your hand in kitchen and try and share your favourite recipes. <p>WEEK 4</p> <ol style="list-style-type: none"> a. What was your experience of watching the two films given (or other English films)? Has the boy in the film <i>Paperboy</i> been able to convey his feelings? Mention a few instances in support of your answer. b. What is your opinion about the ambience and the details which have been focused upon in the film? Do these contribute to your experience and understanding of the film? c. Share your experience of translating a film into text. Were you focused on the meaning, performance of characters, music, staging of scenes, etc? d. Describe your favourite scene from the film <i>Paperboy</i>. e. Write a brief script of street play on corona pandemic, care for street animals, etc.
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संस्कृतम् (कक्षाएकादश)

अधिगम- प्रतिफलानि	उपयुक्तानि संसाधनानि	प्रस्ताविता: गतिविधयः (शिक्षकाणामभिभावकानाम् वा साहायेन विधेयाः)
<ul style="list-style-type: none"> विद्यार्थी सरलसंस्कृतभाषया कक्षोपयोगीनि वाक्यानि वक्तुं समर्थः अस्ति। विद्यार्थी कक्षातः बहिः दैनन्दिन-जीवनोपयोगीनि वाक्यानि वदति। 	<ul style="list-style-type: none"> एनसीईआरटीद्वारा अथवा राज्यद्वारा निर्मितानि पाठ्यपुस्तकानि, गृहे उपलब्धाः पठनलेखन सामग्र्यः अन्यदृश्य-श्रव्यसामग्र्यः यथा इन्टरनेट, वेबसाइट, रेडिओदूरदर्शनादिषु उपलभ्यन्ते यूट्यूबमध्ये *एनसीईआरटी ऑफिशियल* इति चैनलमध्ये संस्कृत विषयमधिकृत्य चर्चाः व्याख्यानि च उपलभ्यन्ते येषाम् उपयोगः कर्तुम् शक्यते। 	<p>सप्ताहः प्रथमः</p> <p>श्रवणसम्भाषणकौशले</p> <ol style="list-style-type: none"> शिक्षणक्रमे शिक्षकः/शिक्षिका सरल-संस्कृत-वाक्यानां प्रयोगं कुर्यात्। छात्राणामवबोधनं श्रवणकौशलम् च परीक्षितुं मध्ये मध्ये प्रश्नान् पृच्छेत्। संस्कृतभाषावबोधनसमये छात्रैः काठिन्यमनुभूयते चेत् मध्ये-मध्ये हिन्दीभाषायाः क्षेत्रीयभाषायाः अपि प्रयोगः करणीयः। शिक्षकः/शिक्षिका प्रतिदिनम् छात्रान् दैनन्दिन-जीवनोपयोगिनः प्रश्नान् संस्कृतभाषया पृच्छेत्। छात्रा अपि संस्कृतभाषया उत्तराणि दद्युः वार्तालापम् च संस्कृतभाषया कुर्युः। इन्टरनेटमध्ये उपलब्धानि संस्कृतगीतानाम् श्रवणम् भवेत्।

<ul style="list-style-type: none"> ● अपठितगद्यांशं पठित्वा तदाधारितप्रश्नानाम् उत्तरप्रदाने सक्षमः अस्ति। ● सरल-संस्कृत-भाषया औपचारिक-अनौपचारिक-पत्रलेखनार्हः भवति। ● अनुच्छेद-लेखनं, संवाद-लेखनं चित्राधारित-वर्णनञ्च करोति। 	<p>www.diksha.gov.in https://swayam.gov.in www.sanskrittural.in इति वेबस्थानानि अपि अनुसन्धनीयानि</p>	<p>सप्ताहःद्वितीयः (प्रथमसप्ताहगतिविधिभिः सह) पठनलेखनकौशले</p> <p>1. पाठ्यपुस्तकेतर-साहित्येभ्यः स्तरानुकूलं कथाः निबन्धान् च संगृह्य सप्ताहे एकवारं पठितुं छात्रान् निर्दिशेत्। तदाधारित-प्रश्नान् पृच्छेत्, चर्चा कुर्यात्। एवं संस्कृतमयवातावरणनिर्माणं कुर्यात्। छात्राणामधिकाधिकी सहभागिता भवेदिति सुनिश्चितं कुर्यात्।</p> <p>यथा - द्वितीया स्यामहं कथम्?*</p> <p>क्रिस्ताब्दस्याष्टादशशतके केरलराज्ये मनोरमा नाम विदुषी प्रत्यवसत्। तस्याः पत्युः मरणानन्तरं तया पुनरपि वरान्वेषणमारब्धम्। नैकेषु शास्त्रेषु कृतपरिश्रमा सा वरणीयस्य ज्ञानपरीक्षां करोति स्म। तस्याः प्रश्नस्य उत्तरं दातुमशक्ताः नैराश्यं प्राप्य गच्छन्ति स्म। एकदा कश्चन रामशब्दपण्डितः तां परिणेतुमिच्छन् समागतः। तं परीक्षमाणा मनोरमा 'विहस्य', 'विहाय', 'अहम्' इत्येषां पदानां व्याकरणदृष्ट्या रूपपरिचयं कारयितुम् अकथयत्।</p> <p>रामशब्दस्य विभक्तिरूपाण्येव जानन् सः 'महा'पण्डितः विहस्य इत्यस्य रामस्य इतिवत् षष्ठीविभक्तिरिति, विहाय पदस्य रामाय इतिवत् चतुर्थीविभक्तिरिति, अहम् इत्यस्य रामम् इव द्वितीयाविभक्तिरिति च न्यगदत्।</p> <p>वरपरीक्षानन्तरं कोऽपि 'कथमस्ति वरः?' इत्यपृच्छत्। तदा विषादेन साब्रवीत् -</p> <p>*यस्य षष्ठी चतुर्थी च*</p> <p>*विहस्य च विहाय च।*</p> <p>*अहं च द्वितीया स्यात्*</p> <p>*द्वितीया स्यामहं कथम्?।।*</p> <p>(द्वितीया =पत्नी)</p> <p>2. औपचारिकचर्चा च -पत्राणां प्रारूपं पदाय विषयगत-अनौपचारिक-विधाय छात्रैः पूर्णपत्रं लेखयेत्, अशुद्धीनां च संशोधनं कृत्वा पुनः बोधयेत्। छात्रैः तेषां पत्राणां कक्षायां प्रस्तुतिं कारयेत्। अनन्तरं तेषां प्रतिपुष्टिं प्रदद्यात्।</p> <p>यथा - अवकाशार्थं प्रधानाचार्यं प्रति पत्रम्, ग्रंथालयस्य निर्माणार्थम् जिलाधिकारिणं प्रति पत्रम् इत्यादीनि (औपचारिकपत्रम्)</p>
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		<p>मित्रस्य कृते पत्रम्। पुत्रस्य पितरं प्रति पत्रम् इत्यादीनि। (अनौपचारिकपत्रम्)</p> <p>3. शिक्षकः/शिक्षिका कम् अपि विषयम् अवलम्ब्य प्रतिछात्रम् एकैकं वाक्यं रचयितुं कथयेत्। तानि वाक्यानि संकलय्य सार्थकम् अनुच्छेदं सज्जीकुर्यात्। एवं संस्कृतमयवातावरणे कक्षायां संवादवाचनस्य अनुच्छेदलेखनस्य च अभ्यासं कारयेत्। यथा – कोरोनाप्रतिकारः-, पर्यावरणं संरक्षणम्, स्वच्छभारतम्, विद्यायाः महत्त्वम् इत्यादयः।</p> <p>कामपि परिस्थितिं मनसि निधाय कांश्चन प्रश्नान् पृष्ट्वा संवादाय उत्तरप्रदानाय च निर्दिशेत्। छात्राणाम् उत्तराणि च संशोध्य संवादलेखनं कारयेत्। यथा- छात्रशिक्षकयोः वार्तालापः, मित्र-संवादः इत्यादयः।</p> <p>संवादशैलीम् अनुकर्तुं दूरदर्शने आकाशवाण्याञ्च संस्कृत-समाचारं श्रोतुं द्रष्टुं च निर्दिशेत्।</p> <p>कानिचन चित्राणि दर्शयित्वा तद्विषये वक्तुं लेखितुं च छात्रान् आदिशेत्। अशुद्धीनां च संशोधनं कृत्वा पुनः लेखितुं निर्दिशेत्।</p>
<ul style="list-style-type: none"> ● पाठ्यपुस्तकगतान् गद्यपाठान् अवबुध्य तेषां सारांशं वक्तुं लेखितुं च समर्थः अस्ति। ● तदाधारितानां प्रश्नानाम् उत्तराणि संस्कृतेन वदति लिखति च। 		<p>सप्ताहः तृतीयः (प्रथमसप्ताहद्वयस्य गतिविधिभिः सह गद्यपाठस्य अध्ययनम्) पठनलेखनश्रवणसम्भाषणकौशलानि</p> <ol style="list-style-type: none"> 1. कथादयः गद्यपाठाः यथासंभवं प्रत्यक्षविधिना पाठनीयाः। 2. शिक्षकेण आदर्शवाचनं, छात्रैः व्यक्तिगतरूपेण समूहे वा अनुवाचनम्, अपरिचितपदानाम् अर्थावबोधनम्, पाठस्य भावावबोधनं च। छात्राणाम् अवबोधं परीक्षितुं मध्ये मध्ये प्रश्नाः अपि प्रष्टव्याः। छात्रैः पाठस्य सारांशः संस्कृतेन स्वभाषया वा प्रस्तोतव्यः। शिक्षकः यथास्थानं संशोधनं कारयेत्। 3. पाठनप्रसंगे केचन एतादृशाः अपि प्रश्नाः प्रष्टुं शक्यन्ते येन छात्राः चिन्तनार्थं अवसरं लभेरन्, विचार्य ते निष्कर्षमवाप्नुयुः, यथा – भवान् अस्यां परिस्थितौ भवेत् चेत् किं कुर्यात्? पाठस्य नायकेन नायिकया वा यः निर्णयः गृहीतः किं स एव निर्णयः समीचीनो वा? <p>यथा- पाठस्य नामः शुकशावकोदन्तः प्रश्नः (i) विन्ध्याटवी कुत्र स्थिता? उत्तरम्- मध्यदेशे</p>

		(ii) विन्ध्याटव्याःपद्मसरसः नाम किम् आसीत्? उत्तरम्- पम्पा इति।
<ul style="list-style-type: none"> ● संस्कृतश्लोकान् उचित-बलाघात-पूर्वकं छन्दोनुगुणम् उच्चारयति। ● श्लोके प्रयुक्तानां सन्धियुक्तपदानां विच्छेदं करोति। ● श्लोकान्वयं कर्तुं समर्थः अस्ति। ● तेषां भावार्थं प्रकटयति। ● श्लोकाधारितानां प्रश्नानाम् उत्तराणि संस्कृतेन वदति लिखति च। ● पद्येषु विद्यमानरसानां भावानाञ्च अनुभूत्या सहैव पदलालित्यस्य बोधं करोति। ● श्लोकेषु विद्यमानपदानां विश्लेषणं कृत्वा व्याकरणस्य सामान्य-विशेष-नियमान् सन्धि-कारक-विभक्ति - प्रत्ययादीः ज्ञास्यति। ● सार्थकपदानि पृथक्कृत्य स्पष्टार्थस्य बोधं 		<p>सप्ताहःचतुर्थः (पूर्वसप्ताहानाम् गतिविधिभिः सह पद्यपाठस्य अध्ययनम्) पठनलेखनश्रवणसम्भाषणव्याकरणकौशलानि</p> <ol style="list-style-type: none"> 1. श्लोकपठनार्थम् अवगमनार्थञ्च यथेष्टमभ्यासस्य आवश्यकता भवति। यद्यपि कश्चिदेकः सरलोपायः सर्वेषां श्लोकानाम् अवगमनाय पर्याप्तं न भवति। तथापि अत्र श्लोकानाम् एका क्रमयुता पद्धतिः प्रदर्श्यते यया श्लोकानामवबोधः सारल्येन सम्भवेत्। यद्यपि एषा पद्धतिः समयसापेक्षा वर्तते तथापि अनया पद्धत्या भाषायाम् नैपुण्यं वर्धते। 2. संस्कृतश्लोकाध्ययनाय चत्वारि सोपानानि भवेयुः <ol style="list-style-type: none"> (i) शुद्धोच्चारणपूर्वकं सस्वरं गायनम्। (ii) पदच्छेदः (iii) अन्वयः /वाक्यसंयोजनम् (iv) अर्थबोधः सौंदर्यबोधश्च <p>(i) उच्चारणं गायनञ्च संस्कृतभाषायाम् उच्चारणे गायने च तादात्म्यभावो दृश्यते, यतोहि संस्कृतश्लोकाः छन्दोभिः सुबद्धाः भवन्ति। छन्दस्सु वर्णानां मात्राणाञ्च योजना शास्त्रीयतया क्रियते। तेषां यथानुगुणम् उच्चारणेन गीतस्य ताल-लयौ आयासं विनैव लभ्येते। साधूच्चारणं गायनं वा श्लोकस्य सामान्यभावं प्रस्तौति यद्धि पद्यस्य विशेषार्थावगमने साहाय्यं करोति।</p> <p>(ii) पदच्छेदः यदा गायनं भवेत् तदा छन्द-यति-अनुस्वार-सन्धि-समासादीन् अपृथक्कृत्यैव गायनं कुर्यात् किन्तु विशेषार्थावगमनार्थं प्रत्येकं पदस्य सन्धि-समास-विग्रहादीन् ज्ञात्वा प्रत्येकं पदस्य विभक्तिं स्पष्टरूपेण अवगन्तव्यम् यद्धि अन्वयं कृत्वा वाक्यार्थावगमनाय आवश्यकं भवति।</p> <p>(iii) अन्वयःवाक्यसंयोजनम्/ संस्कृतभाषायाः एनां विशेषतां प्रायः सर्वे जानन्ति। अत्र पदानां स्थानपरिवर्तनेनापि इष्टार्थस्य परिवर्तनं नैव भवति। अर्थात् संस्कृतवाक्येषु पदविन्यासःसुतरां सुनम्यः भवति, विशेषेण श्लोकेषु पदानामुपस्थितिः छन्दोऽनुगुणमेव भवति न तु येन केन प्रकारेण।</p>

<p>कर्तुं शक्यति।</p> <ul style="list-style-type: none"> ● संस्कृतसूक्तीनां प्रयोगं कृत्वा संक्षेपेण महत्त्वपूर्णभावान् लिखित-मौखिकरूपेण व्यक्तीकरिष्यति। ● श्लोकानां सतताभ्यासेन श्लोकरचनायामपि प्रवृत्तः भविष्यति। ● पद्येषु विद्यमानकाव्यगत - भाव-रस- अलङ्कार- व्यंग्यार्थादीनाम् अवबोधं करिष्यति। ● सभ्यतायाः संस्कृतेः व्यावहारिक- नैतिक -मूल्यानां च बोधम् करिष्यति। ● अनुष्टुप्, उपजाति, शिखरिणी त्यादि- विविधछन्दसां नियमान्स्वरान् च अवगमिष्यति। ● साहित्यिकशब्दानां ज्ञानं तथा च प्रयोगकौशलमपि प्राप्स्यति। 		<p>श्लोकानाम् अन्वय एव श्लोकार्थं प्रति नयति। अनेनैव अध्येतुः भाषाबोधस्य परीक्षापि जायते। अत्र शब्दज्ञानस्य विभक्तिज्ञानस्य व्याकरणज्ञानस्य च पूर्णप्रयोगः भवति। अन्वयानां स्तरद्वयं भवति प्रथमः अन्वयक्रमः अपरस्तु वाक्यसंयोजनम्। आदौ वाक्यसंयोजनं जानीमः। अत्र श्लोकवाक्यैः गद्यवाक्यानां निर्मितिः क्रियते। संस्कृतभाषायाः वाक्यविन्यासः सामान्यतया इत्थं भवति-</p> <p>(क) सविशेषणं कर्ता + (ख) सविशेषणं कर्म + (ग) सविशेषणम् अन्यकारकाणि + (घ) क्रियाविशेषणसहिताः क्रियाः</p> <p>यदि वाक्येषु क्त्वान्तम्, ल्यबन्तम्, तुमुनन्तं वा क्रियाः सन्ति तर्हि तासां विन्यासः तत्कर्मसहितं वाक्यस्य कर्तुः अनन्तरं भवितुं शक्यते।</p> <p>उपर्युक्तक्रमे पदविन्यासार्थम् आदौ अन्वयप्रक्रियायाः बोधः आवश्यकः। अन्वयप्रक्रियायाः बौद्धिकक्रमः इत्थं भवितुं शक्यते-</p> <p>(क) वाक्यस्थमुख्यक्रियापदानाम् अभिज्ञानम्- (ख) क्रियापदानुसारं कर्तृकर्मणोः- अभिज्ञानम् (ग) कर्तृ कर्मणोः समानविभक्तिकविशेषणानाम् अभिज्ञानम्- (घ) अन्यकारकाणां तद्विशेषणसहितम् अभिज्ञानम् (ङ) क्त्वान्ततुमुनन्तक्रियाणां तत्सम्बन्धिकारकैः सह-ल्यबन्त- अभिज्ञानम्</p> <p>सर्वेषु श्लोकेषु उपर्युक्तानि सर्वाणि चरणानि आवश्यकानि न सन्ति, एषा केवलमेका व्यापिका पद्धतिः वर्तते। पदच्छेदानन्तरं उपर्युक्तक्रमे यानि चरणानि प्रासंगिकानि सन्ति तेषाम् अनुसंधानं करणीयम्। एतदतिरिक्तमपि श्लोकेषु कानिचन अव्ययपदान्यपि प्राप्यन्ते, येषाम् अन्यपदैः सह सम्बन्धानुसारमेव विन्यासः स्यात्।</p> <p>उदाहरणार्थम् अत्रद्वादश्याः कक्षायाः संस्कृतपाठ्यपुस्तकं भास्वतीद्वितीयभागस्य षष्ठपाठः 'सूक्तिसौरभम्' इत्यतः कानिचन सुभाषितानि स्वीकृत्य तेषाम् अन्वयप्रक्रिया वाक्यसंयोजनञ्च अधः प्रदर्शयते (एवमेव शिक्षकः/ शिक्षिका एकादशकक्षायाः पाठ्यपुस्तकात् उदाहरणमादाय छात्राणाम् मार्गदर्शनम् कुर्यात्)</p> <p>श्लोकः न दुर्जनः सज्जनतामुपैति,</p>
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		<p>शठः सहस्रैरपि शिक्ष्यमाणः। चिरं निमग्नोऽपि सुधा-समुद्रे, न मन्दरो मार्दवमभ्युपैति॥</p> <p>पदच्छेदः न दुर्जनः सज्जनताम् उप एति, शठः सहस्रैः अपि शिक्ष्यमाणः। चिरं निमग्नः अपि सुधा-समुद्रे, न मन्दरः मार्दवम् अभि+उप+एति॥</p> <p>अन्वयः क्रियापदम्- न उपैति कर्तृपदम्- दुर्जनः विशेषणम् (क) शठः (ख) सहस्रैः शिक्ष्यमाणः अपि (ग) कर्मपदम् -सज्जनताम् (घ) वाक्यसंयोजनम्- (ङ) सविशेषणं कर्ता सहस्रैः -शिक्ष्यमाणः अपि शठः दुर्जनः (च) कर्मपदम्सज्जनताम् - (छ) क्रियापदम्न उपैति -</p> <p>अर्थात्सहस्रैः शिक्ष्यमाणः अपि शठः दुर्जनः सज्जनताम् न उपैति</p> <p>एतादृशस्य सम्यगवबोधनम् अध्यापकैः छात्राः प्रादेशिकभाषास्वपि शिक्षणीयाः।</p> <p>भावार्थः कश्चिद् शठतां सम्प्राप्तः महान् दुर्जनः भवति चेत् बहुधा शिक्ष्यमाणोऽपि सः सज्जनतां न प्राप्नोति।</p> <p>अत्र श्लोके क्रियापदद्वयं वर्तते, अतः द्वे वाक्ये भवतः। अत्र एकस्य वाक्यस्य अन्वयः प्रोक्तः। एवमेव अपरस्यापि वाक्यस्य अन्वयः भवता/भवत्या स्वयमेव कृत्वा सम्पूर्णस्य श्लोकस्यार्थः करणीयः-</p> <p>श्लोकः कर्णामृतं सूक्तिरसं विमुच्य, दोषेषु यत्नः सुमहान् खलानाम्। निरीक्षते केलिवनं प्रविश्य,</p>
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		<p>क्रमेलकः कण्टकजालमेव॥</p> <p>पदच्छेदः कर्ण-अमृतं सूक्ति-रसं विमुच्य, दोषेषु यत्नः सुमहान् खलानाम्। निरीक्षते केलिवनं प्रविश्य, क्रमेलकः कण्टकजालम् एव॥</p> <p>अन्वयः क्रियापदम् -भवति /अस्ति (अत्र मुख्यक्रियापदम् आक्षिप्यते)</p> <p>कर्तृपदम् -यत्नः विशेषणम् -सुमहान् अन्यकारकम् -दोषेषु क्त्वा /ल्यप् -विमुच्य कर्म -सूक्तिरसम् विशेषणम् -कर्णामृतम्</p> <p>वाक्यसंयोजनम् (क) सविशेषणं कर्ता- खलानाम् सुमहान् यत्नः (ख) ल्यबन्तक्रिया कर्)मसहिता(कर्णामृतं सूक्तिरसं विमुच्य (ग) अन्यकारकम्दोषेषु - (घ) क्रियापदम्भवति -</p> <p>अर्थात् -खलानाम् सुमहान् यत्नः कर्णामृतं सूक्तिरसं विमुच्य दोषेषु भवति।</p> <p>एतादृशस्य पदार्थस्य सम्यगवबोधनार्थम् प्रादेशिकभाषास्वपि छात्राः शिक्षणीयाः।</p> <p>भावार्थः ये स्वभावतः सहजरूपेण दुष्टाः भवन्ति तेषां महान् प्रयत्नः कर्णयोः कृते सुधातुल्यं सुभाषितरसं परित्यज्य दोषावलोकनमेव भवति।</p>
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		<p>एवमेव अस्य सुभाषितस्य अवशिष्टवाक्यानाम् अन्वयः भवन्तः / भवत्यः स्वयमेव कर्तुं शक्नुवन्ति । यथा- निरीक्षते केलिवनं प्रविश्य क्रमेलकाः कण्टकजालम् एव॥</p> <p>मुख्यक्रिया -निरीक्षते ल्यप्-कर्म -केलिवनम् ल्यबन्तम् -प्रविश्य कर्ता-क्रमेलकः कर्म-कण्टकजालम् अव्ययम् -एव</p> <p>ध्यातव्यम् -अन्वये वाक्यसंयोजनस्य कश्चित् दृढः नियमः न भवति। पदविन्यासः कदाचित् पूर्वं कदाचिच्च पश्चाद् विधीयते यथा - ल्यबन्तक्रिया स्वकर्मणा सह वाक्यस्यारम्भे भवितुं शक्यते कदाचित् कर्तृपदानन्तरमपि, अत्र महत्वपूर्णं तत्त्वं पदानां प्रकृतिः तेषां मिथः सम्बन्धानाम् अभिज्ञानं वर्तते।</p> <p>(iv) अर्थबोधः/सौंदर्यबोधः एष एव काव्यसाहित्ययोः हैयङ्गवीनं विद्यते, यत्र कवेः संदेशः निहितो भवति। एतदेव काव्यपाठस्य तत्सोपानं यत्र पाठकः अध्येता वा आनन्दस्यानुभूतिं करोति। उपर्युक्तचरणेषु अध्येता आदौ शाब्दिकार्थम् / अभिधार्थम् अवबुध्य ततः ततोऽप्यधिकं कवेः आशयम् अवगच्छति यो हि प्रायः शाब्दिकार्थतोऽप्यग्रे भवति, यथा पूर्वोक्ते श्लोके-</p> <p>कर्णामृतं सूक्तिरसं ----- कण्टकजालमेव॥</p> <p>अस्मिन् पद्ये कवेः आशयो वर्तते यत् अस्माभिः शोभनेषूद्यानेषु गत्वा उष्ट्रः इव कण्टकानाम् अन्वेषणम् नैव करणीयम् अपितु तस्य मनोहारिपरिवेशस्य प्रशंसा करणीया। तात्पर्यमिदं वर्तते यद् अस्माभिः सर्वत्र साधुता एव अन्वेषणीया न तु दुर्जनवत् दोषान्वेषणं करणीयम्। आशयोऽयं शब्दैः साक्षान्नैव अवाप्यते। अतः एषः व्यंग्यार्थः कथ्यते यो हि अभिधार्थमाश्रित्य ततोऽप्यधिको भवति, किन्तु यावत् अभिधार्थः स्पष्टः न भवति अर्थात् शब्दज्ञान-व्याकरणज्ञानेनावगतः अर्थः स्पष्टो न भवति तावत् व्यंग्यार्थस्यावबोधः न सम्भाव्यते। अभिधार्थात् व्यंग्यार्थं प्रति गमनेन काव्यगतसौंदर्यस्य अनुभूतिः जायते।</p>
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संस्कृतम् (कक्षाद्वादश)

अधिगम-प्रतिफलानि	उपयुक्तानि संसाधनानि	प्रस्ताविता: गतिविधयः (शिक्षकाणामभिभावकानाम् वा साहायेन विधेयाः)
<ul style="list-style-type: none"> ● विद्यार्थी सरलसंस्कृतभाषया कक्षोपयोगीनि वाक्यानि वक्तुं समर्थः अस्ति। ● विद्यार्थी कक्षातः बहिः दैनन्दिन-जीवनोपयोगीनि वाक्यानि वदति। 	<ul style="list-style-type: none"> ● एनसीईआरटीद्वारा अथवा राज्यद्वारा निर्मितानि पाठ्यपुस्तकानि, गृहे उपलब्धाः पठनलेखनसामग्र्यः अन्यदृश्यश्रव्यसामग्र्यः यथा इन्टरनेट-वेबसाइट, रेडिओदूरदर्शनादिषु उपलभ्यन्ते। ● यूट्यूबमध्ये * एनसीईआरटीऑफि इति *शियल चैनलमध्येसंस्कृतविषयमधिकृत्यचर्चाःव्याख्यानानि चउपलभ्यन्ते येषाम् उपयोगःकर्तुं शक्यते। 	<p>सप्ताहः प्रथमः श्रवणसम्भाषणकौशले</p> <ol style="list-style-type: none"> 1. शिक्षणक्रमे शिक्षकः/शिक्षिका सरल-संस्कृत-वाक्यानां प्रयोगं कुर्यात्। छात्राणामवबोधनं श्रवणकौशलम् च परीक्षितुं मध्ये- मध्ये प्रश्नान् पृच्छेत्। संस्कृतभाषावबोधनसमये छात्रैः काठिन्यमनुभूयते चेत् मध्ये मध्ये हिन्दीभाषायाः क्षेत्रीयभाषायाः अपि प्रयोगः करणीयः। 2. शिक्षकः/शिक्षिका प्रतिदिनम् छात्रान् दैनन्दिन-जीवनोपयोगिनः प्रश्नान् संस्कृतभाषया पृच्छेत्। <p>उत्तराणि द्द्युः वार्तालापम् च संस्कृतभाषया कुर्युः।</p> <ol style="list-style-type: none"> 3. इण्टरनेटमध्ये उपलब्धानि संस्कृतगीतानाम् श्रवणम् भवेत्।
<ul style="list-style-type: none"> ● अपठितगद्यांशं पठित्वा तदाधारितप्रश्नानाम् उत्तरप्रदाने सक्षमः अस्ति। ● सरल-संस्कृत-भाषया -औपचारिक -अनौपचारिक पत्रलेखनार्हः भवति। 	<ul style="list-style-type: none"> ● अपठितगद्यस्य उदाहरणार्थम् गोवानगरस्य म्हाबलभट्टस्य सोशलमिडियातः कथाद्वयम् उदाहृतम्। तस्य कृते कृतज्ञताम् निवेदयामः। 	<p>सप्ताहः द्वितीयः (प्रथमसप्ताहगतिविधिभिः सह) पठनलेखनकौशले</p> <ol style="list-style-type: none"> 1. पाठ्यपुस्तकेतरसाहित्येभ्यः स्तरानुकूलं कथाः - निबन्धान् च संगृह्य सप्ताहे एकवारं पठितुं छात्रान् प्रश्नान् पृच्छेत्-निर्दिशेत्। तदाधारित, चर्चा कुर्यात्। एवं संस्कृतमयवातावरणनिर्माणं कुर्यात्। छात्राणामधिकाधिकी सहभागिता भवेदिति सुनिश्चितं कुर्यात्। <p>यथा -*चेक् मेट्*</p>

- अनुच्छेदलेखनं-,
संवादलेखनं -
-चित्राधारित
वर्णनञ्च करोति।

भोजराजस्य अक्षरलक्षयोजना तस्य मुख्यमन्त्रिणः
निद्रामपहरत् । कोशः शीघ्रमेव रिक्तः भविष्यतीति सः
चिन्तामग्नः सञ्जातः ।

कथमपि धनदानं न्यूनीकरणीयमिति धिया तेन कश्चन
उपायः कृतः । भोजस्थाने एकपाठिनः, द्विपाठिनः,
त्रिपाठिनश्च आसन् । यदा कश्चन कविः नूतनकवितां
प्रस्तौति, तदा एकपाठी तां पुनरुच्चार्य ज्ञातपूर्वेयं
कवितेति प्रतिपादयति स्म । द्विपाठिनः, त्रिपाठिनश्च
क्रमशः अनुपठनं विधाय तत् पद्यं प्राचीनमिति
प्रतिपादयन्ति स्म । अनेन पुरस्कारस्वीकर्तृणां संख्यायां
हासः दृष्टः ।

कविकुलगुरवे नारोचत मन्त्रिणः चिन्तनम् । अतः सः
कञ्चन कविम् आहूय पद्यमेकं विरच्य प्रादात् ।

*स्वस्ति श्रीभोजराज ! त्वमखिलभुवने धार्मिकः
सत्यवक्ता*

*पित्रा ते सङ्गृहीता नवनवतिमिता रत्नकोट्यो
मदीयः।*

तांस्त्वं देहीति राजन्! सकलबुधजनैर्ज्ञायते सत्यमेतत्

*नो वा जानन्ति यत्तन्मम कृतिमपि नो देहि लक्षं ततो
मे॥*

'हे राजन् ! भवतः पित्रा नवनवतिकोटिरत्नानि मत्तः
ऋणरूपेण स्वीकृतान्यासन्। एषः विषयः भवतः
आस्थानपण्डितैरपि ज्ञायते । अतः तद्धनं मह्यं ददातु
अथवा यदि अयं विषयः अज्ञातश्चेत् मम पद्यस्य
प्रत्यक्षरं लक्षसुवर्णनाकानि यच्छतु' इति पद्यस्य
आशयः ।

सम्प्रति, यदि कवितेयं ज्ञातपूर्वेति पण्डिताः वदन्ति,
तर्हि भोजस्य ऋणभारः समर्थितः भवति । यदि कविता
प्रत्यग्रेति अङ्गीक्रियते राज्ञा ८४ लक्षसुवर्णनाकानि
दातव्यानि भवन्ति ।

अनन्यगतिकतया पद्यं अर्वाचीनमिति अङ्गीकृत्य ८४

		<p>लक्षसुवर्णनाणकानि प्रदाय कविवरं प्रेषयामास ।</p> <p>2. औपचारिक-अनौपचारिकपत्राणां प्रारूपं पदाय - चर्चा च विधाय छात्रैः पूर्णं पत्रं लेखयेत्-विषयगत, अशुद्धीनां च संशोधनं कृत्वा पुनः बोधयेत्। छात्रैः तेषां पत्राणां कक्षायां प्रस्तुतिं कारयेत्। अनन्तरं तेषां प्रतिपुष्टिं प्रदद्यात्।</p> <p>यथा - अवकाशार्थं प्रधानाचार्यं प्रति पत्रम्, ग्रंथालयस्य निर्माणार्थम् जिलाधिकारिणं प्रति पत्रम् इत्यादीनि (औपचारिकपत्रम्)</p> <p>मित्रस्य कृते पत्रम्। पुत्रस्य पितरं प्रति पत्रम् इत्यादीनि। (अनौपचारिकपत्रम्)</p> <p>3. शिक्षकः/शिक्षिका कम् अपि विषयम् अवलम्ब्य प्रतिछात्रम् एकैकं वाक्यं रचयितुं कथयेत्। तानि वाक्यानि संकलय्य सार्थकम् अनुच्छेदं सज्जीकुर्यात्। एवं संस्कृतमयवातावरणे कक्षायां संवादवाचनस्य अनुच्छेदलेखनस्य च अभ्यासं कारयेत्। यथा – कोरोनाप्रतीकारः, पर्यावरणं संरक्षणम्, स्वच्छभारतम्, विद्यायाः महत्त्वम् इत्यादयः।</p> <p>(i) कामपि परिस्थितिं मनसि निधाय कांश्चन प्रश्नान् पृष्ट्वा संवादाय उत्तरप्रदानाय च निर्दिशेत्। छात्राणाम् उत्तराणि च संशोध्य संवादालेखनं कारयेत्। यथा छात्रशिक्षकयोः वार्तालापः -, मित्रसंवादः इत्यादयः।-</p> <p>(ii) संवादशैलीम् अनुकर्तुं दूरदर्शने आकाशवाण्याञ्च संस्कृत-समाचारं श्रोतुं द्रष्टुं च निर्दिशेत्।</p> <p>(iii) कानिचन चित्राणि दर्शयित्वा तद्विषये वक्तुं लेखितुं च छात्रान् आदिशेत्। अशुद्धीनां च संशोधनं कृत्वा पुनः लेखितुं निर्दिशेत्।</p>
<p>● पाठ्यपुस्तकगतान् गद्यपाठान् अवबुध्य तेषां सारांशं वक्तुं लेखितुं च समर्थः अस्ति।</p>		<p>सप्ताहः तृतीयः</p> <p>(प्रथमसप्ताहद्वयस्य गतिविधिभिः सह गद्यपाठस्य अध्ययनम्)</p> <p>पठनलेखनश्रवणसम्भाषणकौशलानि</p> <p>1. कथादयः गद्यपाठाः यथासंभवं प्रत्यक्षविधिना</p>

<ul style="list-style-type: none"> ● तदाधारितानां प्रश्नानाम् उत्तराणि संस्कृतेन वदति लिखति च। 		<p>पाठनीयाः।</p> <ol style="list-style-type: none"> 2. शिक्षकेण आदर्शवाचनं, छात्रैः व्यक्तिगतरूपेण समूहे वा अनुवाचनम्, अपरिचितपदानाम् अर्थावबोधनम्, पाठस्य भावावबोधनं च। छात्राणाम् अवबोधं परीक्षितुं मध्ये मध्ये प्रश्नाः अपि प्रष्टव्याः। छात्रैः पाठस्य सारांशः संस्कृतेन स्वभाषया वा प्रस्तोतव्यः। शिक्षकः यथास्थानं संशोधनं कारयेत्। 3. पाठनप्रसंगे केचन एतादृशाः अपि प्रश्नाः प्रष्टुं शक्यन्ते येन छात्राः चिन्तनार्थं अवसरं लभेरन्, विचार्य ते निष्कर्षमवाप्नुयुः, यथा भवान् अस्यां – परिस्थितौ भवेत् चेत् किं कुर्यात्? पाठस्य नायकेन नायिकया वा यः निर्णयः गृहीतः किं स एव निर्णयः समीचीनो वा? <p>यथा -पाठस्य नाम –दौवारिकस्य निष्ठा प्रश्नः-(क)संन्यासी कठोरभाषणैः केन तिरस्कृतः उत्तरम् –दौवारिकेण (ख)छद्मसंन्यासीवेषे कः आसीत्? उत्तरम् –गौरसिंहः</p>
<ul style="list-style-type: none"> ● संस्कृतश्लोकान् उचित-छन्दोनुगुणम्-बलाघातपूर्वकम् उच्चारयति। ● श्लोके प्रयुक्तानां सन्धियुक्तपदानां विच्छेदं करोति। ● श्लोकान्वयं कर्तुं समर्थः अस्ति। ● तेषां भावार्थं प्रकटयति। ● श्लोकाधारितानां प्रश्नानाम् उत्तराणि संस्कृतेन वदति लिखति च। ● पद्येषु 		<p>सप्ताहः चतुर्थः (पूर्वसप्ताहानाम् गतिविधिभिः सह पद्यपाठस्य अध्ययनम्) पठनलेखनश्रवणसम्भाषणव्याकरणकौशलानि</p> <ol style="list-style-type: none"> 1. श्लोकपठनार्थम् अवगमनार्थञ्च यथेष्टमभ्यासस्य आवश्यकता भवति। यद्यपि कश्चिदेकः सरलोपायः सर्वेषां श्लोकानाम् अवगमनाय पर्याप्तं न भवति। तथापि अत्र श्लोकानाम् एका क्रमयुता पद्धतिः प्रदर्श्यते यया श्लोकानामवबोधः सारल्येन सम्भवेत्। यद्यपि एषा पद्धतिः समयसापेक्षा वर्तते तथापि अनया पद्धत्या भाषायाम् नैपुण्यं वर्धते। 2. संस्कृतश्लोकाध्ययनाय चत्वारि सोपानानि भवेयुः- <ol style="list-style-type: none"> (i) शुद्धोच्चारणपूर्वकं सस्वरं गायनम्। (ii) पदच्छेदः (iii) अन्वयः/वाक्यसंयोजनम् (iv) अर्थबोधः/सौंदर्यबोधश्च

<p>विद्यमानरसानां भावानाञ्च अनुभूत्या सहैव पदलालित्यस्य बोधं करोति।</p> <ul style="list-style-type: none"> ● श्लोकेषु विद्यमानपदानां विश्लेषणं कृत्वा व्याकरणस्य सामान्य-विशेष- -नियमान् सन्धि- -विभक्ति-कारक प्रत्ययादीः ज्ञास्यति। ● सार्थकपदानि पृथक्कृत्य स्पष्टार्थस्य बोधं कर्तुं शक्यति। ● संस्कृतसूक्तीनां प्रयोगं कृत्वा संक्षेपेण महत्त्वपूर्णभावान् लिखित- मौखिकरूपेण व्यक्तीकरिष्यति। ● श्लोकानां सतताभ्यासेन श्लोकरचनायामपि प्रवृत्तः भविष्यति। ● पद्येषु विद्यमानकाव्यगत - -रस-भाव -अलङ्कार व्यंग्यार्थादीनाम् अवबोधं करिष्यति। 		<p>(i) उच्चारणं गायनञ्च संस्कृतभाषायाम् उच्चारणे गायने च तादात्म्यभावो दृश्यते, यतोहि संस्कृतश्लोकाः छन्दोभिः सुबद्धाः भवन्ति। छन्दस्सु वर्णानां मात्राणाञ्च योजना शास्त्रीत्या क्रियते। तेषां यथानुगुणम् उच्चारणेन गीतस्य ताल-लयौ आयासं विनैव लभ्येते। साधूच्चारणं गायनं वा श्लोकस्य सामान्यभावं प्रस्तौति यद्धि पद्यस्य विशेषार्थावगमने साहाय्यं करोति।</p> <p>(ii) पदच्छेदः यदा गायनं भवेत् तदा छन्द-यति-अनुस्वार-सन्धि- समासादीन् अपृथक्कृत्वैव गायनं कुर्यात् किन्तु विशेषार्थावगमनार्थं प्रत्येकं पदस्य सन्धि-समास- विग्रहादीन् ज्ञात्वा प्रत्येकं पदस्य विभक्तिं स्पष्टरूपेण अवगन्तव्यम् यद्धि अन्वयं कृत्वा वाक्यार्थावगमनाय आवश्यकं भवति।</p> <p>(iii) अन्वयः/वाक्यसंयोजनम् संस्कृतभाषायाः एनां विशेषतां प्रायः सर्वे जानन्ति। अत्र पदानां स्थानपरिवर्तनेनापि इष्टार्थस्य परिवर्तनं नैव भवति। अर्थात् संस्कृतवाक्येषु पदविन्यासः सुतरां सुनम्यः भवति, विशेषेण श्लोकेषु पदानामुपस्थितिः छन्दोऽनुगुणमेव भवति न तु येन केन प्रकारेण।</p> <p>श्लोकानाम् अन्वय एव श्लोकार्थं प्रति नयति। अनेनैव अध्येतुः भाषाबोधस्य परीक्षापि जायते। अत्र शब्दज्ञानस्य विभक्तिज्ञानस्य व्याकरणज्ञानस्य च पूर्णप्रयोगः भवति। अन्वयानां स्तरद्वयं भवति प्रथमः अन्वयक्रमः अपरस्तु वाक्यसंयोजनम् आदौ वाक्यसंयोजनं जानीमः। अत्र श्लोकवाक्यैः गद्यवाक्यानां निर्मितिः क्रियते। संस्कृतभाषायाः वाक्यविन्यासः सामान्यतया इत्थं भवति-</p> <p>(क) सविशेषणं कर्ता + (ख) सविशेषणं कर्म + (ग) सविशेषणमन्यकारकाणि +</p>
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<ul style="list-style-type: none"> ● सभ्यतायाःसंस्कृतेः व्यावहारिक-नैतिक-मूल्यानां च बोधम् करिष्यति। ● अनुष्टुप्, उपजाति, शिखरिणीत्यादि-विविधछन्दसां - नियमान् स्वरां च अवगमिष्यति । ● साहित्यिकशब्दानां ज्ञानं तथा च प्रयोगकौशलमपि प्राप्स्यति। 		<p>(घ) क्रियाविशेषणसहिताः क्रियाः यदि वाक्येषु क्त्वान्तम्, ल्यबन्तम्, तुमुनन्तं वा क्रियाः सन्ति तर्हि तासां विन्यासः तत्कर्मसहितं वाक्यस्य कर्तुः अनन्तरं भवितुं शक्यते।</p> <p>उपर्युक्तक्रमे पदविन्यासार्थम् आदौ अन्वयप्रक्रियायाः बोधः आवश्यकः। अन्वयप्रक्रियायाः बौद्धिकक्रमः इत्थं भवितुं शक्यते-</p> <p>(क) क्यस्थमुख्यक्-रियापदानाम् अभिज्ञानम् (ख) क्रियापदानुसारं कर्तृ-कर्मणोः अभिज्ञानम् (ग) कर्तृकर्मणोः समानविभक्तिकविशेषणानाम् - अभिज्ञानम् (घ) अन्यकारकाणां तद्विशेषणसहितम् अभिज्ञानम् (ङ) क्त्वान्त-ल्यबन्त-तुमुनन्तक्रियाणां तत्सम्बन्धिकारकैः सह अभिज्ञानम्</p> <p>सर्वेषु श्लोकेषु उपर्युक्तानि सर्वाणि चरणानि आवश्यकानि न सन्ति, एषा केवलमेका व्यापिका पद्धतिः वर्तते। पदच्छेदानन्तरं उपर्युक्तक्रमे यानि चरणानि प्रासंगिकानि सन्ति तेषाम् अनुसंधानं करणीयम्। एतदतिरिक्तमपि श्लोकेषु कानिचन अव्ययपदान्यपि प्राप्यन्ते, येषाम् अन्यपदैः सह सम्बन्धानुसारमेव विन्यासः स्यात्।</p> <p>उदाहरणार्थम् अत्र द्वादश्याः कक्षायाः संस्कृतपाठ्यपुस्तकं भास्वतीद्वितीयभागस्य षष्ठपाठः 'सूक्तिसौरभम्' इत्यतः कानिचन सुभाषितानि स्वीकृत्य तेषाम् अन्वयप्रक्रिया वाक्यसंयोजनञ्च अधः प्रदर्श्यते -</p> <p>श्लोकः न दुर्जनः सज्जनतामुपैति, शठः सहस्रैरपि शिक्ष्यमाणः। चिरं निमग्नोऽपि सुधासमुद्रे, न मन्दरो मार्दवमभ्युपैति।।</p> <p>पदच्छेदः न दुर्जनः सज्जनताम् उप एति, शठः सहस्रैः अपि</p>
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		<p>शिक्ष्यमाणः। चिरं निमग्नः अपि सुधा-समुद्रे, न मन्दरः मार्दवम् अभि+उप+एति॥</p> <p>अन्वयः क्रियापदम् -न उपैति कर्तृपदम् -दुर्जनः विशेषणम् (क) शठः (ख) सहस्रैः शिक्ष्यमाणः अपि</p> <p>कर्मपदम् -सज्जनताम् वाक्यसंयोजनम्- (क) सविशेषणं कर्तासहस्रैः शिक्ष्यमाणः अपि शठः - दुर्जनः (ख) कर्मपदम् -सज्जनताम् (ग) क्रियापदम् -न उपैति अर्थात् -सहस्रैः शिक्ष्यमाणः अपि शठः दुर्जनः सज्जनताम् न उपैति</p> <p>एतादृशस्य सम्यगवबोधनम् अध्यापकैः छात्राः प्रादेशिकभाषास्वपि शिक्षणीयाः।</p> <p>भावार्थः -कश्चिद् शठतां सम्प्राप्तः महान् दुर्जनः भवति चेत् बहुधा शिक्ष्यमाणोऽपि सः सज्जनतां न प्राप्नोति।</p> <p>अत्र श्लोके क्रियापदद्वयं वर्तते, अतः द्वे वाक्ये भवतः। अत्र एकस्य वाक्यस्य अन्वयः प्रोक्तः। एवमेव अपरस्यापि वाक्यस्य अन्वयः भवता/भवत्या स्वयमेव कृत्वा सम्पूर्णस्य श्लोकस्यार्थः करणीयः-</p> <p>श्लोकः कर्णामृतं सूक्तिरसं विमुच्य, दोषेषु यत्नः सुमहान् खलानाम्। निरीक्षते केलिवनं प्रविश्य, क्रमेलकः कण्टकजालमेव॥</p> <p>पदच्छेदः कर्ण-अमृतं सूक्ति-रसं विमुच्य,</p>
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		<p>दोषेषु यत्नः सुमहान् खलानाम्। निरीक्षते केलिवनं प्रविश्य, क्रमेलकः कण्टकजालम् एव॥</p> <p>अन्वयः क्रियापदम् - भवति / अस्ति (अत्र मुख्यक्रियापदम् आक्षिप्यते) कर्तृपदम् - यत्नः विशेषणम् - सुमहान् अन्यकारकम् - दोषेषु क्त्वा / ल्यप् - विमुच्य कर्म - सूक्तिरसम् विशेषणम् - कर्णामृतम्</p> <p>वाक्यसंयोजनम् (क) सविशेषणं कर्ता- खलानाम् सुमहान् यत्नः (ख) ल्यबन्तक्रिया (कर्मसहिता) कर्णामृतं सूक्तिरसं विमुच्य (ग) अन्यकारकम् दोषेषु - (घ) क्रियापदम् भवति - अर्थात् - खलानाम् सुमहान् यत्नः कर्णामृतं सूक्तिरसं विमुच्य दोषेषु भवति। एतादृशस्य पदार्थस्य सम्यगवबोधनार्थम् प्रादेशिकभाषास्वपि छात्राः शिक्षणीयाः।</p> <p>भावार्थः ये स्वभावतः सहजरूपेण दुष्टाः भवन्ति तेषां महान् प्रयत्नः कर्णयोः कृते सुधातुल्यं सुभाषितरसं परित्यज्य दोषावलोकनमेव भवति।</p> <p>एवमेव अस्य सुभाषितस्य अवशिष्टवाक्यानाम् अन्वयः भवन्तः / भवत्यः स्वयमेव कर्तुं शक्नुवन्ति । यथा- निरीक्षते केलिवनं प्रविश्य क्रमेलकाः कण्टकजालम् एव॥ मुख्यक्रिया - निरीक्षते ल्यप्-कर्म - केलिवनम् ल्यबन्तम् - प्रविश्य</p>
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		<p>कर्ता -क्रमेलकः कर्म -कण्टकजालम् अव्ययम् -एव ध्यातव्यम् -अन्वये वाक्यसंयोजनस्य कश्चित् दृढः नियमः न भवति। पदविन्यासः कदाचित् पूर्वं कदाचिच्च पश्चाद् विधीयते यथा -ल्यबन्तक्रिया स्वकर्मणा सह वाक्यस्यारम्भे भवितुं शक्यते कदाचित् कर्तृपदानन्तरमपि, अत्र महत्वपूर्णं तत्त्वं पदानां प्रकृतिः तेषां मिथः सम्बन्धानाम् अभिज्ञानं वर्तते।</p> <p>(iv) अर्थबोधः/सौंदर्यबोधः एष एव काव्यसाहित्ययोः हैयङ्गवीनं विद्यते, यत्र कवेः संदेशः निहितो भवति। एतदेव काव्यपाठस्य तत्सोपानं यत्र पाठकः अध्येता वा आनन्दस्यानुभूतिं करोति। उपर्युक्तचरणेषु अध्येता आदौ शाब्दिकार्थम् / अभिधार्थम् अवबुध्य ततः ततोऽप्यधिकं कवेः आशयम् अवगच्छति यो हि प्रायः शाब्दिकार्थतोऽप्यग्रे भवति, यथा पूर्वोक्ते श्लोके-</p> <p>कर्णामृतं सूक्तिरसं ----- कण्टकजालमेव।।</p> <p>अस्मिन् पद्ये कवेः आशयो वर्तते यत् अस्माभिः शोभनेषूद्यानेषु गत्वा उष्ट्रः इव कण्टकानाम् अन्वेषणम् नैव करणीयम् अपितु तस्य मनोहारिपरिवेशस्य प्रशंसा करणीया। तात्पर्यमिदं वर्तते यद् अस्माभिः सर्वत्र साधुता एव अन्वेषणीया न तु दुर्जनवत् दोषान्वेषणं करणीयम्। आशयोऽयं शब्दैः साक्षान्नैव अवाप्यते। अतः एषः व्यंग्यार्थः कथ्यते यो हि अभिधार्थमाश्रित्य ततोऽप्यधिको भवति, किन्तु यावत् अभिधार्थः स्पष्टः न भवति अर्थात् शब्दज्ञान-व्याकरणज्ञानेनावगतः अर्थः स्पष्टो न भवति तावत् व्यंग्यार्थस्यावबोधः न सम्भाव्यते। अभिधार्थात् व्यंग्यार्थं प्रति गमनेन काव्यगतसौंदर्यस्य अनुभूतिः जायते।</p>
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URDU (CLASS XI)

بفتہوار سرگرمیاں (Week-wise Activities)	ماخذ (Source)	متوقع آموز شہیماحصل (Expected Learning Outcomes)
<p>بفتہ - 1 موضوع - افسانہ پڑھنا اور گفتگو کرنا</p> <p>1- آپ پچھلی جماعتوں میں بہت سے افسانے اور کہانی پڑھ چکے ہیں۔ بہت سے افسانے آپ کی پچھلی جماعتوں کی درسی کتابوں میں بھی شامل ہیں۔ کسی ایک افسانے کا انتخاب کیجیے اور بتائیے کہ وہ افسانہ یا کہانی آپ کو کیوں پسند ہے؟</p> <p>2- دیے گئے لنک کی مدد سے ویڈیو کو دیکھئے</p> <p>(i) https://www.youtube.com/watch?v=QQAZSZJXL8s&list=PLnq_2d5Egqu5LRaBmkg8TAYtiUxQGc2gn&index=8&t=0s</p> <p>(ii) https://www.youtube.com/watch?v=Nw85dmxuWxc&list=PLUGLcpnv1Yiede7Z1tbStw5RKMyv_wszY&index=6</p> <p>اپنے استاد یا گھر کے افراد کے ساتھ ان نکات کو ذہن میں رکھتے ہوئے گفتگو کیجیے۔</p> <ul style="list-style-type: none"> - کہانی کا موضوع - مختلف کردار - مرکز کردار - وحدت تاثر - نقطہ خروج - زبان و بیان وغیرہ۔ <p>بفتہ - 2 موضوع - افسانہ پڑھنا اور لکھنا</p> <p>سبق میں شامل عصمت چغتائی کا افسانہ 'چوتھی' کا جوڑا کو دیے گئے لنک کی مدد سے پڑھیے:</p> <p>http://ncert.nic.in/textbook/textbook.htm?kuga1=5-33</p> <p>اس افسانے کو پڑھنے کے بعد ان نکات پر غور کیجیے:</p> <ul style="list-style-type: none"> - اس میں آغاز، وسط اور انجام کس نوعیت کے ہیں؟ - پلاٹ کیسا ہے؟ - کردار کیسے ہیں؟ - زبان کیسی ہے؟ <p>2- آپ جانتے ہیں کہ ہر کہانی میں آغاز، وسط اور انجام ہوتا ہے۔ آپ ایک خاکہ تیار کیجیے کہ کہانی میں کون کون سے واقعات بیان کرنے ہیں اور ان کی ترتیب کیا ہوگی۔ خیال رکھیے کہ افسانے میں اختصار سے کام لینا ضروری ہے ورنہ پڑھنے اور سننے والے کی دلچسپی نہیں رہے گی۔ دوسری اہم بات افسانے میں تمام اجزا کا ایک دوسرے کے ساتھ مربوط ہونا ضروری ہے۔</p> <p>3- اپنی کہانی کو اپنے گھر کے افراد کو سنائیے اور ان کے مشورونکی روشنی میں مناسب تبدیلیاں کیجیے۔ آپ ای میل کے ذریعے اپنے افسانے یا کہانی کو</p>	<p>این سی ای آر ٹی/ ریاست کی درسی کتب</p>	<p>1- مختلف شعری و نثری اصناف کا مطالعہ کرتے ہیں اور آزادانہ طور پر خود افسانہ یا غزل/نظم لکھنے کی کوشش کرتے ہیں۔</p> <p>2- افسانوی نثر کی خصوصیات بیان کرتے ہیں۔ اپنے تجربات کو موثر انداز میں لکھتے ہیں۔</p> <p>3- گفتگو اور تحریر میں اپنی تخلیقی صلاحیت کا استعمال کرتے ہیں۔</p> <p>4- شعری اصناف جیسے غزل، نظم، مثنوی، مرثیہ قصیدہ، گیت، قطعہ وغیرہ کے مختلف اجزا کی وضاحت کرتے ہیں۔</p> <p>5- عبارت اور شعر میں حسن پیدا کرنے والے عناصر کی نشاندہی کرتے ہیں جیسے محاورے، ضرب الامثال، تشبیہ، استعارہ، مختلف صنعتیں وغیرہ۔</p>

اساتذہ کو بھی روانہ کرسکتے ہیں اور ان سے رہنمائی حاصل کرسکتے ہیں۔

ہفتہ - 3

موضوع - غزل پڑھنا اور لکھنا

- 1- اپنی پسند کی کسی ایک غزل کے سب سے اچھے شعر کو خوش خط لکھیے اور اپنے گھر کے افراد کو یہ بتائیے کہ آپ کو یہ شعر کیوں پسند ہے۔
- 2- اب جس شعر کو آپ نے پسند کیا ہے اس کی پوری غزل کو پڑھیے۔ مشق کے طور پر آپ اس غزل کو تنہائی میں بہ آواز بلند پڑھیے۔ ممکن ہو تو ترنم کے ساتھ گائیے۔
- 3- غزل کے ہر شعر کا مفہوم اپنے گھر کے افراد کو اپنی زبان میں بتائیے۔ اس گفتگو کو جاری رکھتے ہوئے ان سے بھی اشعار کے الگ الگ مفہوم بتانے کے لیے کہیے۔
- 4- ان کے الگ الگ مفہوم کے بارے میں ان سے گفتگو کیجیے ساتھ ہی اشعار کے معنوی اور فنی پہلوؤں پر بات چیت کیجیے۔
- 5- نیچے دیے گئے لنک کی مدد سے ویڈیو کو دیکھیے:

<https://www.youtube.com/watch?v=ki8uwoweGJQ>

ہفتہ - 4

موضوع - غزل پڑھنا اور لکھنا

- 1- اپنی پسندیدہ غزل کو پڑھیے۔ یہ آپ کی درسی کتب میں بھی شامل ہو سکتی ہیں یا کسی رسالے یا اخبار میں۔ اپنے گھر کے افراد کو بتائیے کہ یہ غزل آپ کو کیوں پسند ہے۔
- 2- اس غزل کو کئی مرتبہ دہرائیں۔ انٹر نیٹ پر اس غزل کی آڈیو یا ویڈیو ریکارڈنگ دستیاب ہوگی۔ اسے تلاش کیجیے اور سنیے یا دیکھیے۔
- 3- آپ کو اس کی بحر اور وزن کا اندازہ ہو گیا ہوگا۔ غزل کے قافیہ، ردیف، مطلع، مقطع سے بھی واقف ہو گئے ہوں گے۔
- 4- اب آپ اسی نوعیت کے کچھ الگ الگ مصرعے لکھنے کی کوشش کیجیے۔ یہ مت سوچیے کہ یہ مصرعے کتنے بے معنی یا بے وزن ہیں۔ بس یہ خیال رکھیے کہ مصرعے یا معنی ہیں اور ایک دوسرے کے بغیر ادھورے بھی ہیں۔ اس طرح کم سے کم دس مصرعے لکھیے۔
- 5- ان مصرعوں پر دوبارہ غور کیجیے۔ اب دیکھیے کہ یہ پانچ اشعار قافیہ اور ردیف کے لحاظ سے مناسب ہیں اور ان میں ایک تعلق بھی ہے۔ اس طرح آپ کی غزل پوری ہو گئی۔ اپنی اس غزل کو اپنے گھر کے افراد کو سنائیے یا فون پر اپنی استانی / اپنے استاد کو سنائیے اور ان سے مشورہ کیجیے۔ دیے گئے لنک کی مدد سے درسی کتاب میں شامل غزلوں کو پڑھیے:

<http://ncert.nic.in/textbook/textbook.htm?kuga1=12-33>

URDU (CLASS XII)

ہفتہ وار سرگرمیاں (Week-wise Activities)	ماخذ (Source)	متوقع آموزشیماحصل (Expected Learning Outcomes)
<p>ہفتہ - 1 موضوع خاکہ پڑھنا اور لکھنا 1- دیے گئے لنک کی مدد سے ویڈیو کو دیکھیے https://www.youtube.com/watch?v=Tl1bS-uocwBY اپنے گھر کے افراد یا استاد کے ساتھ خاکہ کے بارے میں گفتگو کیجیے اور یہ معلوم کیجیے کہ سوانح اور خاکہ کے درمیان کیا فرق ہے۔ 2- آپ پچھلی جماعتوں میں بہت سے خاکے پڑھ چکے ہیں۔ کسی ایک خاکے کا انتخاب کیجیے اور بتائیے کہ وہ خاکہ آپ کو کیوں پسند ہے؟ 3- آپ نیچے دیے گئے لنک کی مدد سے بھی خاکے کو پڑھ سکتے ہیں: http://ncert.nic.in/textbook/textbook.htm?luga1=10-11 4- اپنے استاد یا گھر کے افراد کے ساتھ ان نکات کو ذہن میں رکھتے ہوئے گفتگو کیجیے۔ - جس شخص کا خاکہ لکھا گیا ہے اس کی زندگی، سیرت و صورت، عادات و اطوار اور کارنامے زبان و بیان وغیرہ۔</p> <p>ہفتہ - 2 موضوع - خاکہ لکھنا 1- اپنے بہترین دوست کا حلیہ لکھیے یعنی اس کا قد، ناک، نقشہ، رنگ، چال ڈھال وغیرہ۔ 2- اس کی بات چیت کا انداز بیان اور کی کوئی مخصوص یا دلچسپ عادت کا بیان کیجیے اور اس کے بعد اس کی سیرت و شخصیت کے بارے میں بتائیے۔ 3- آپ نے جو خاکہ لکھا ہے اسے فون پر اپنے دوستوں کو سنائیے۔ وہ جو مشورہ دیں اس کے مطابق خاکے میں ردوبدل کیجیے اور پھر اسے اپنے گھر کے افراد یا اپنے استاد کو سنائیے۔ 4- انٹرنیٹ پر دستیاب مولوی عبدالحق کے خاکوں کی کتاب 'چند ہم عصر' اور 'سعادت حسن منٹو کے خاکوں کا مجموعہ' گنجے فرشتے 'تلاش کیجیے اور پڑھیے۔</p> <p>ہفتہ - 3 موضوع - نظم کو پڑھنا 1- اپنی پسند کی نظم کا انتخاب کیجیے خواہ وہ آپ کی درسی کتب میں ہی کیوں نہ شامل ہو۔ 2- اپنی منتخب کی ہوئی نظم میں ادبی اظہار کے ان نکات پر غور کیجیے: - موضوع - خیال/تجربہ کی تحریک اور پیشکش - فنی محاسن جیسے صنائع و بدائع وغیرہ - منظر نگاری/جزئیات نگاری - صوتی آہنگ - زبان و بیان - آپ کے محسوسات 3- دیے گئے لنک کی مدد سے ویڈیو کو دیکھیے اور ان کے بارے میں گفتگو کیجیے:</p>		<p>1- مختلف شعری و نثری اصناف کا مطالعہ کرتے ہیں اور آزادانہ طور پر خود افسانہ یا غزل/نظم لکھنے کی کوشش کرتے ہیں۔ 2- غیر افسانوی نثر کی خصوصیات بیان کرتے ہیں۔ اپنے تجربات کو موثر انداز میں لکھتے ہیں۔ 3- گفتگو اور تحریر میں اپنی تخلیقی صلاحیت کا استعمال کرتے ہیں۔ 4- شعری اصناف جیسے غزل، نظم، مثنوی، مرثیہ قصیدہ، گیت، قطعہ وغیرہ کے مختلف اجزا کی وضاحت کرتے ہیں۔ 5- عبارت اور شعر میں حسن پیدا کرنے والے عناصر کی نشاندہی کرتے ہیں۔</p>

(i) https://www.youtube.com/watch?v=cHbqCG2-R2Q&list=PLUgLcpnv1Yiede7Z1tbStw5RKMyv_wszY&index=14
(ii) https://www.youtube.com/watch?v=Hx4KhFlzBfI&list=PLUgLcpnv1Yiede7Z1tbStw5RKMyv_wszY&index=13

ہفتہ - 4

موضوع - سبق میں شامل نظم کا مطالعہ

1. سبق میں شامل فیض احمد فیض کی نظم تنہائی کو پڑھیے:

<http://ncert.nic.in/textbook/textbook.htm?kuga1=21-33>

2. اپنے گھر کے افراد/اساتذہ سے گفتگو کیجیے کہ اس نظم میں خیال کا ارتقا کس طرح ہو رہا ہے؟

3. نظم کے ان فقروں کو پڑھیے ان سے آپ کو اپنی بات کی وضاحت میں مدد ملے گی -

- پھر کوئی آیا
 - کہیں اور چلا جائے گا
 - ڈھل چکی
 - بکھرنے لگا
 - لڑکھڑانے لگے
 - دھندلا دیے
 - گل کرو
 - بڑھادو
 - مقفل کرلو
 - کوئی نہیں آئے گا۔
4. دیے گئے لنک کی مدد سے ویڈیو دیکھیے اور گفتگو کیجیے:

https://www.youtube.com/watch?v=cHbqCG2-R2Q&list=PLUgLcpnv1Yiede7Z1tbStw5RKMyv_wszY&index=14 (i)

<https://www.youtube.com/watch?v=7eOsAE-9X74> (ii)

SOCIAL SCIENCES

History (Class XI)

Learning Outcomes	Sources/Resources	Suggested Activities
<p>The learner</p> <ul style="list-style-type: none"> — identifies different crops during this period in West Asia, East and South Asia. — interprets Sources. 	<p>NCERT/STATE TEXTBOOKS</p> <p>Textbook: Textbook in History for Class XI: <i>Themes in World History</i></p> <p>Chapter-1- Early Societies: From the Beginning of Time Writing and City Life.</p> <p>Sources that can be consulted Resources available in QR-Code given in the NCERT textbook e-materials</p> <p>Dictionary in History</p> <p>Books of other states, neighbouring countries by downloading the same from the net.</p>	<p>WEEK-1</p> <p>Preparing timeline taking help of chronology of events as well as pictures. You may also sketch some of the pictures. You may also prepare a comparative timeline. This will help you to relate the story of early humans in Asia, Africa and Asia.</p> <p>Prepare a chart on the following:</p> <ul style="list-style-type: none"> • Tools used by early humans • Settlement patterns • Crops <p>Animals that were known to early humans</p> <p>Write an essay on the story of writing and share it with your colleagues.</p>
<ul style="list-style-type: none"> — explains the establishment of Empires in Mesopotamia and the various attempts at empire building process across the region. — describes the processes of making of an empire. — interprets and analyses different sources. —discusses the technological changes taking place during this period. 	<p>Chapter-2 Empires: An Empire Across Three Continents: The Central Islamic Lands, Nomadic Empire</p> <p>QR- Code e-content</p> <p>epathsala</p> <p>Dictionary in History</p> <p>Textbooks of states/neighbouring countries/other countries by downloading the same.</p>	<p>WEEK-2</p> <p>Students can prepare a timeline focusing on kingdoms and Empires</p> <p>Students can collect pictures of empires like the Roman Empire</p> <p>Students can prepare a chart on items traded with the Roman empire and India.</p> <p>Students can prepare a brief write-up on the cosmopolitan character of the state setup by the Arabs, Iranians and Turks and share it with peers with help of mobile phone or email.</p>

<ul style="list-style-type: none"> — discusses the period (C.1300 to 1700) and several major developments in Europe in the domain of agriculture, way of life, culture and growth of trade. — explains the spread of ideas, cultures through movement of people and trade. — describes the causes of constant warfare between kingdoms. 	<p>Chapter-3, Changing Traditions, Confrontation of Cultures</p> <p>QR-CODE e-content</p> <p>Textbooks of states, neighbouring countries/other countries</p> <p>E-pathshala You Tube</p>	<p>WEEK-3</p> <p>Students may be asked to prepare a comparative timeline.</p> <p>Discuss with parents about changing traditions and cultures which they have witnessed in their lives. You can then compare it with the theme.</p> <p>Write an essay on Feudalism and prepare a diagram on the Administrative set-up during this time. Share it with the help of e-mail.</p> <p>Students may be asked to prepare glossary of terms.</p> <p>Imagine yourself as a Medieval craftsperson and write down your diary.</p>
<ul style="list-style-type: none"> — explains encounters between Europeans and the people of Americas in the 15 and 17 centuries. — identifies factors that led to the exploration of unknown trade routes. — discusses the urban civilisation of the Aztecs, Mayans and the Incas. — collects variety of sources and analyse the same. 	<p>Chapter 4 Confrontation of Cultures</p> <p>Collect pictures from magazines, other books reflecting the contributions of the Aztecs, the Mayas and the Incas.</p> <p>World map</p> <p>Books of other Countries Encyclopedia</p> <p>https://www.ducksters.com/history/aztec-maya-inca.php</p> <p>https://prezi.com/w7/waa-zugukb7/differences-between-the-maya-aztec-and-inca-empires/</p>	<p>WEEK 4</p> <p>Prepare a comparative timeline on these cultures. You may consult your books or any other resource that is available. Locate places on the world map on these cultures.</p> <p>Write a short note the contributions of the Aztecs, Mayans and the Incas. You may practice answering questions that has appeared on the theme in the last five years. Keep a watch in front and see how much time you take in answering short and long answer questions.</p> <p>Write in your own words the reasons for Spain and Portugal in the 15th century to venture across the Atlantic.</p>

History (Class-XII)

Note: History Class XII textbook has been published in three parts by the NCERT. Here, all the three parts have been covered giving week-wise activities from various chapters of these three parts. However, states are free to use their own textbooks keeping in view the given themes.

Learning outcomes	Sources/Resources	Suggestive activities
<p>The learner</p> <ul style="list-style-type: none"> • becomes aware of early urban centres • understands how archaeological sources have been put together, analysed and interpreted by archaeologists to present the story of early urban centres. • understands how new data or new questions can lead to a fresh interpretation and suggestion for revision in existing notions of history. 	<p>NCERT textbook Themes in Indian History, Part I</p> <p>Dictionary of History for Schools http://www.ncert.nic.in/publication/Miscellaneous/pdf_files/Dic_History.pdf</p> <p>www.harappa.com (this website provides material on different aspects of Harappan civilization)</p> <p>https://artsandculture.google.com/ (Google Arts and Culture website for high resolution pictures, virtual tours to partner museums, their artworks and various historical places and sites. It provides a huge collection of free to use and licensed pictures. Students can virtually walk to any such place and learn a lot about history and culture from this website.)</p>	<p>Theme Bricks, Beads and Bones The Harappan Civilisation</p> <p>WEEK 1</p> <ul style="list-style-type: none"> • Suggest learners to read the chapter and mark different terms/concepts appearing in the chapter. • Suggest them to consult dictionary of history to understand these terms. • Suggest students to visit Google cultural institute site to take a virtual tour of: <ul style="list-style-type: none"> ✓ Harappa and other available sites, National Museum, Delhi to see the collections of Harappan Civilization. • Give written assignment with 1 or 2 questions. Suggestive questions: <ul style="list-style-type: none"> ✓ Why is Indus valley civilisation also known as Harappan civilisation? ✓ What are the specific features of early Harappan cultures? <p>(Students might browse the internet for example www.harappa.com to understand these and prepare assignment)</p> <p>Give them some time to finish the task. Students can do the task and send the photo of their replies to the teacher, which can be used for assessment later.</p> <p>WEEK 2</p> <p>Make use of google classroom and initiate the discussion on the following.</p>

	<p>Google classroom</p>	<p>Subsistence strategies</p> <ul style="list-style-type: none"> • Important crops and animals for food • Agricultural technologies <p>Pose a question</p> <p>How present-day analogies help archaeologists understand what ancient artefacts were used for?</p> <p>(Students can get help from source 1 in the textbook but they need to be encouraged to find out about other such things)</p> <p>A case study on Mohenjo-Daro has been given in the chapter. Students can read that and visit the website www.harappa.com to prepare a case study on another Harappan urban centre. This will help them to understand the important features of Harappan urban centres.</p> <p>WEEK 3</p> <p>Students can be suggested to go through sections on social and economic differences, craft production, strategies for procuring materials, seals, scripts and weight, ancient authority or the teacher can discuss these with them in a Google classroom and encourage students to reflect on the following:</p> <ol style="list-style-type: none"> 1. Did Harappans practise social and economic differences? 2. What kinds of crafts they practised? How do we identify a craft centre? 3. Relation of Harappan towns with contemporary places/sites in India or outside with focus on sources/things which tell us about this contact and the nature of this contact. 4. What is the importance of seals and sealings (features of Harappan script and materials used to make weights)? 5. Did ancient Indus people have a government? <p>WEEK 4</p> <p>The teacher can share a presentation of slides with learners covering topics like decline of the civilization, how this civilization was discovered,</p>
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		<p>how archaeologists interpret different material remains and the problems that they face in this, using Google hangout, where each slide can be numbered to work on by individual students or group of students.</p> <p>Students may be given 15 minutes to work on their slides. Once they finish the task they may come back to hangout chat.</p> <p>2-3 students may be selected randomly to explain what they have understood or share their views on the slides.</p> <p>Invite their feedback (you can prepare and share a sheet for this with some ready questions like, how did they find this activity? Was there something that they did not understand? You can also leave some space for them to comment).</p> <p>In the end conduct a quiz of atleast 10 or 15 self graded questions (it can be prepared using H5P) and give them some time to respond.</p> <p>Finally suggest learners to answer the questions given at the end of the chapter and submit their answers to their teacher through email or click a photo of their answers and share it with their teacher. Sufficient time should be given to the learners.</p>
<p><i>The learner</i></p> <ul style="list-style-type: none"> — <i>investigates with a help of a map, to locate places from where travellers came to the Indian sub-continent.</i> — <i>identifies biases in their work</i> — <i>explains the salient features from</i> 	<p>Themes in Indian History- Part II</p> <p>Chapter-1- Through the Eyes of Travellers: Perceptions of Society (c.10 to 17 century)</p> <p>Web Resources e-Pathshala QR Code may be used to access video on the above topic.</p>	<p>WEEK 1</p> <p>The theme can be studied by adopting an integrated perspective, in studying the geographical routes from where the travellers came to the Indian Subcontinent. A discussion can be initiated on why people travel in the past and in the present.</p> <ul style="list-style-type: none"> • Learners may be asked to prepare a short note on different travellers and share with their peers through e-mail. • An Album can be prepared on the life and works of travellers. Peer sharing can be done through email /WhatsApp.

<p>their works on society, education, economy etc. relates travellers' accounts with other sources to get in-depth idea of the theme under investigation</p>	<ul style="list-style-type: none"> ➤ Trilingual Dictionary of History for Schools (Hind-English-Urdu) ➤ e-material ➤ material available on the Abhilekh Patal 	<ul style="list-style-type: none"> • Sketches on some of the travellers can be made. • Learners may prepare a chart on interesting observations made by travellers • A timeline can be prepared.
<p>— investigates places with a help of a map to locate places associated with the Bhakti and Sufi Saints. — explains the essence of their works e.g padas, vakas, abhangas etc. — identifies monuments and musical instruments associated with the saints</p>	<p>Textbook-Chapter-2-Bhakti-Sufi Traditions: Changes in Religious Beliefs and Devotional Texts (C. Eighth to Eighteenth Century)</p> <p>Web Resources e-Pathshala QR Code may be asked to access video on the above topic.</p> <ul style="list-style-type: none"> ➤ Trilingual Dictionary of History for Schools (Hind-English-Urdu) ➤ e-materials ➤ material available in other state textbooks ➤ e-books on each saint poets 	<p>Week 2 The theme can be introduced by initiating a discussion on Saints of India along with their works. A map can be shown of regions from where the saints belonged. Sharing of their works in regional languages may be done to make the learners appreciate the richness and diversity in their compositions.</p> <p>Learners can be encouraged to prepare a toolkit consisting of pictures, maps and collection of their messages on social harmony. A CD can also be included by encouraging them to recite from their works.</p> <p>A chart can be prepared on musical instruments associated with the saints of India.</p> <p>Children may be encouraged to locate places associated with their lives and works</p> <p>Parents may be encouraged to download last five years' question papers based on the theme from the website and ask their child to practice attempting it in a fixed time.</p>
<p>The learner — explains the contributions of Vijayanagara in the 14th to 16th century</p>	<p>Chapter-3 An Imperial Capital Vijayanagara (C.14th to 16 th Century) Web Resources</p>	<p>WEEK 3 AND 4</p> <p>Theme- The lesson can be initiated by showing some of the architectural features that are present till date. The contributions to trade can be discussed along with the rulers of the</p>

<p>— identifies the salient features of the architecture and water – works.</p>	<p>On e-Pathshala QR Code may be used to access video on the above topic.</p> <ul style="list-style-type: none"> ➤ Trilingual Dictionary of History for Schools (Hind-English-Urdu) ➤ e-materials ➤ material available in other state textbooks 	<p>Vijayanagara empire.</p> <p>Pictures of monuments can be collected.</p> <p>A chart can be prepared on important items that were exported and imported and shared with the peers through email.</p> <p>Learners may be encouraged to prepare a tool kit on items needed for preserving monuments.</p> <p>Essays can be written on the rulers of Vijayanagara and shared with peers through e-mail.</p> <p>A glossary of terms can be prepared.</p> <p>A Short note on waterworks of this period can be written.</p>
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Learning Outcomes	Sources	Week-wise Suggestive Activities
<p>The learner</p> <p>— investigates the contemporary agrarian structure with those that existed during the colonial period.</p> <p>— explains various structures of the agrarian system along with economic and social conditions of the landlord, peasants and colonial officials.</p>	<p>Textbook- Themes in Indian History-Part III</p> <p>Chapter-1 Colonialism and the Countryside: Exploring Official Archives</p> <p>Web Resources On e-Pathshala QR Code may be used to access video on the above topic.</p> <ul style="list-style-type: none"> ➤ Trilingual Dictionary of History for Schools (Hind-English-Urdu) ➤ e-materials 	<p>WEEK -1</p> <p>Theme- the theme can be studied by adopting an integrated perspective, in studying the impact of agrarian policies on peasants during colonialism. You may use a map and highlight different agrarian settlements in diverse geographical regions.</p> <ul style="list-style-type: none"> • The teacher may initiate the discussion by introducing the learners to the contemporary agrarian system they know about. • Learners may be asked to prepare a short note on the life of landowners and the peasantry. • Learners may be asked to locate crops grown in different parts of the country and the way they are marketed. They can compare it with the colonial period. Peer sharing can be done through email /WhatsApp. • Concept map can be prepared on different types of revenue settlement that was operating during the colonial period. • Learners may be asked to consult trilingual Dictionary of History for Schools (Hindi-English- Urdu) for technical terms given in the chapter.

		<ul style="list-style-type: none"> Learners may prepare glossary of terms for concept clarification and share with peers through email, mobile phones, etc.
<ul style="list-style-type: none"> identifies many popular uprisings during this period. explains the causes that led to its occurrence draws linkages with socio, economic and political causes that culminated in igniting it. demonstrates sensitivity by reflecting the contributions of men and women in the revolt. 	<p>Chapter-2 The Revolt of 1857 and its Representation</p> <ul style="list-style-type: none"> ➤ <i>Trilingual Dictionary of History for Schools</i> (Hind-English-Urdu) ➤ e-content ➤ Using Google search engine for exploring the way the revolt is reflected in textbooks of different state. ➤ e-pathsala ➤ QR Code 	<p>WEEK 2</p> <p>The theme can be interestingly studied by asking the children to recall any personality they know who played a significant role in the 1857 revolt. Learners can be asked to locate places that are associated with the revolt.</p> <ol style="list-style-type: none"> A flow chart can be prepared to show the causes that led to the revolt. Biographies of important personalities who participated in the revolt can be prepared. Learners may be asked to prepare a script for a small video presentation on 1857 and share with peers through email. Learners may be asked to discuss the theme with their grandparents, parents, or guardians to know more about 1857. They may collect interesting information's through other resources such as textbooks, magazines, newspaper clippings, YouTube, etc. Learners can be asked to prepare an album by collecting interesting information on the same.
<ul style="list-style-type: none"> recognises facts, figures about processes that led to urbanisation. demonstrates oral and written skills in explaining urbanisation in the past and the present. 	<p>Chapter-3 Colonial Cities: Urbanisation, Planning and Architecture</p> <p>Web Resources Dos' and Don'ts for various hazards/disasters in urban and rural settings</p> <p><i>Trilingual Dictionary of History for Schools</i> (Hind-English-Urdu)</p> <ul style="list-style-type: none"> ➤ e-content ➤ QR-Code ➤ Google-Earth to 	<p>WEEK-3</p> <p>Theme- Teacher may use audio visuals and print materials/documentary, etc. for introducing the theme regarding urban centers and planning in the past and the present.</p> <ol style="list-style-type: none"> Learners may be asked to locate important urban centers on a map of India. They may be asked to write an essay on the contemporary challenges of urbanisation. Learners may be asked to imagine themselves as architects and design a house that is environment friendly. Learners can be encouraged to prepare

	<p>show distances and connectivity of places in urban areas.</p> <p>➤ State Gazetteers</p>	<p>a concept map on any architectural features. For example, what are the monuments of their liking and then go about preparing linkages using lines to show when was it built; who patronised it, what materials were used; what was the architectural features; how has it survived till date; how would they preserve and conserve it, etc. They may share the same with their peers through e-mail.</p> <p>5. Learners may be encouraged to prepare quiz items.</p>
<p>— recalls from the earlier readings on the Civil Disobedience Movement.</p> <p>— compiles from various sources the contributions of Mahatma Gandhi to the Civil Disobedience Movement</p> <p>— explains the role of women in the Civil Disobedience movement.</p> <p>— examines from secondary sources the role of Gandhiji in Champaran and Kheda <i>satyagraha</i>.</p>	<p>Themes in Indian History-Part III</p> <p>Chapter 4: Mahatma Gandhi and the Nationalist Movement: Civil Disobedience and Beyond</p> <p>e-content UTube on Mahatma Gandhi and the freedom struggle.</p> <p>State textbooks/ neighbouring countries textbooks/other countries books.</p> <p><i>Collected Works of Mahatma Gandhi-</i></p> <p><i>Abhilekh patal</i> of the National Archives.</p> <p><i>Imperial Gazetteer of India</i> Newspaper and magazines articles</p>	<p>WEEK-4</p> <p>The activities may be done in two weeks'time. Explore more materials and write innovatively and creatively like story, poems, short case studies and others you make like to do.</p> <ul style="list-style-type: none"> • Learners may prepare a brief write-up on the early life of Mahatma Gandhiji. The same may be shared with the peers. • Learners may collect messages of Mahatma Gandhi on Women Empowerment, his views on <i>Swadeshi</i> and <i>Swaraj</i>. • Learners may locate places associated with the Civil Disobedience Movement • Prepare a collage on the different movements associated with Gandhiji. • Collect pictures on women associated with the civil disobedience movement and write brief biography. • Learners may practice answering questions that appeared in the last five years. <p>They may also prepare a timeline of events associated with Gandhiji.</p>

Political Science (Class –XI)

<i>Learning outcomes</i>	<i>Sources/Resources</i>	<i>Suggested Activities (to be guided by teachers)</i>
<p>The learner</p> <ul style="list-style-type: none"> understands what is meant by Politics and Political Theory. identifies important political thinkers in India and in the world. explains Equality, Justice and Democracy. 	<p>NCERT/State Textbooks</p> <p>Theme-I Political Theory: An Introduction,</p> <p>Sources</p> <p>E content</p> <p>QR Code</p> <p>e-pathshala</p> <p>Newspapers and magazines</p>	<p>WEEK 1</p> <ol style="list-style-type: none"> Write short notes on Kautilya, Aristotle and Dr. BR. Ambedkar and share them with your friends through email. Prepare a glossary of terms. Prepare a chart on some of the recent amendments to the Constitution. Collect cartoons from newspapers and magazines and write down the messages they convey politically. Which concepts do they highlight? You may prepare your own cartoons. Collect the messages of important political thinkers and share them with your parents. Those that have inspired you may be shared with all your family members with the help of a mobile.
<ul style="list-style-type: none"> explains the importance of freedom for self and the society. explains the difference between positive and negative freedom. 	<p>Theme-2 Freedom: Overview</p> <p>Sources</p> <p>e-materials</p> <p>OR-Code</p> <p>e-pathshala</p> <p>Radio/T.V.and YouTube</p>	<p>WEEK 2</p> <p>✓ Learners may be asked to read biographies of our freedom fighters (both men and women) as well as of some eminent global personalities like Nelson Mandela who struggled against the apartheid regime in South Africa. You may prepare a short note on their trials and tribulations and what inspired you about them. Share these with your friends with the help of a mobile or on email.</p> <p>WEEK 3</p> <p>✓ Collect important quotes of eminent personalities like Mahatma Gandhi and Subhash Chandra Bose on freedom.</p> <p>✓ Prepare a glossary of terms.</p>

<ul style="list-style-type: none"> explains the concept of Equality understands that the pursuit of Equality involves treating everyone the same way. recognises different dimensions of Equality- Political, Economic and Social. 	<p>Theme-3 Equality</p> <p>Sources e-content</p> <p><i>OR-Code e-pathshala Newspaper, magazines Radio/T.V/other Audio Video materials</i></p>	<p>WEEK 4</p> <ol style="list-style-type: none"> Prepare a chart on Schemes and Programmes that address inequalities related to access, enrolment, retention and achievement of learners at the secondary level of education. Write an essay on 'Equality as a principle and as a practice'. Prepare a comic strip on inequalities existing in your neighbourhood. Prepare a note on 'Gender equality as a stepping stone for development' and share it with your friends.
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POLITICAL SCIENCE (CLASS XII)

Learning outcomes	Sources/Resources	Suggested Activities (to be guided by teachers)
<p>The learner</p> <ul style="list-style-type: none"> describes Politics in India since Independence. explains the processes of integration of Princely states into the Indian Union. interprets sources on the Partition of India 	<p>NCERT/STATE TEXTBOOKS</p> <p>Politics in India Since Independence: Chapter-1, Challenges of Nation building</p> <p>Sources e-content QR-Code You-Tube Print materials like Newspaper and Magazines Radio Talk / TV programme on the theme</p>	<p>WEEK-1</p> <p>Learners may prepare a write-up on the processes of National building.</p> <p>Learners may be asked to collect articles on the Partition of India.</p> <p>Collect stamps issued in 1950 to mark the first Republic Day.</p> <p>Prepare a script for a small documentary on Partition and Beyond.</p> <p>Imagine you are a press reporter writing a brief write-up on 'The Challenges of Nation Building'.</p> <p>Write a biography on any leader who has inspired you and share it with your peers through email.</p>

<ul style="list-style-type: none"> describes the functions of the Election Commission of India explains the processes of election in India. interprets how the process of voting has changed to electronic voting. 	<p>Chapter-2 Era of One Party Dominance</p> <p>e-content</p> <p>QR-Code</p> <p>Newspaper and magazines</p>	<p>WEEK-2</p> <p>Discuss with your parents /grandparents about their experiences during the partition.</p> <p>Prepare a short write-up on the party system in India.</p> <p>Prepare a chart on different political party in India with their symbols.</p> <p>Prepare a chart on the different Lok Sabha Speakers — from the 1st to the 16th, and their respective terms. Share it with your peers through e-mail.</p>
<p>The learner</p> <ul style="list-style-type: none"> explains the past and present of planning — Planning Commission to Niti Aayog. explains what is de-centralised planning. distinguishes between public and private sectors 	<p>Sources/Resources</p> <p>Chapter-3 Politics of Planned Development.</p> <p>e-content</p> <p>QR-Code</p> <p>Youtube</p> <p>Newspaper and magazines</p>	<p>WEEK- 3</p> <p>Prepare a write-up on the Schemes and Programmes</p> <p>Prepare a Chart on the Green and White revolutions</p> <p>Collect information from the website of different Ministries on the scheme and programmes for the educational welfare of SC/ST and Minorities communities and share it with peers through mobile and e-mail.</p>
<ul style="list-style-type: none"> recalls the international context that shaped India's external relations discusses the content of Article 51 of the Indian Constitution explains the Sino-Indian relationship examines India's Nuclear policy 	<p>Chapter 4 India's External Relations</p> <p>e-content</p> <p>T.V./Radio</p> <p>Other state textbooks</p> <p>Newspaper/magazines</p>	<p>WEEK-4</p> <p>Explain the background that shaped India's external relations</p> <p>Prepare a chart on the contents of Article 51.</p> <p>Write an essay on India's Nuclear Policy.</p> <p>Collect material on India's relation with neighbouring countries</p> <p>Role of India in SAARC.</p> <p>Collect question papers of the last five years and practice answering questions that have appeared on the theme.</p>

Geography (Class-XI)

Learning Outcomes	Sources/Resources	Suggested Activities (to be guided by teachers)
<p>The learner</p> <ul style="list-style-type: none"> explains nature of geography describes geography as an interdisciplinary subject. establishes relationship of geography with other subjects. identifies branches of geography. classifies geography on the basis of systematic and regional approach. appreciates importance of physical geography. 	<p>Textbook- Fundamentals of Physical Geography Chapter -1- Geography as a Discipline</p> <p>Web Resources On e-Pathshala QR Code may be used to access video on the above topic.</p> <p><i>Dictionary of Geography for Schools (Trilingual) (Hindi-English-Urdu)</i> http://www.ncert.nic.in/publication/Miscellaneous/pdf_files/tidog101.pdf</p>	<p>WEEK 1</p> <p>Topic- Nature of Geography. Geography is an interdisciplinary subject. Physical Geography and Natural Sciences, Geography and Social Sciences, Branches of Geography, Physical Geography and its importance</p> <ul style="list-style-type: none"> The teacher may initiate a discussion with the story of primitive societies and people's interaction with the natural environment. Learners may be asked to prepare a short note on the life of people living in different regions of India and the world. Learners may share their write-up with their teacher and classmates through emails/WhatsApp. Teachers may take a cue from the write-up and link it with the discussion related to Geography as a Spatial Science, interrelationship with other subjects, branches of geography, etc. The flow chart given on pages 8 and 9 may be used to discuss systematic and regional approaches to geography. Newspaper clippings related to climate change, forest fires, natural disasters, etc., may be used to discuss the importance of physical geography. Learners may be asked to consult the trilingual Dictionary of Geography for Schools (Hindi-English-Urdu) for technical terms given in the chapter.
<ul style="list-style-type: none"> identifies theories related to origin of the earth and the universe distinguishes between inner planets and outer planets describes evolution 	<p>Chapter-2 The Origin and Evolution of the Earth</p> <p>Web Resources For Teachers Explore the Universe www.nasa.gov</p>	<p>WEEK 2</p> <p>Topic-Theories related to the origin of the Earth and universe, the Solar System, evolution of the Earth, lithosphere, atmosphere and hydrosphere, origin of life</p> <ul style="list-style-type: none"> The teacher may use audio-video

<p>of the earth including lithosphere, atmosphere and hydrosphere</p> <ul style="list-style-type: none"> relates origin of life on the earth with Geological time scale 	<p>https://www.nasa.gov/stem/foreducators/k-12/index.html</p> <p>For Learners Fun Activities To Do at Home Where in the World Image Quiz https://www.nasa.gov/stem-ed-resources/where-in-the-world-image-quiz.html</p> <ul style="list-style-type: none"> Dictionary of Geography for Schools (Trilingual) (Hindi-English-Urdu) http://www.ncert.nic.in/publication/Miscellaneous/pdf_files/tidog101.pdf 	<p>materials available on the website of NASA to initiate the topic.</p> <ul style="list-style-type: none"> With the help of the activity related to the big bang theory, using a balloon, as mentioned on page 14 of the textbook, learners may be encouraged to learn the theories of the origin of the universe. Learners may be asked to prepare a chart showing <i>Inner</i> and <i>Outer</i> planets along with their characteristics. Learners may share their chart and write-up with their teacher and classmates through email /WhatsApp. The teacher may prepare questions for a quiz on the Geological Time Scale. A flowchart may be used to explain evolution of the atmosphere. Learners may be advised to consult the Dictionary of Geography for Schools (Trilingual) (Hindi-English-Urdu) for technical terms given in the chapter.
<ul style="list-style-type: none"> identifies direct and indirect sources of information of the interior of the earth identifies and describes characteristics of earthquake waves explains causes and effects of earthquake and preparedness during earthquake interprets diagram showing structure of the earth and earthquake waves describes types of volcanoes and volcanic landforms 	<p>Chapter-3 Interior of the Earth</p> <p>Web Resources</p> <ul style="list-style-type: none"> Do's and Don'ts For Various Hazards/Disasters https://nidm.gov.in/PDF/IEC/Dosnewnidm.pdf https://nidm.gov.in/videos.asp Volcano safety tips - https://www.nationalgeographic.com/environment/natural-disasters/volcano-safety-tips/ <p>➤ Dictionary of Geography for Schools (Trilingual) (Hindi-English-Urdu)</p>	<p>WEEK 3</p> <p>Topic- Sources of information about the Interior of the Earth, Earthquake.</p> <ul style="list-style-type: none"> Teacher may use audio-visual materials/ documentaries, etc., showing volcanic eruptions and earthquakes to initiate the topic. Besides this, learners may be encouraged to watch the videos and documentaries on channels such as National Geographic, Discovery, etc., and write their observations and share them with their teacher and classmates through email or WhatsApp. A flow chart may be developed by the teacher to explain types of earthquake waves and their characteristics. Newspaper clippings related to an earthquake in any part of the world may be used to discuss the effects of an earthquake. A mock drill may be organized to make learners aware and help them prepare safety measures necessary

	<p>http://www.ncert.nic.in/publication/Miscellaneous/pdf_files/tidog101.pdf</p>	<p>during the occurrence of an earthquake.</p> <p>WEEK 4</p> <p>Topic-Structure of the Earth, Volcanoes, Volcanic Landforms</p> <ul style="list-style-type: none"> Learners may be asked to draw a diagram of the structure of the earth and earthquake waves and explain them. Visuals may be used to describe types of volcanoes and volcanic landforms. Learners may collect information from a newspaper or the internet about earthquakes and volcanic eruptions and prepare a chart to show their location on the world map. Learners may be advised to consult the Dictionary of Geography for Schools (Trilingual) (Hindi-English-Urdu) for technical terms given in the chapter.
Learning Outcomes	Sources/Resources	Week-wise Suggestive Activities (to be guided by Parents)
<p>The learner</p> <ul style="list-style-type: none"> locates places, states, union territories on the map of India. describes important terms in Geography such as, standard meridian, prime meridian, tropic of cancer, subcontinent, passes, sea ports etc. appreciates political diversity. 	<p>NCERT Textbook India – Physical Environment http://ncert.nic.in/textbook/textbook.htm?key1=0-7</p> <p>Chapter 1 India: Location</p> <p>Use the QR code given for the chapter for additional resources</p> <p>Explore School Bhuvan-NCERT portal http://bhuvan.nrsc.gov.in/governance/mhrd_ncert/</p>	<p>WEEK 1</p> <p>Topic: Location of India, States and Union Territories</p> <ul style="list-style-type: none"> observe political map of India on <i>School Bhuvan-NCERT</i> portal, NCERT/ atlas/ textbook <ul style="list-style-type: none"> ✓ identify states and union territories of India and their capitals ✓ discuss and verify the information about the States and UTs from other sources, like the website of other states, books etc ✓ work out the latitudinal and longitudinal extent of India and actual distance from north to

<ul style="list-style-type: none"> • compare and contrast different states/UTs of India. • explains inter-relationship between various passes and sea ports in India for trade and communication since historical times. 	<p>Dictionary of Geography for Schools(Trilingual) (Hindi-English-Urdu) http://www.ncert.nic.in/publication/Miscellaneous/pdf_files/tidog101.pdf</p> <p>Additional books for reading</p> <p>1) India: Unity in Cultural Diversity http://www.ncert.nic.in/publication/Miscellaneous/pdf_files/Unit_y_cultural.pdf</p> <p>2) North East India: People, History and Culture http://www.ncert.nic.in/publication/Miscellaneous/pdf_files/tinei101.pdf</p> <p>Youtube https://www.youtube.com/watch?v=Klh1E79yOyU</p> <p>Map work: Lets learn it through BHUVAN</p>	<p>south and east to west. Find out if there is any difference and why?</p> <p>✓ Find out the zone of India. Find out if the location is responsible for large variations in landforms, climate, soil types and natural vegetation in the country. Prepare a write up on it.</p> <p>WEEK-2</p> <p>Topic: Compare and Contrast States and Union Territories</p> <ul style="list-style-type: none"> • Collect information about States and UTs in terms of languages, food, dress, cultural traditions, etc. • Prepare a project on your own state/union territory and any other state/union territory. Identify the similarities and contrasts <p>WEEK-3</p> <p>Topic: India and its Neighbours</p> <ul style="list-style-type: none"> • observe political map of India on <i>School Bhuvan</i> NCERT portal/ atlas/ textbook <ul style="list-style-type: none"> • identify neighbouring countries of India • which countries are included in the Indian subcontinent? • correlate with other disciplines, for example, how various passes in the north and seaports in the south have provided passages to the travellers and how these passages have contributed in the exchange of ideas and commodities since ancient times. Which are these important passes and seaports?
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<ul style="list-style-type: none"> • appreciates physical diversity of India • compares and contrast the physical features of India 	<p>Chapter 2 Structure and Physiography</p> <p>Use the QR code given for the chapter for additional resources</p> <p>Dictionary of Geography for Schools (Trilingual)(Hindi-English-Urdu) http://www.ncert.nic.in/publication/Miscellaneous/pdf_files/tidog101.pdf</p> <p>Explore school Bhuvan-NCERT portal http://bhuvan.nrsc.gov.in/governance/mhrd_ncert/</p>	<p>Read the complete chapter and find out answers for all the questions given in the text.</p> <p>WEEK-4</p> <p>Topic: Structure and Physiography of India</p> <ul style="list-style-type: none"> • Read the chapter and seek help from geography dictionary to understand various geographical terms in the chapter. • Read about the geological region given in the book. Write down their characteristics in a notebook. • Your state/UT lies in which geological region? Explain the characteristics and features which are visible in your state. Draw diagrams along with your write up. • Explore the physiographic divisions of India on School Bhuvan-NCERT portal/ atlas/ textbook.
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Geography (Class XII)

<i>Learning Outcomes</i>	<i>Sources/Resources</i>	<i>Week-wise Suggestive Activities (to be guided by Teachers)</i>
<p>The learner –</p> <ul style="list-style-type: none"> • familiarises themselves with the terms, key concepts and basic principles of geography • explains nature of human geography and its relationship with other disciplines • understands and analyses the inter-relationship between physical and human environments and their impact 	<p>NCERT Textbook <i>Fundamentals of Human Geography</i> http://ncert.nic.in/textbook/textbook.htm?legyl=0-10</p> <p>Chapter 1 Human Geography- Nature and Scope Use the QR code given for the chapter for additional resources</p> <p>Dictionary of Geography for Schools (Trilingual) (Hindi-English-Urdu) http://www.ncert.nic.in/publication/Miscellaneous/pdf_files/tidog101.pdf</p> <p>MOOC https://www.classcentral.com/course/swayam-geography-xii-part-i-17627</p>	<p>WEEK-1</p> <p>Topic Nature of Human Geography, Naturalisation of Humans and Humanisation of Nature</p> <ul style="list-style-type: none"> • The earth comprises two major components: nature (physical environment) and life forms including human beings? Make a list of physical and human components of your surroundings. • Identify the elements which human beings have created through their activities on the stage provided by the physical environment? Houses, villages, cities, road-rail networks, industries, farms, ports, items of our daily use and all other elements of material culture have been created by human beings using the resources provided by the physical environment. While physical environment has been greatly modified by human beings, it has also in turn, impacted human lives. Prepare a write up on impact of humans on physical environment and how sometimes physical environment impacts humans. <p>WEEK-2</p> <p>Topic Human Geography through the Corridors of Time, Fields and Sub-fields of Human Geography</p> <ul style="list-style-type: none"> • Examine the table 1.1 in the chapter related to Broad Stages and Thrust of Human Geography. In your own words describe how human geography has emerged as sub field of geography. • How human geography is related to other social sciences. Analyse and explain in your own words. Derive clues

<ul style="list-style-type: none"> explains population growth and factors affecting it explains uneven distribution of population in the world understands population growth, reasons for migration 	<p>Chapter 2 The World Population-Distribution, Density and Growth</p> <p>Use the QR code given for the chapter for additional resources</p> <p>Dictionary of Geography for Schools (Trilingual) (Hindi-English-Urdu) http://www.ncert.nic.in/publication/Miscellaneous/pdf_files/tidog101.pdf</p> <p>MOOC https://www.classcentral.com/course/swayam-geography-xii-part-i-17627</p>	<p>the chapter and table 1.2.</p> <p>WEEK-3</p> <p>Topic: Patterns of Population Distribution in the World, Density of population and Factors Affecting it</p> <ul style="list-style-type: none"> Read the chapter and seek help from geography dictionary to understand various geographical terms in the chapter. People prefer to live in certain regions of the world, not everywhere. Give your views for this statement with suitable examples of geographical, economic, social and cultural factors. Find out what could be the impact of population change. On a political map of the world identify the largest country in terms of area in each continent Look at figure 2.1: <i>Most Populous Countries</i>. Identify these countries on the world map Measure the population density of these countries. Take the population and area data from Appendix I in the textbook. <p>WEEK-4</p> <p>Topic: Population Growth, Migration, Population Control</p> <ul style="list-style-type: none"> Find out the components of population change. What are the push and pull factors which lead to migration in the world? How migration affects the life of people. Prepare a write up. Observe the Fig. 2.3: Demographic Transition Theory and explain it in your own words. Analyse what are the trends of population growth in world from early period to the present day? How relevant is Thomas Malthus theory (1798) in today's time?
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Learning Outcomes	Sources/Resources	Suggested Activities (to be guided by teachers)
<p>The learner</p> <ul style="list-style-type: none"> differentiates between distribution of population and density of population identifies the factors for uneven distribution of population in India explains trends of population growth since 1951. describes rural-urban population composition interprets graphical presentation of data in words. converts tabular data into diagrams like bar, pie and graph analyses map showing population density and population growth. develops Dot map to show distribution of population develops choropleth map to show density of population. 	<p>NCERT/State Textbooks</p> <p>NCERT Textbook-<i>India People and Economy</i></p> <p>Chapter -1 Population-Distribution, Density, Growth and Compositions</p> <p>Resources Atlas, Outline map of India</p> <p>Web resource Online e-learning portal School Bhuvan NCERT</p> <p>QR Code may used to learn to develop a choropleth map showing district-wise density of population on the GIS Viewer available on School Bhuvan NCERT web portal.</p> <p>Web Resource Occupational structure, religious composition, etc., may be shown through maps and may be developed by learners using GIS Viewer available on School Bhuvan NCERT Portal.</p>	<p>WEEK 1</p> <p>Topic- Population Distribution and Density</p> <ul style="list-style-type: none"> Learner may be asked to consult Atlas to correlate relief map of India and map of population distribution and density and write their observation and share with their classmates through email or WhatsApp. Learners may be asked to use School Bhuvan NCERT Web portal to observe thematic maps e.g. the relief map of India and maps showing population density. Overlay thematic maps and slowly swipe the layer of population density and try to correlate density of population and relief features. Learners can develop a choropleth map showing the density of population or any other map related to population on the GIS Viewer available on School Bhuvan NCERT. <p>WEEK -2</p> <p>Topic- Population Growth and Composition</p> <ul style="list-style-type: none"> Learners may be asked to develop appropriate diagrams on the data given on page 5 related to Decadal Growth rate in India or any other data related to composition of population included in the appendix of the textbook. MCQs based on the population characteristics of India may be developed by the teacher and shared with learners through email. Learners may be encouraged to consult Census of India website (https://censusindia.gov.in)

	<p>For Teachers</p> <p>Youtube-NCERT Official-</p> <p>“Outreach programme for Geography Teachers on School Bhuvan NCERT” may be seen to learn about School Bhuvan NCERT and develop district-wise choropleth maps using GIS Viewer.</p>	
<ul style="list-style-type: none"> describes migration in his/her own words distinguishes immigration and emigration classifies streams of migration identifies causes of migration explains consequences of migration. interprets graphical presentation of data in words. converts tabular data into diagrams like bar, pie and graph analyses visuals and newspaper clippings highlighting issues related to national 	<p>Chapter 2 Migration – Types, Causes and Consequences</p> <p>Resources Atlas, Outline map of India</p> <p>Web resource Online e-learning portal School Bhuvan NCERT</p>	<p>WEEK 3</p> <p>Topic- Migration, Streams of Migration</p> <ul style="list-style-type: none"> Teacher may ask learners to read the newspaper and watch TV news to prepare a write-up on the current issue related to migration of people in India. Learners may share their views and write-up with their teacher and classmates through email and WhatsApp. Teachers may take cues from these write-ups and initiate a discussion on the topic on Migration. Learners may be asked to use a map of India to locate places/states/cities from where people are nowadays migrating in large numbers Learners may locate places/states/cities/villages on the map of India or on the digital map available on School Bhuvan NCERT portal where immigration and emigration are taking place nowadays. <p>WEEK-4</p> <p>Topic- Spatial Variation in Migration, Causes and consequences of migration</p> <ul style="list-style-type: none"> School Bhuvan NCERT online e-learning Web portal may also be used to locate places and develop a map showing streams of migration. Teachers may demonstrate and correlate thematic maps of population density, relief features and maps of

<p>and international migration</p>		<p>industrial cities to motivate learners to analyse the factors of migration.</p> <ul style="list-style-type: none"> • Learners may prepare a chart on consequences of migration and share it with classmates through email or WhatsApp. • Learners may be asked to develop appropriate diagrams on the data related to international migration given on page 18 of the textbook. • Learners can locate countries on the world map to show international migration. • MCQs based on the population Migration in India may be developed by the teacher and shared with learners through email. • Learners may be encouraged to consult the Census of India website (https://censusindia.gov.in)
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Economics (Class XI)

Learning Outcomes	Source	Suggested Activities (to be guided by teachers)
<p>The learner</p> <ul style="list-style-type: none"> ✓ understandsthe nature of Economics and Statistics. ✓ classifies the basic economic activities like production, consumption and distribution. ✓ explains the relationship between Statistics in analyzing economic problems. ✓ interprets basic economic data related to agriculture, GDP, population etc. from news reports. 	<p>Textbook Statistics for Economics (Class XI)</p> <p>Theme1 Introduction</p> <p>Web-links Dictionary of Economics for Schools (Trilingual)</p> <ul style="list-style-type: none"> ✓ http://www.ncert.nic.in/publication/Miscellaneous/pdf_files/Dic_Eco.pdf ✓ http://ncert.nic.in/textbook/textbook.htm?kest1=2-9 ✓ http://ncert.nic.in/textbook/textbook.htm?kest1=1-9 	<p>WEEK -1</p> <ul style="list-style-type: none"> ✓ Teachers may start the discussion with the definition and importance of Statistics. ✓ Examples may be taken to explain the importance of statistics in economics. ✓ Explain consumer, producer, seller, employer and employee, through their activities. ✓ Learners may be asked to list their daily and monthly wants and their resources (pocket money, gifts etc.). They may be asked to find out how many of their wants they are able to fulfill within given resources. ✓ After this, teachers may explain to them that scarcity of resources gives rise to economic problems. ✓ It must be explained to them how production decisions are taken in view of limited resources. <p>WEEK 2</p> <ul style="list-style-type: none"> ✓ With this background, the role and importance of statistics in making a choice among scarce resources may be discussed. ✓ Collect a newspaper report on crop production in the country and organise it into a table. <p>Exemplar Activity</p> <p>Learners may be given the paragraph below: <i>During the planning period, the death rate has considerably declined, and it was 6.4 per thousand in 2016 as against 27.4 per thousand in 1951. The infant mortality rate has also come down from 146 per thousand in 1951 to 34 per thousand in 2016. Moreover, life expectancy at birth has risen from 37.2 years for males and 36.2 years for females in 1951 to 66.9 years for males and 70 years for females during 2011-15. (Puri and Misra, Indian Economy, 2018)</i></p> <p>Learners may be asked to present the data placed above in tabular form.</p> <ul style="list-style-type: none"> • Thus, teachers can use similar statistics from newspapers, etc., and explain the use of data in making policies for the welfare of people.

<p>The learner</p> <ul style="list-style-type: none"> • understands the meaning and purpose of Data Collection. • distinguishes between Primary and Secondary Data. • Identifies important sources of Secondary Data. • differentiates between Census or Complete Enumeration and Sample Methods of data collection • understands the difference between Random and Non-Random Sampling. 	<p>Theme 2 Collection of Data</p> <p>Web-links</p> <p>Dictionary of Economics for Schools (Trilingual)</p> <ul style="list-style-type: none"> • http://www.ncert.nic.in/publication/Miscellaneous/pdf_files/Dic_Eco.pdf • http://ncert.nic.in/textbook/textbook.htm?kest1=ps9 • http://ncert.nic.in/textbook/textbook.htm?kest1=2-9 	<p>WEEK 3</p> <ul style="list-style-type: none"> • Teachers should explain the sources from which data can be obtained. • They should explain the difference between primary and secondary sources. • Some of the important secondary sources may be discussed. • Teachers can discuss the two major types of methods/techniques of primary data collection, i.e., Census method and Survey method. <p>WEEK 4</p> <ul style="list-style-type: none"> • Teachers can describe the characteristics of a good questionnaire. They may show examples of good questions and poor questions from the textbook. • The difference between population and sample can be explained with the help of the number of learners in the classroom. <p>Exemplar Activity</p> <p>Suppose a study of gradual progression of learners into adulthood with respect to their height and weight is to be made. There are approximately 50 learners each in two sections of a class. You pick any five learners from each section, by drawing chits from roll number 1 to 50. After the exercise, you have data for weight and height of 10 learners from both sections.</p> <p>Teachers can discuss the following points:</p> <ul style="list-style-type: none"> • What kind of data do you have now? • Can it be called Census survey or Sample Survey? • Is it Random sampling or Non-random sampling? • Is the source of data primary or secondary?
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Economics (Class XII)

Macroeconomics

Learning outcomes	Sources/Resources	Suggested Activities (to be guided by teachers)
<p>The learner</p> <ul style="list-style-type: none"> Identifies the economic question that concerns all the citizens. understand the importance of output level of goods and services produced within your economy. explains how single good could be representative of all goods 	<p>Class XII Economics textbook can be accessed from the web portal of NCERT https://www.ncert.nic.in/as/Energised/Textbooks with QR codes</p> <p>Textbooks are also available on e-pathshala APP</p> <p>Create a group on WhatsApp for Learners and economics teachers</p> <p>Information can also be shared through e-mail</p>	<p>WEEK 1</p> <p>Initiate a discussion on the measure of the lockdown that has been announced to contain the spread of Coronavirus. What will be its impact upon the economy? Will prices as a whole rise or come down? Should workers be given their salary? What will be a reasonable indicator to show that the economy is better or worse?</p> <p>Share in a blog or WhatsApp group that the production of goods generates income, output and employment. For example, a firm produces Rs 500 worth of biscuits which means 500 worth of income has been generated i.e. production worth Rs 500= income of 500.</p> <p>Taking a hint from the following statement, write a paragraph on how agriculture and industry are complementary to each other.</p> <p>Hint: In our country 50 per cent of the labour is engaged in agriculture. Can they be absorbed by the industry?</p> <p>Find out how the price of representative goods reflects the general price level of the economy. For e.g. consumer price index (CPI) is computed by considering the general price of the household items used for consumption.</p>
<ul style="list-style-type: none"> understands the meaning and importance of basic economic variables, i.e., income, employment, inflation, etc., Recapitulates the 	<p>Learners can discuss the following economic variables, on Facebook.</p> <p>Learners can use their mobiles to share information</p> <p>Explore e-content given on NROER E-content on QR code can also be referred</p>	<p>WEEK 2</p> <p>National income is the sum total of goods and services produced within an economy. The average income of developed countries like U.S.A and Japan is more than India and Indonesia. Discuss with your friends.</p> <p>Unemployment denotes the number of adults who are on the lookout for a job. Do you agree that the loss of employment is associated with the loss of income and may even push a person into poverty?</p>

<p>difference between microeconomics and macroeconomics.</p> <ul style="list-style-type: none"> • explains how market came into existence. • explains how the economic aggregates (output, price and employment) portray the large picture of the economy? 	<p>Refer to news on T.V and radios</p>	<p>Inflation is increase in the price level which leads to a fall in the purchasing power of money Think and answer - Suppose in any firm, an owner gives a hike of 5 percent salary to her/his workers. Will the workers be benefitted if there is no inflation?</p> <p>Or</p> <p>Will the workers be benefitted if the inflation rate is 5 percent?</p> <p>Microeconomics deals with individual economic agents. Macroeconomics deals with the economy as a whole.</p> <p>Let's say your mother asked you to purchase a litre of milk. You visit the nearby dairy cooperatives like Mother dairy or Amul. Find out how milk is delivered by the dairy cooperative. As a thoughtful learner, reflect on how milk production on large scale gets organised. Who coordinates the sale of milk?</p> <p>Or</p> <p>Discuss with your parents how coordination between buyers and sellers of fruits is established?</p> <p>When aggregate output increases, it has an impact on the income of many individuals. Do you agree that an individual's salary may increase?</p> <p>When there is an increase in the price of the essential commodities what will happen to the labourer engaged in construction work? Hint: Adjustment in his budget</p> <p>Imagine your friend's mother is working in a firm. One fine morning she was fired from the job. What will she do?</p> <p>Share with your friend that economic aggregates are very important for they portray the health of the economy.</p>
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<ul style="list-style-type: none"> identifies the cause of great depression in the 1930's and suggest measures to overcome it 	<p>Parents along with teachers can develop a worksheet and share it in the group. The use of the worksheet is to provide learners with different ways of expressing themselves and also to enable them to be engaged in different activities that promote the skills of problem solving, critical thinking and so on.</p> <p>E-portfolios can be shared where views or opinions of the learners on different sets of activities can be shared.</p>	<p>WEEK 3</p> <p>Discuss with your parents the cause of the Great Depression which occurred in the 1930s.</p> <p>Various suggestions have been made by an economist to overcome the problem-</p> <ol style="list-style-type: none"> Governments should increase spending to stimulate economic activity. Taxes can be raised to curtail expenditure. Governments should not do anything for they have very limited understanding of the economy. <p>Which suggestion will you agree to and why?</p>
<ul style="list-style-type: none"> understands some of the main challenges facing the developing country 		<p>WEEK 4</p> <p>Let us say country A imports a large amount of goods and services from other countries. Your teacher says one should produce goods and services on its own How do you reconcile these two facts?</p> <p>In your neighbouring state, let us say, only 50 girls are enrolled in the secondary school for every 100 boys. Suggest a measure to increase the enrolment of girls. Do you agree that enrolment of girls will lead to faster economic growth?</p> <p>There was a strike in a private bank as the workers were protesting against automation. You have been asked for suggestions. Do you agree that both situations are correct or is only one correct? Give reasons.</p> <ol style="list-style-type: none"> The workers will be benefitted from automation. There will be a reduction in jobs after automation. <p>Refer to the website for the UN (www.un.org). On the home-page click 'Economic and social development' and then click on 'statistics'. Look for 'social indicators' and answer the following. Why does an increase in the population make it difficult for its people to improve their living standards?</p>

The NCERT textbooks can be accessed from the NCERT portal
<http://ncert.nic.in/textbook/textbook.htm?leec1=0-6>

The new energised text includes QR code in the textbook
The coded box placed on the top corner of every chapter is called Quick Response (QR) code. It will help to access e-resources such as audio, videos, MCQs, etc., related to the topic given in the textbook.

The use of QR code will increase your interest in the subject
<http://ePathshala.nic.in>

Click on the menu 'access e-resources'- Type the alphanumeric code given under the QR code

E-content on important topics and concepts can be accessed on

<https://nroer.gov.in/home/>

The Department has developed Handbook in Economics which can be used by teachers
http://www.ncert.nic.in/departments/nie/dess/index_dessh.html

Technical terms of the subject has been explained in the trilingual dictionary
http://www.ncert.nic.in/publication/Miscellaneous/pdf_files/Dic_Eco.pdf

Upload from NCERT official can provide information on important topics/concept of economics <https://www.youtube.com/playlist?list=UUT0s92hGjqLX6p7qY9BBrSA>

Sociology (Class XI)

Learning Outcomes	Sources/ Resources	Suggested Activities (to be guided by teachers)
<p>The learner</p> <ul style="list-style-type: none"> understands how the study of Sociology reflects upon the connection between a personal problem and a public issue understands the concept of society and how societies are unequal in nature. 	<p>NCERT/State Textbook on Sociology</p> <p>Class-XI Theme-1 Sociology and Society</p> <p>Search websites that advertise fancy white-collar jobs.</p> <p>Read newspapers</p> <p>Watch youtube videos on different types of societies.</p>	<p>WEEK 1</p> <p>Read pages 1 to 3 from the NCERT textbook. Make a list of the most desired jobs in our society. (This list can also be made, without going through textbook pages)</p> <p>Write down the questions and suggestions which you often receive on working hard and deciding your career.</p> <p>Activity 1</p> <p>Write your analysis of the connection between a personal problem and a public issue.</p> <p>Continue reading the Chapter from pages 4 to 6.</p> <p>Try to identify the type of society that you live in.</p> <p>List the types of societies that you know about and you have seen.</p> <p>In your opinion how are these societies different in nature?</p> <p>Discuss with your parents and friends about the reasons for inequalities in societies.</p> <p>What do you think should be the focus of society?</p> <p>The aforesaid questions may be answered without reading the textbook as well.</p> <p>Do the activities given on pages no. 5 and 6.</p>
<ul style="list-style-type: none"> Understand how Sociology studies human society as an interconnected whole. understands the difference between Sociology and 	<p>Visit different sites of social media.</p> <p>Read about panchayats on the Internet</p> <p>Read e-newspaper</p>	<p>WEEK 2</p> <p>Write about social life.</p> <p>Give your own definition of group and social behaviour.</p> <p>Discuss with your grandparents, parents, elder sibling about norms and values and their importance in the society.</p> <p>Write a paragraph on common sense. Try to recall how you use the word 'common sense' in your daily life.</p>

<p>common-sense knowledg.</p>	<p>Read blogs related to the topic</p>	<p>Reflect, write and discuss with your parents why they/you have certain views and whether we can question these views?</p> <p>Study the language of newspapers and blogs. Identify the differences.</p> <p>Do the activity given on page no. 8 of the NCERT textbook</p>
<ul style="list-style-type: none"> ➤ understands the development of sociology as a discipline. ➤ understands the growth of Sociology in India. ➤ understands the scope of Sociology. ➤ understands the relationship of Sociology with other social sciences. 	<p>Blogs, newspapers and social media</p> <p>Youtube, online movie streaming websites.</p>	<p>WEEK 3</p> <p>Read the chapter from pages 10 to 15.</p> <p>Read about the origin of Sociology.</p> <p>Read about August Comte, Karl Marx and Herbert Spencer.</p> <p>Write essays on Industrialisation and Urbanisation.</p> <p>Read about Enlightenment.</p> <p>Discuss with your grandparents/ parents about society and life when they were young.</p> <p>If you are a farmer in a village and you have to move to a city you will be leaving your agricultural work behind to probably work in a factory. What changes will happen in your life?</p> <p>Do the activities given on pages no. 12 and 13.</p> <p>Prepare a write-up on the making of Sociology.</p> <p>WEEK 4</p> <p>Read the chapter from pages 15 to 21 of the NCERT or State textbook.</p> <p>Take any topic of your choice and try to find out its sociological dimensions.</p> <p>Discuss with your friends about family, politics, and the economy and write about the interconnectivity among them.</p> <p>Watch the film <i>Lagaan</i>. Critically reflect upon the social, political and economical aspects of the society as shown in the film.</p>

Sociology (Class XII)

Learning Outcomes	Sources/ Resources	Suggested Activities (to be guided by teachers)
<p>The learner</p> <p>✓ understands how the study of Sociology enables self-reflexivity</p> <p>✓ understands colonialism and nationalism in India</p> <p>✓ gets a preview of the textbook</p>	<p>NCERT TEXTBOOK Indian Society</p> <p>Class-XII Chapter-1</p> <p>Introducing Indian Society</p> <p>Read about colonialism and nationalism.</p> <p>Read Rabindra Nath Tagore's book <i>Nationalism</i></p> <p>Read on internet about census and population.</p> <p>Read BR Ambedkar's book <i>Castes in India</i> or any of his works on the Caste system in India.</p> <p>Read the book <i>Understanding Gender</i> by Kamla Bhasin</p> <p>Chapter 2 The Demographic structure of Indian Society</p>	<p>WEEK 1</p> <p>Read the chapter from pages 1-5.</p> <p>Write an essay on your understanding of the society in which you live.</p> <p>Discuss with your friends, parents and grandparents about generation gap. Write down the difference in perspectives on generation gap.</p> <p>Locate yourself on social map with the help of the example given on page 4.</p> <p>Read page 5 of the chapter.</p> <p>Write an essay on your understanding of colonialism and nationalism.</p> <p>Discuss with your friends about colonialism and its impacts on the world and India.</p> <p>Discuss with your family members about nationalism. Write down the different opinions and try to identify the causes of differences in their opinions.</p> <p>Read the chapter from pages 6-7.</p> <p>Write a paragraph on demography.</p> <p>Discuss with your family members about caste, tribes and family in India.</p> <p>Write your impressions of caste.</p> <p>Why do you consider family as an important institution of society?</p> <p>Imagine a society without markets and write how it will look like?</p> <p>Critically reflect on the changing nature of markets and how markets impact society.</p> <p>Write about gender and the generally seen gender stereotypes.</p> <p>Write your views about social exclusion and the factors responsible for it.</p> <p>Discuss with your friends about the meaning of social diversity and the different perceptions about social diversity.</p> <p>WEEK 2</p> <p>Read the chapter from pages 10 to 12.</p>

<p>✓ understands social demography and its importance in Sociology</p>	<p>Read the Abstract of Census of India - 2011</p>	<p>Make a list of the most populated countries in the world. Try to understand the composition of their societies.</p>
<p>✓ understands Malthusian theory of Population Growth</p>	<p>Read Thomas Robert Malthus' book <i>An Essay on the Principle of Population</i></p>	<p>Discuss with your friends why population data is important to understand the development of a country and for the formulation and implementation of policies.</p> <p>Read the chapter from page 12 to 13.</p>
<p>✓ understands the theory of Demographic Transition</p>	<p>Read on theory of demographic transition</p>	<p>Write about Malthusian theory of Population growth. Do you agree with this theory? Write your critical reflections on this theory.</p> <p>Write your views on unjust and unequal social systems.</p> <p>Do the activity 2.1 given on page no. 14.</p>
<p>✓ understands common concepts and indicators given in the chapter</p>	<p>Collect information from the Internet on the birth and death rates in India for the last 10 years.</p>	<p>WEEK 3</p> <p>Read the chapter from pages 13 to 14.</p> <p>Write about the theory of Demographic Transition.</p> <p>Discuss with your friends about the causes and factors of population explosion.</p>
<p>✓ understands common concepts and indicators given in the chapter</p>	<p>Read <i>Imagining India: Ideas for the New Century</i> by Nandan Nilekani.</p>	<p>Read the chapter from page 14 to 16.</p> <p>Write why it is important to keep the record of birth and death rates of a country.</p> <p>Make a list of countries with negative population growth rate. Analyse the causes for this phenomenon.</p> <p>Write about the fertility rate and infant mortality rate in India. Try to observe the link between these two.</p> <p>Write your views about the sex ratio in India.</p>
<p>✓ understands the size and growth of population in India.</p>		<p>Discuss with your friends how the young population of India can contribute to the overall development of the country.</p> <p>WEEK - 4</p> <p>Read the chapter from pages 16 to 21.</p> <p>Analyse Table 1 given on page 17.</p>

	Visit the reference resources given in the box 2.2.	<p>Write your analysis on the differences in the population growth in India in the 20th Century.</p> <p>Read box 2.2 given on page 18. Try to observe the difference in the situation of Spanish influenza in 1918 and Covid-19 pandemic in 2020.</p> <p>Analyse chart 2 given on page 20. Write about the possible causes for different birth ratios in different states of India.</p>
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Psychology (Class XI)

Theme 1: What is Psychology?

Learning Outcomes	Sources/ Resources	Suggested Activities (to be guided by teachers)
<p>The learner</p> <ul style="list-style-type: none"> ➤ identifies psychology as an established discipline ➤ states the different branches of psychology explains the role of psychology in understanding mind and behaviour. ➤ explains that psychology deals with thoughts, feelings, sensations, emotions, and perceptions ➤ Enumerate the usefulness of psychology in everyday life. ➤ 	<p>NCERT/State Textbook in Psychology (Class XI)</p> <p>Students may also visit NROER, an online educational resource repository of NCERT and explore the e-resources available online for Psychology, i.e.</p> <ul style="list-style-type: none"> ▪ Evolution of Psychology https://nroer.gov.in/55ab34ff81fccb4f1d806025/file/582aa11116b51c1a9064b2c5 ▪ Branches of Psychology https://nroer.gov.in/55ab34ff81fccb4f1d806025/page/582aa26416b51c1a9064b2e7 	<p>WEEK 1</p> <p>Understanding role of psychology through experience and observation</p> <ul style="list-style-type: none"> ▪ Write in your own words what you understand of psychology? Write how psychology can help in understanding better your inner self and the world around you. Ask your peers/siblings/parents to do the same. Compare your views/responses. ▪ Write the main points given in the book related to the explanation about what psychology is. Reflect on the meaning of psychology you formed earlier. What are the differences between both? ▪ Think about things/situations around you which can be better understood with the help of psychology and why. Write about how you have been feeling since the past 2-3 days and which possible psychological processes are involved in it. <p>WEEK 2</p> <p>Appreciating the growth of psychology and developments in India</p> <ul style="list-style-type: none"> ▪ Read about the 'Evolution of Psychology' and write which approach/perspective you find interesting and why? ▪ Write some of those aspects keeping in mind the Indian context (for example-yoga, different cultural practices, vratas, etc.) Which among these do you think psychology can attempt to understand / explain? Why do you think so? Discuss it with your peers/teachers/parents. <p>WEEK 3</p> <p>Recognising fields of specialisation in psychology</p> <ul style="list-style-type: none"> ▪ Select the branch of psychology which interests you the most and the branch you find least interesting. Write down the following points - what makes it interesting and what is not of interest to you.

		<ul style="list-style-type: none"> ▪ Search information related to the different branches of psychology on the Internet to discover what psychologists do. ▪ Relate your new learning with your initial understanding of psychology. <p>WEEK 4</p> <p>Valuing psychology in daily life to help understand oneself and others</p> <ul style="list-style-type: none"> ▪ Observe someone talking to you. Try to pay attention to what the person is saying and how (i.e. facial expressions, tone of voice, speed of articulation, body posture, eye movements, and hand-gestures, etc.). ▪ Make a list of happenings / examples from everyday life which you might consider as human behaviour and those which you think are mental processes studied in psychology ▪ Which discipline do you think has a close relationship with psychology? Why do you think so? ▪ <u>Make a list of skills and feelings that you think are necessary to become a psychologist? Explain why you think these are important?</u>
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Psychology (Class- XII)

Theme 1: Variations in Psychological Attributes

Learning Outcomes	Sources/ Resources	Suggested Activities (to be guided by teachers)
<p>The learner</p> <ul style="list-style-type: none"> enumerates individual variations in terms of characteristics and behaviours distinguishes different domains of psychological attributes- intelligence, aptitude, personality, interest, and values. explains different assessment methods: psychological test, interview, case study, observation, and self-report. describes the construct of intelligence, theories of intelligence and Indian perspective. explains variations in intelligence as entwined in both heredity and environment. Lists the difference between different types of intelligence tests 	<p>NCERT/ State Textbook in Psychology (Class XII)</p> <p>Students may also visit NROER, an online educational resource repository of NCERT and explore the Psychology e-resources available online, i.e.</p> <ul style="list-style-type: none"> Different Assessment methods http://econtent.ncert.org.in/wp-admin/admin-ajax.php?action=h5p_embed&id=460 Theories and Measurement of Intelligence https://nroer.gov.in/55ab34ff81fccb4f1d806025/page/582add6516b51c60b06a81e2 	<p>WEEK-1</p> <p>Understanding individual differences in human functioning and assessment of psychological attributes</p> <ul style="list-style-type: none"> Observe and identify different characteristics and behaviours of your own self and your family members. Classify these according to aspects in which you and your family members are similar and those in which you differ. Try to name the characteristics/behaviours. Write which psychological attribute (e. g. intelligence, aptitude, interest, personality, and values) would you like to learn more about and why. <p>WEEK-2</p> <p>Understanding Intelligence and its theories</p> <ul style="list-style-type: none"> Make a list of all the attributes (quality, characteristics, traits, features) you consider as sign of intelligent behaviours. Keeping these attributes in view try to formulate a description/explanation of intelligence. Think of any three people who you think are intelligent. Try to visualise their thoughts, behaviours and actions. Classify these and prepare a list. Compare your understanding of intelligence as formulated in the previous activity with the explanation given in the Psychology Textbook. Which theory of intelligence do you find most interesting? Write the points which interest you. Write the careers that interest you? Reflect on which multiple intelligences are important for these careers? Search information related to skills and abilities required for different careers on the Internet.

<ul style="list-style-type: none"> Distinguishes between aptitude, intelligence and creativity 	<ul style="list-style-type: none"> Culture and Emotional Intelligence https://nroer.gov.in/55ab34ff81fccb4f1d806025/page/582ae09316b51c60b06a8226 	<p>WEEK 3</p> <p>Understanding nature, nurture, assessment, and types of intelligence tests</p> <ul style="list-style-type: none"> How are you and your sibling; you and your friend, similar as well as different? Make a list of factors that you think have led to these similarities and differences. Try to group them as those related to the environment of individual and those due to genetics /heredity. What will be the Intelligence quotient of a 16-year-old child having the mental age of an 18-year-old? Find out the mental age of a 14-year-old child having an Intelligence Quotient of 100. Search for information about the different ways in which heredity and environment influence intelligence. <p>WEEK 4</p> <p>Understanding culture and intelligence, emotional intelligence, aptitude, and creativity</p> <ul style="list-style-type: none"> Find out which aspects in Indian culture are considered intelligent behaviours? Are the same aspects considered intelligent in Western countries? Are culture and intelligence related? Write points which indicate the relationship exists. Make a list of behaviours, qualities, actions, thoughts, etc., which make a person emotionally competent. Reflect on these and write down those behaviours/ actions/skills etc. which you possess. Write about one situation that you handled by making use of these behaviours, qualities, actions, thoughts, etc. In which area do you think you are most proficient (music, dance, studies, arts, sports, etc.)? Is this intelligence or aptitude? Find out different ways in which people can be creative. List the characteristics of creative individuals.
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COMMERCE

Business Studies (Class XI)

Learning Outcomes	Sources/ Resources	Suggested Activities (to be guided by teachers)
<p>The learner</p> <ul style="list-style-type: none"> ❖ classifies and compares economic and non-economic activities to arrive at the concept of business. ❖ Analyses information to differentiate between economic and non-economic activity. ❖ evaluates business as an economic activity ❖ understands elements of risk and uncertainty for profit objective of business ❖ enlists the factors for starting one's own business ❖ appreciates the development of trade in historical past 	<p>Source NCERT Textbook Business Studies</p> <p>Theme 1 Business Trade and Commerce</p>	<p>WEEK - 1</p> <p>Theme- Economic and Non-Economic Activity:</p> <p><u>BEGIN WITH GROUP ACTIVITY</u></p> <p>This activity introduces the concept of 'business' to the learners. Teachers are advised to do the following group activity to begin with:</p> <ul style="list-style-type: none"> - Mode: Interactive: <i>Google form</i> - Collaboration: using Instagram live/Skype/Facebook live <p>Activity 1</p> <p>Identifying different types of occupations /professions/jobs</p> <ul style="list-style-type: none"> - Discuss with learners about the occupations/jobs/professions their family members, relatives and neighbours are engaged in. - Encourage them to recall and list various types of occupations/jobs/professions they observe around them. - Use the following Google form to accumulate responses - <i>Link of Google form for teachers</i> https://docs.google.com/forms/d/e/1FAIpQLSeESQBWVRNwroM7UhXovndwCRnT16Gd7ISGHgGOaG-9omB1_Q/viewform?usp=sf_link - <i>Link for Google form for sharing with learners</i> https://docs.google.com/forms/d/1qjmVQJRNU0Dxx1pVgOi1a-InFevzH50Z_upRjcSDJc/edit?usp=sharing <p>Evaluation/Assessment</p> <ul style="list-style-type: none"> - What occupations can they think of? Compile and Read aloud the responses of learners.

		<ul style="list-style-type: none"> - Are learners able to differentiate between: (1) Self owned work/self-employment (2) Working for others i.e. wage employment (3) working not for money but for love, affection and household work i.e. mother cooking food for family, etc. <p>Now go to page number 11 of the textbook and discuss the content with the learners. Encourage learners to complete the given activity: <i>Try it yourself at page 11 of the textbook. Instruct learners to read the text by themselves and raise queries.</i></p> <p>WEEK 2</p> <p>Theme Business as an Economic Activity</p> <p>Activity</p> <p>Use of Concept Map</p> <ul style="list-style-type: none"> - Share the concept map with the learners - Use the following link for a concept map https://h5p.org/node/768111?feed_me=nps - Instruct them to read the concept map for about 10 minutes. <p>Discuss the following topics with them</p> <ul style="list-style-type: none"> - <i>Characteristics of business as an economic activity</i> - <i>Objectives of business</i> - <i>Importance of profit earning in business</i> - <i>Classification of Industry</i> - <i>Trade and Auxiliaries to Trade</i> - <i>Risk and uncertainties and business activities</i> - <i>Discuss the concept of Business as an economic activity.</i> - Instruct learners to read Chapter 1 from page no. 12 to page no. 23 and raise queries. <p>Evaluation/Assessment</p> <ol style="list-style-type: none"> 1. <i>Instruct learners to attempt E-resource in the QR code for chapter 1</i>
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(<https://h5p.org/node/490910>) at the beginning of Chapter 1 using the *e-pathshala* scanner app.

WEEK 3

Theme

Starting your own business

Activity 3

Factors affecting starting a business

- Share the e resource (<https://h5p.org/node/50230?feedme=mps>) with learners.
- Encourage them to complete the exercise by identifying the businesswomen covered in the e- resource by surfing the internet. There is no time limit to complete the task. Let the learners do the assignment at their own pace.
- Initiate a discussion with learners using Instagram live/Skype/Facebook live on starting one's own business.
- Go to pages no. 24 -25 of the textbook and discuss the factors for starting a business.

Evaluation/Assessment

- Encourage learners to read the content on pages 24-25 and raise queries, if any.
- Ask them to identify any manufacturing or trading business and list the factors they will consider to start their own business.

[Hint: Define the business idea, name the product, choose a name for the business, list the factors associated to start the identified business]

Note to teachers: this activity will be taken further to Chapter 2

WEEK 4

Theme

History of Trade in India:

- Discuss the following with learners:
 - Why was the Indian subcontinent referred to as '*Swarn Bhoomi*' and '*Swarn Deep*' by the then travelers to our country.
 - What made Columbus and Vasco Da Gama undertake journeys to locate our

		<p>country?</p> <ul style="list-style-type: none"> - To what extent were an indigenous banking system and taxation mechanism developed in ancient times for merchant corporations? - List the major exports, imports and trade centers of ancient India. - Comment on the use of <i>Hundies</i> and <i>Chitties</i> for carrying out monetary transactions by merchant corporations. • Share the given e-resource for understanding the ways of monetary transactions by the trading community https://h5p.org/node/768161 • Discuss the chapter content from pages 4 to page 10 with learners. • Encourage them to raise queries. <p>Activity 4</p> <p>Chapter end Exercises</p> <ul style="list-style-type: none"> - Instruct learners to attempt all short and long answer questions given at the end of the chapter and submit them to their Business Studies teacher via email. - Teacher to facilitate completion of the work, before proceeding to the next chapter. - Suitable timeframe may be given to learners with respect to this.
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Business Studies (Class XII)

<i>Learning Outcomes</i>	<i>Sources/Resources</i>	<i>Suggested Activities (to be guided by teachers)</i>
Mode of transaction: Mode: Skype/Facebook live/ Instagram live		
<p>The learner</p> <ul style="list-style-type: none"> discusses the significance of managing business organisation effectively describes management as an Art, Science and Profession appreciates the techniques of scientific management understands the general principles of management examines the dimensions of business environment managing business effectively 	<p>Source NCERT Textbook Business Studies Part I Principles and Functions of Management</p> <p>Theme 1 Nature and Significance of Management</p> <p>Theme 2 Principles of management</p> <p>Theme 3 Business Environment</p>	<p>WEEK 1</p> <p>Theme How Big business houses are the result of effective business management</p> <ul style="list-style-type: none"> Teachers are advised to collect success stories or the timeline of big business houses operating in India for the past several decades and weave it into a story to arrive at a discussion on the concept and nature of management. Exemplar links with respect to this can be https://www.tata.com/about-us/ta https://www.ril.com/TheRelianceStory.aspx https://www.infosys.com/about/history.html Encourage learners to search for other success stories to understand how important management is for the growth of a business organization Such stories can also be from the unorganized sector in their own state. <p>Theme Concept of Management</p> <p>Discuss with learners the following topics:</p> <ul style="list-style-type: none"> Why is management a goal-oriented process? What makes management all pervasive and continuous in an organisation? How is management to be treated as a group activity? Why is it called an invisible force? What makes management a dynamic function in an organization? Efficiency versus Effectiveness. <p>Instruct students to read the chapter from page 5 to page 19 and raise queries.</p>

		<p>Activity 1 Relating with the success stories</p> <ul style="list-style-type: none"> • Encourage learners to identify one success story, either from the organised or unorganised sector [Local, Country wide or Global). • In case internet facility is not available, cases given in boxes throughout the chapter in the textbook can be used. • Develop a write up of 2 pages on its management strategies. <p>[Hint: Vision statement, mission, objectives, growth strategies, prepare timeline]</p> <p>WEEK 2</p> <p>Theme Coordination as the essence of the management process</p> <ul style="list-style-type: none"> • Explain the management process listing the levels and functions of the management. • Make learners understand that individual functions do not have any value. They need to be coordinated for fruitful results. • Discuss coordination as the essence of effective management. • Instruct learners to read the chapter from page 21 to page 26 and raise queries. <p>Activity 2 How to organise ‘Swachhta Diwas’ in school by applying functions of management</p> <ul style="list-style-type: none"> • Make a group of learners for each function of management. • Each group is to prepare a blue print (or concept map) of tasks related to the respective function allotted to them. • Facilitate discussions as to how each group will coordinate with each other at different levels to make ‘Swachhta Diwas’ a success. • What will happen if all groups work individually? Arrive at the concept of coordination as a function of management. <p>Chapter end Exercises</p> <p>➤ Share the link: https://h5p.org/node/716134 https://h5p.org/node/303714 with</p>
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		<p>learners.</p> <ul style="list-style-type: none"> ➤ Instruct learners to attempt all short and long answer questions given at the end of the chapter 2 and submit them to their Business Studies teacher via email. ➤ Teacher to facilitate completion of the work, before proceeding to the next chapter. ➤ Suitable timeframe may be given to learners with respect to this. <p>WEEKS 3 AND 4</p> <p>Theme Scientific rigor in managing business</p> <p>Discuss the following with the learners</p> <ul style="list-style-type: none"> ❖ Universal applicability of management principles in all walks of life ❖ No 'rule of thumb' approach ❖ Cause and effect relationship based on practice and experimentation ❖ Workforce behaviour and means for optimum utilisation of resources ❖ Instruct students to read the chapter from page 32 to page 45 and raise queries.
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Accounting (Class-XI)

<i>Learning Outcomes</i>	<i>Sources/ Resources</i>	<i>Suggested Activities (to be guided by teachers)</i>
Mode of transaction: Mode: Skype/Facebook live/ Instagram live		
<p>The learner</p> <ol style="list-style-type: none"> 1. understands accounting as a source of information <ol style="list-style-type: none"> a. appreciates the role of accounting as a language of business 2. classifies and compares accounting data for generating accounting information 3. analyses and evaluates accounting concepts for preparation of financial statements. 	<p>Source NCERT Textbook Accounting</p> <p>Theme 1 Introduction to Accounting</p> <p>Theme 2 Theory base of Accounting</p>	<p>WEEK 1</p> <p>Theme What is accounting</p> <p>The teacher should discuss;</p> <ul style="list-style-type: none"> ❖ role of accounting in keeping financial records of business activities. ❖ accounting data versus accounting information ❖ users of accounting information ❖ qualitative characteristics of accounting information ❖ basic accounting terms used <p>Evaluation/Assessment</p> <ul style="list-style-type: none"> ❖ Instruct learners to read the text of Chapter 1 by themselves and raise queries ❖ Encourage learners to complete the in-text exercises given on pages 7 to 19 of the textbook for better clarity about Chapter 1 <p>Test your Understanding</p> <ul style="list-style-type: none"> ▪ Instruct learnersto attempt all questions for practice (both short and long answer questions) given at the end of the chapter 1 and to submit them to their accounting teacher via email. ▪ Teacher to facilitate completion of the work, before proceeding to the next chapter. <p>WEEK 2</p> <p>Theme Accounting Concepts</p> <p>The teacher should discuss—</p> <ul style="list-style-type: none"> ▪ Generally Accepted Accounting

		<p>Principles (GAAP)</p> <ul style="list-style-type: none"> ▪ Various Accounting concepts for recording business transactions in the book of accounts. ▪ Cash versus Accrual basis of accounting ▪ Role of accounting standards developed by ICAI for preparing financial statements ▪ IFRS and Ind_AS for enhancing qualitative nature of financial statements. ▪ Encourage learners to access the e-content material embedded in QR codes for Chapter 1 and Chapter 2 of the Accounting textbook Part 1 (developed using QR code). Learners can access these QR codes through the e-pathshala scanner on their smart mobile phones. <p>https://h5p.org/node/473281 https://h5p.org/node/478704 https://h5p.org/node/304362</p> <p>Theme Goods and Services Tax</p> <ul style="list-style-type: none"> ▪ Concept of GST as One Nation one Tax ▪ Applicability of GST for inter-state and intra state movement of goods and services i.e., CGST, SGST and IGST. ▪ Encourage students to access the link https://h5p.org/node/304344?feed_me=nps. <i>Learners can access these QR codes through the e-pathshala scanner on their smart mobile phones.</i> <p>Evaluation/Assessment</p> <ol style="list-style-type: none"> 1. Instruct learners to read the text of Chapter 2 by themselves and raise queries. Instruct learners to attempt all short and long answer questions given at the end of the chapter 2 and submit them to their teacher via email. <ol style="list-style-type: none"> a) Encourage learners to complete the in-text exercises given on pages 27 and 33 of the textbook for better clarity on chapter 2.
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		<p>Test your Understanding</p> <p>b) Instruct learners to attempt all questions for practice (both short and long answer questions) given at the end of the chapter 1 and submit them to their accounting teacher via email.</p> <p>c) Teacher to facilitate completion of the work, before proceeding to the next chapter.</p>
<p>The learner</p> <ul style="list-style-type: none"> describes the nature of transaction source documents and preparation of accounting vouchers; applies accounting equation for effect of transactions; records transactions using rules of debit and credit explains the concept of book of original entry and recording of transactions in journal explains the concept of ledger and posting of journal entries to the ledger accounts. 	<p>Source NCERT or State Textbook Accounting</p> <p>Theme 3 Recording of Transactions, I</p>	<p>WEEK 3</p> <p>Theme Source Documents and Accounting vouchers</p> <ul style="list-style-type: none"> Use of source documents and evidencing the occurrence of business transactions Preparation of accounting vouchers for recording of business transactions Classification of accounting vouchers as cash vouchers, debit vouchers, credit vouchers, journal vouchers, etc. <p>Theme Accounting Equation</p> <p>Discuss with learners:</p> <ul style="list-style-type: none"> Resources of the business entity must be equal to the claims of those who have financed these resources i.e., A= C+L Identifying capital and revenue items Analysis of business transactions to show effect on accounting equation. Encourage learners to access the following links to practice https://h5p.org/node/478818. <i>Learners can access these QR codes through the epathshala scanner on their smart mobile phones.</i> <p>WEEK 4</p> <p>Activity 1: Numerical questions for practice on accounting equation</p>

		<ul style="list-style-type: none"> • Encourage learners to practice solved illustrations given on pages 51 to 60 to understand rules of debit and credit and the effect on accounting equations. • Instruct learners to attempt all questions for practice (both short and long answer questions) given at the end of the chapter and to submit them to their accounting teacher via email. • Instruct learners to practice numerical unsolved questions 1 to 10 given on pages 88 to 92. • Teacher to facilitate completion of the work, before proceeding to next topic. Suitable time frame may be given to complete the task. • Teachers are advised to draft similar questions for practice.
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Accounting (Class XII)

Learning Outcomes	Source/ Resources	Suggested Activities (to be guided by teachers)
Mode of transaction: Mode: Skype/Facebook live/ Instagram live		
<p>The learner</p> <ul style="list-style-type: none"> ✓ differentiates between Profit and Not for profit Organisations ✓ explains the accounting treatment of items for Not for profit organisations ✓ prepares Receipts and Payments Account and Income and Expenditure Account for Not for profit organisations ✓ prepares partnership accounts ✓ understands the provisions of Indian Partnership Act 1932 ✓ applies accounting treatment for the reconstituted firm on admission, retirement and death of a partner 	<p>Source NCERT Textbook Accounting Part I Not for Profit Organisations and Partnership Accounts</p> <p>Theme 1 Not for Profit Organisations</p> <p>Source NCERT Textbook Accounting Part I Not for Profit Organisations and Partnership Accounts Theme 1: Accounting for Partnership- basic Concepts</p>	<p>WEEK 1</p> <p>Theme Understanding Not-for-Profit Organisations</p> <p>Discuss</p> <ul style="list-style-type: none"> • the concept and features of Not for Profit Organisations • Distinguish between profit and Not for Profit Organisations • Accounting records for Not for Profit Organisations. <p>WEEK 2</p> <p>Theme Procedure for preparing accounting records of Not for Profit Organisations</p> <ul style="list-style-type: none"> • Discuss the steps involved in the preparation of Receipts and Payments account • Discuss the steps in preparation of Income and Expenditure Account • Explain the treatment of peculiar items relating to Not for Profit Organisations • Classification of Capital versus revenue items for accounting records of Not for Profit Organisations • Guide learners by providing simple transactions to prepare accounting records of Not for Profit Organisations <p>WEEK 3</p> <p>Theme Preparation of Receipts and Payments account and Income and Expenditure Account and the Balance Sheet of Not for Profit Organisations</p> <ul style="list-style-type: none"> • Encourage learnersto practice solved

		<p>illustrations given on pages 11 to 45 of the textbook.</p> <ul style="list-style-type: none"> • Self-study by learners and raising queries for further clarification. <p>WEEK 4</p> <ul style="list-style-type: none"> • Instruct learners to complete chapter-end exercises on their own. • Facilitate learners so that they can clarify doubts while completing this assignment • Provide a suitable timeframe to complete this assignment. • Teachers should not proceed to next chapter unless doubts of all learners are satisfactorily clarified. • The QR code given for each chapter of the textbook contains additional questions of varied difficulty levels. Teachers should make use of these numerical exercises during the course of transacting the chapter • Learners may be asked to solve the QR code content to practice numerical questions at their own pace.
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HUMAN ECOLOGY AND FAMILY SCIENCES (HEFS)

(Class XI)

Learning Outcomes	Sources/ Resources	Suggested Activities (to be guided by teachers/parents)
<p>The Learner</p> <ul style="list-style-type: none"> - describes the term HEFS in the context of relationship between science and sociology - relates the subject in his/ her own context such as adolescence self-awareness and the role of food, resources, clothing and communications etc. in their lives - explains the reasons for adapting the term HEFS and its role in sustaining and augmenting the quality of life 	<p>Unit I Introduction to Home Science</p> <p>Chapter 1- Introduction- Home Science/ <i>Human Ecology and Family Sciences</i></p> <p>Content discussed in the textbook Evolution of the discipline and its relevance to quality of life</p> <p>Note: <i>In case learners do not have the hard copy of the textbook, they can open link given below and download the complete e-textbook/s (Part I and II) available in both Hindi and English language:</i> http://ncert.nic.in/ebooks.html</p> <p>Links</p> <ul style="list-style-type: none"> - Lady Irwin 	<p>WEEK 1</p> <p>Activities</p> <ul style="list-style-type: none"> • At the beginning for better understanding and knowing the content and the context of the textbook learners should read the following sections of the textbook, carefully: <ul style="list-style-type: none"> - Foreword - Preface - Note for Teachers - Contents - Chapter I 'Introduction- <i>Human Ecology and Family Sciences</i>' • Try to understand the <ul style="list-style-type: none"> - Evolution of the discipline and its relevance to the quality of life in your own context. - Need and importance to study HEFS in relation to global context and its entrepreneurship scope. • List the future avenues which are open to you after studying HEFS • Prepare a chart showing different aspects of ecosystem theory like microsystem, mesosystem and exosystem. • Referring to the sections 'Note for Teachers' and 'Contents', develop a matrix mentioning all the chapters and their themes and write down your own expectations from the particular chapter and theme and how it is going to help you improve the quality of your life. Share the prepared matrix with teachers, friends, and classmates through class discussion in small groups, email or WhatsApp groups. • Create a copy of your own matrix, remove your responses, and share the matrix with friends and classmates. Now, ask them to fill-up their response and send back to you. Read all the responses,

	<p>College: http://www.ladyirwin.edu.in/index.aspx</p> <p>- Institute of Home Economics: http://www.ihe-du.com/</p> <p>- The Maharaja Sayajirao University Baroda: https://msubaroda.ac.in/Academics/Faculty</p>	<p>create a master copy of responses in single file, and send it to the teachers.</p> <ul style="list-style-type: none"> • Search on the internet and try to find out the answer to the following questions, prepare a write-up and share with teachers and classmates: <ul style="list-style-type: none"> - What is Home Science? - What are the areas/ domains of Home Science? - Why Home Science is important for both boys and girl? - What are the carrier options for Home Science in India? <p>Teachers may conduct a discussion on WhatsApp group or online meeting platforms to build the understanding of the learners about the above mentioned topics.</p> <ul style="list-style-type: none"> • Make a video explaining importance of Home Science and its career options and share with teachers, friends, and classmates. • Go to the website of Lady Irwin College using the following link: http://www.ladyirwin.edu.in/index.aspx Get acquainted with the college, its departments, courses, admission process, playschool, crèche, etc. Write down the important points and share with the teachers and friends. Do the same exercise with the other home science colleges such as: <ul style="list-style-type: none"> - Institute of Home Economics http://www.ihe-du.com/ - The Maharaja Sayajirao University Baroda, here the Home Science is known as 'Faculty of Family and Community Sciences' https://msubaroda.ac.in/Academics/Faculty • There are many other Home Science colleges under the State and Centrally run Universities including Universities under Indian Council of Agricultural Research (ICAR). Explore on the internet and prepare the list of following information: <ul style="list-style-type: none"> - List of Home Science Colleges with address and website link. - Objectives mentioned on the website of identified Home Science Colleges. - Different nomenclatures used for Home Science in these colleges.
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		<ul style="list-style-type: none"> • Based on your own understanding about the Chapter 1, prepare a glossary of the following key terms and share with the teachers and friends: <ul style="list-style-type: none"> - Ecology - Family - Adolescence - Gender-typing - Contemporary - Multi-disciplinary - Quality of life <p>Note: Arrange a diary or rough copy to prepare glossary of the key terms given in the Textbook. Glossary can be made on the word file on the computer/ laptop.</p>
<p>The Learner</p> <ul style="list-style-type: none"> • Discusses the importance of knowing oneself and the significance of developing a positive sense of self. • Able to list the factors that influence the development of selfhood and identity • Explains why the period of adolescence is critical for the development of self and identity • Describes the characteristics of self during infancy, childhood and adolescence 	<p>UNIT II Understanding Oneself: Adolescence</p> <p>Chapter 2- Understanding the Self</p> <p>Content discussed in the textbook</p> <p>A. What makes me 'I'</p> <ul style="list-style-type: none"> • What is Self? • What is Identity? <p>B. Development and Characteristics of the Self</p> <ul style="list-style-type: none"> • Self during Infancy • Self during Early Childhood • Self during Middle Childhood • Self during Adolescence 	<p>WEEK 2</p> <p>Activities</p> <p>Theme: What makes me 'I'</p> <ul style="list-style-type: none"> • Learners should read all three sections under Chapter 2 of the textbook, carefully and try to understand their own self in terms of their personal and social identity. • Draw your own picture on a paper and make two circles around the picture (one inner circle and another one outer circle). Now, think about yourself and mention the characteristics related to your personal dimension in the inner circle and social dimension in your outer circle. Share with friends and ask them to tick mark on the characteristics that are mentioned and obvious to them and add those, which are not mentioned by you, but you have those characteristics. • Create two columns in the notebook and give heading 'Personal Identity' to the first column and 'Social Identity' to the second column. Now, think about yourself and write down those characteristics in 'Personal Identity' column, which you think make you different from others and write those aspects of yours in 'Social Identity' that link you to a group such as professional, social or cultural. • Take psychometric tests. Psychometric tests can help measure a person's skills, numerical or verbal aptitude, or their personality type. Although the

	<p>C. Influences on Identity- How do we Develop a Sense of Self?</p> <ul style="list-style-type: none"> • Biological and Physical Changes • Socio-cultural Contexts • Emotional Changes • Cognitive Changes <p>Links</p> <ul style="list-style-type: none"> - 'Self: The Treasure within' (Hindi video): https://nroer.gov.in/55ab34ff81fcb4f1d806025/file/5ea06ff716b51c0c7d238614 - 'Developing and Nurturing the Self' (Hindi video): https://www.youtube.com/watch?v=t8uqsQs3zvE - 'Chupan Chupai' on Sexual abuse (Hindi audio): https://nroer.gov.in/55ab34ff81fcb4f1d806025/file/5ea06ff71 	<p>results of these tests should not be taken as gospel, yet they are a good way to start learning more about yourself and increase your self-awareness. You can take the 'Predictive Index Behavioral Assessment' or 'The 16 Personalities Test'.</p> <ul style="list-style-type: none"> • To become more self-aware, you can ask a few people you trust for feedback on your own personality. Ask for both positive and negative feedback, as well as for any advice they may have on how you can improve. <p>Theme Development and Characteristics of the Self</p> <ul style="list-style-type: none"> • You belong to the age group of adolescence so; prepare separate list of your own 'Feelings' about yourself and another list of 'Expectations' from others. Now, do the following: <ul style="list-style-type: none"> - Draw smiley against those feelings and expectations, which you really like. - Identify those feelings and expectations, which make you, confuse about your own identity and role. • Study Plutchik Wheel of Emotions. This is the way to get better at labeling your emotions. Many people have a very limited vocabulary when it comes to expressing what emotions they are feeling, and this limits their ability to be fully aware of, and to fully comprehend, what they are feeling. If you get better at labeling your emotions, not only you will lead an emotionally richer life, but you will also be able to respond more appropriately to what is happening around you. You can prepare a chart related to this and submit to the teachers. • If there are infants and 3 to13-year-old children at home, then perform activity no. 1 and 2 given in the section 'Development and Characteristics of the Self' under Chapter 2. Based on the instructions given in both the activities, you may prepare a report and submit to the teachers through email or WhatsApp group. • In order to understand the concept of 'self' in its true sense read the theory of Erik H. Erikson, i.e., 'Eight Stages of Psychosocial Development' using internet and prepare a leaflet having highlights of
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	<p>6b51c0c7d238614</p> <ul style="list-style-type: none"> - 'Saavdhan' on Sexual abuse (Hindi audio): https://nroer.gov.in/55ab34ff81fccb4f1d806025/file/5ea06ff916b51c0c7d238625 - 'Mat Roko'Girls respect- no bullying (Hindi audio): https://nroer.gov.in/55ab34ff81fccb4f1d806025/file/5ea0703016b51c0c7d2387f0 - Understanding Emotions (Hindi video): https://www.youtube.com/watch?v=yGnT_I6PdIM - Mental and Emotional Well-Being of Children (Hindi video): https://www.youtube.com/watch?v=EYh7K-E0tBc&t=806s 	<p>his theory. Share it with the classmates and teachers. Teachers may provide some links for related text material and videos.</p> <ul style="list-style-type: none"> • You can discuss your real-life experiences related to eight stages of development on WhatsApp groups or online platforms among themselves. Here, teacher may perform the role of a facilitator. • Watch different audio-video programmes using following links and write down the learning or the important information and share with friends, classmates and family members: <ul style="list-style-type: none"> - 'Self: The Treasure within' (Hindi video):https://nroer.gov.in/55ab34ff81fccb4f1d806025/file/5ea06ff716b51c0c7d238614 - 'Developing and Nurturing the Self' (Hindi video): https://www.youtube.com/watch?v=t8uqsQs3zvE <p>Theme Influences on Identity- How do we Develop a Sense of Self?</p> <ul style="list-style-type: none"> • List down the kind of information and support needed from peers, parents and teachers to be comfortable with the physical, social, emotional, and cognitive changes during puberty and adolescence stage. • Think and write down various emotional and behavioral changes with regard to your: <ul style="list-style-type: none"> - Friendships and feelings of love - Relationship with their parents - Expectations of the adults • Highlight the identified changes through poem or drawing or any other medium your find is more appropriate and submit to the teachers. • Teachers may guide learners about POCSO act and show related videos. • Think and write down your dream about life and what you want to achieve. • Teacher may ask learners to draw a picture depicting their dream and achievements. • Share dreams and achievements with teachers, friends, and family members and write down the expectations from each one of them to fulfill dream and achieve what you want to achieve. Again, share
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		<p>with all of them.</p> <ul style="list-style-type: none"> • Complete the following two Practicals given in section 'Influences on Identity How do we Develop a Sense of Self?' under Chapter 2 and share with teachers: <ul style="list-style-type: none"> - Practical 1: <i>Development and Characteristics of the Self</i> - Practical 2: <i>Influences on Identity</i> • Watch different audio-video programmes on using following links and write down the learning or the important information and share with friends, classmates and family members: <ul style="list-style-type: none"> - 'Chupan Chupai' (Hindi audio): https://nroer.gov.in/55ab34ff81fccb4f1d806025/file/5ea06ff716b51c0c7d238614 - 'Saavdhan' (Hindi audio): https://nroer.gov.in/55ab34ff81fccb4f1d806025/file/5ea06ff916b51c0c7d238625 - 'Mat Roko'(Hindi audio): https://nroer.gov.in/55ab34ff81fccb4f1d806025/file/5ea0703016b51c0c7d2387f0 - 'Understanding Emotions' (Hindi video): https://www.youtube.com/watch?v=yGnT_I6PdIM - 'Mental and Emotional Well-Being of Children' (Hindi video): https://www.youtube.com/watch?v=EYh7K-E0tBc&t=806s • Find out the functional helpline numbers to file complaint against any abuse or violence. • Based on the understanding about all three sections of Chapter 2, prepare a glossary of the following key terms and share with the teachers and friends: <ul style="list-style-type: none"> - Self-concept - Self-esteem - Infancy - Early childhood - Middle childhood - Adolescence - Identity development - Puberty - Pubescence - Menarche - Individuality
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		- Connectedness
<p>The Learner</p> <ul style="list-style-type: none"> defines the terms — food, nutrition, nutrients, health, fitness and the role of food and nutrition in maintaining health applies the concept of balanced diet in planning and consuming diets explains the basis for defining the Recommended Dietary Allowances (RDAs) and the difference between Dietary Requirement and RDA classifies foods into appropriate groups Shows awareness about the factors which influence adolescent food habits Identifies the causes, symptoms 	<p>UNIT II Understanding Oneself: Adolescence</p> <p>Chapter 3- Food, Nutrition, Health and Fitness</p> <p>Content discussed in the textbook</p> <ul style="list-style-type: none"> Definitions (food, nutrition, nutrients) Balanced diet Health and fitness Using basic food Groups for planning Balanced diets Vegetarian food guide Dietary patterns in adolescence Modifying diet related behavior Factors influencing eating behavior Eating disorders at adolescence 	<p>WEEK 3</p> <p>Activities</p> <ul style="list-style-type: none"> Learners should read all the sections of Chapter 3 of the textbook, carefully and try to understand role of food, nutrition, health, and fitness in helping them creating and maintaining healthy lifestyle. Watch following video programmes using following links and write down the learning or the important information and share with friends, classmates and family members: <ul style="list-style-type: none"> ‘Aahar and Svasthya (Hindi video): http://epathshala.nic.in/watch.php?id=307 ‘Nav Sakshar Mehfil Bhag 02 (Hindi video): http://epathshala.nic.in/watch.php?id=2473 ‘Vitamin ‘A’Ki Kahani’: http://epathshala.nic.in/watch.php?id=131 ‘Food, Nutrition and Healthy eating Habits for Children’ (Hindi video): https://www.youtube.com/watch?v=E8pddqXRD60&t=329s ‘Dietary Fibre’ (English Audio): https://www.youtube.com/watch?v=_RnNbnPm8o4 ‘Khojo Jawab’(Hindi audio): https://nroer.gov.in/55ab34ff81fccb4f1d806025/file/5ea06ef116b51c0c7d2383db ‘Components of Food’ (English video): https://www.youtube.com/watch?v=IpUNzXOqH1M&t=25s Create a balanced meal on your own by searching through grocery advertisements on news papers and magazines to find a balanced meal for breakfast, lunch or dinner. Cut out photos and glue them onto a paper plate. Before this activity, teachers must discuss how our bodies need a variety of foods. Now, prepare balanced diet for breakfast lunch and dinner and make videos for each one of them and share with friends, family, and teachers. Keep a food diary of all of the foods that you eat for

<p>and nutritional interventions related to eating disorders</p>	<p>Links</p> <ul style="list-style-type: none"> - 'Aahar & Svasthya' (Hindi video): http://epathshala.nic.in/watch.php?id=307 - 'Nav Sakshar Mehfil Bhag 02' (Hindi video): http://epathshala.nic.in/watch.php?id=2473 - Vitamin 'A'Ki Kahani (Hindi video): http://epathshala.nic.in/watch.php?id=131 - 'Food, Nutrition and Healthy eating Habits for Children' (Hindi video): https://www.youtube.com/watch?v=E8pddqXRD60&t=329s - 'Dietary Fibre' (English Audio): https://www.youtube.com/watch?v=_RnNbnPm8o4 - 'Khojo Jawab' (Hindi audio): https://nrour.gov.in/55a 	<p>five days (Monday–Friday). Keep a record of everything you consume, even drinks. Then compare your diet to the national guidelines of what is recommended to eat. Then, see if you need to modify your diets in any way. Remember, when we eat a balanced meal we are getting all of the vitamins and minerals that our bodies need in order to be healthy.</p> <ul style="list-style-type: none"> • Prepare a chart of various food groups and their recommended quantity for different age groups for male and female. • Prepare an info graphic showing different nutrients and what are their sources in both vegetarian and non-vegetarian foods. • Teachers can give learners an assignment of preparing sweet and salted items for snacks and make a video of the same. Also, they may ask them to write down the nutritive value of these snacks. • Teachers may organise a quiz on WhatsApp group encouraging learners to be spontaneous and elaborate the following in their own words— <ul style="list-style-type: none"> - Food - Health - Fitness - Nutrition - Nutrients - Balanced diet - Micronutrients - Macro nutrients - Vitamins - Minerals - Protein - Fats - Fiber - Iodine - Calcium - Iron - Recommended Dietary Allowances (RDA) • Create a poem from these words for example one learner says rhyming line with food, another one with health and so on. • Find out the food item which have the following
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	<p>b34ff81fcb4f1d806025/fi1e/5ea06ef116b51c0c7d2383db</p> <p>- 'Components of Food ' (English video):https://www.youtube.com/watch?v=IpUNzXOqH1M&t=25s</p>	<p>nutrients and effects of their deficiency:</p> <ul style="list-style-type: none"> - Iodine - Calcium - Iron - Vitamin A, B, C, D, E, & K <ul style="list-style-type: none"> • Play <i>antakshari</i> by singing poems / songs related to various foods. E.g “<i>ek tamatar lal lal</i>”. • Write your name in vertical line and write the name of various foods and nutrients given by that food item, starting from your name alphabet: A – Almonds- rich in fat and good for brain R – Rice- rich in carbohydrate T- Tomato- rich in vitamin C I- Ice cream- rich in calcium as it is made up from milk and cream • Suggest food item for your balanced diet at lunch or dinner plate following the ‘Guidelines for using basic food groups’ given in the chapter. Share the lunchplate with friends, teachers, and family members. • Suggest a pure vegetarian balanced diet for lunch or dinner. Make a chart or pamphlet showing pure vegetarian foods and their nutrients. • A discussion may be held among learners on WhatsApp groups or online meetings to discuss upon the following points: <ul style="list-style-type: none"> - Suggested balanced lunch or dinner plates - Difference and similarities between normal balanced diet having non-vegetarian food and pure vegetarian food • In order to know more about Recommended Dietary Allowances (RDA), read more about RDA using internet. Share the same information with classmates, friends, family members, and teachers. Teachers may provide some links for related text material and videos. • Look at the ‘Food Guide Pyramid’ and try to understand the messages behind the illustration/s and text. Now, do the following tasks and share with teachers friends, classmates and family members—
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		<ul style="list-style-type: none"> - Label the food items given in pyramid with the name of their nutrient/s such as protein, carbohydrates, etc. - Write down the reason for the broad base and narrow top of the food pyramid <ul style="list-style-type: none"> • Prepare a list of food items available at home. Now, prepare a matrix having three columns: 'Available food items at home', 'Nutrient/s found in the food item' and 'Functions in our body'. Write the appropriate response against each food item. <ul style="list-style-type: none"> • Create a leaflet having following information— <ul style="list-style-type: none"> - How to keep ourselves fit - Benefits of being fit - Few nutritious recipes using low cost ingredients - How to increase iron, protein and calcium through diet because these are main nutrients in which learners of this are deficient • Prepare a power-point presentation or chart about eating disorders, their types, and the ways to treat them. <p>WEEK 4</p> <p>Activities</p> <ul style="list-style-type: none"> • Conduct a survey by creating a four column table having following points: <ul style="list-style-type: none"> - Breakfast - Lunch - Supper/ snack time - Dinner <p>Circulate this among friends, family members, and classmates. Now, ask them to mention against each of category what they usually eat and mention if they skip any meal frequently. Do this activity for yourself also.</p> <ul style="list-style-type: none"> • After getting the response from them, compile all responses and check who is eating healthy and having healthy meal pattern or who is not. Also, compare how fitness and health is affected by nutrition. (Good nutrition/ Junk Foods). • Based on the knowledge gained in this chapter,
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		<p>write suggestions for those who are not eating healthy and having healthy meal pattern and put smiley against those who are eating healthy and having healthy meal pattern. Share this information with those who have responded.</p> <ul style="list-style-type: none"> • Find out the effects of the following unhealthy eating habits, eating patterns and eating disorders— <ul style="list-style-type: none"> - Irregular meals and skipping meals - Surviving on snacks or junk food - Frequent eating of fast food - Dieting - Anorexia nervosa - Bulimia <p>Prepare an information bulletin and share with others through various platforms.</p> <ul style="list-style-type: none"> • Find out the videos, illustrations or text depicting home based exercises for keeping ourselves healthy, active, and fit. Share such resources with the family, friends, classmates, and teachers. You also practice these exercises and encourage others to do so. Make your own videos of different types of home-based exercise for seven days. • Teachers may initiate a discussion on WhatsApp group about ‘adapting healthy choices at their age’. They may ask learners to participate in the discussion and prepare a report of the points discussed and the point of view of other learners. Finally, write their own perspective in the report and submit to the teachers. • Discuss the effect of Iron Folic Acid supplementation programme and deworming programme run in their schools by the Government of India. Why the Iron Folic Acid tablets given to you on every Wednesday is necessary also deworming tablet in every 3 months. • Perform a small action research on the effect of healthy eating habits, on fitness, health, mental well being and academic performance. • Search the Internet or magazines for images that you think promote unhealthy eating habits or a starved or unhealthy appearance. Next, you can
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		<p>find images that represent the opposite: good nutrition and healthy bodies. Then use these images to prepare a poster or info graphic. You can add your own drawings, and text to explain your message.</p> <ul style="list-style-type: none"> • Teachers can begin by dividing the learners into four groups. Assign each group with one of the following: <ul style="list-style-type: none"> - Anorexia Nervosa - Bulimia Nervosa - Other eating disorders. <p>Explain to the groups that they are responsible for creating public awareness posters for the assigned eating disorder. The idea is that anyone viewing this poster would be able to distinguish the type of eating disorder along with its symptoms and warning signs. Each poster must also provide a resource for accessing help for this particular eating disorder.</p> <ul style="list-style-type: none"> • Complete all three exercises under Practical no. 3, given at the end of chapter 3 and share with the teachers.
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HUMAN ECOLOGY AND FAMILY SCIENCES (HEFS)

CLASS XII

Learning Outcomes	Sources/ Resources	Suggested Activities (to be guided by teachers/parents)
<p>The Learner</p> <ul style="list-style-type: none"> • Explains meaningful work, livelihood, careers and entrepreneurs hip • Describes the concepts of standard of living and quality of life • Knows the importance of social responsibility and volunteerism • Explains the attitudes and approaches that contribute to quality of work life and successful careers • Shows sensitivity to the issues of work in relation to traditional occupations and special groups namely women, 	<p>UNIT I WORK, LIVELIHOOD AND CAREER</p> <p>Chapter 1- Work, Livelihood and Career</p> <p>Content discussed in the textbook</p> <ul style="list-style-type: none"> • Introduction <ul style="list-style-type: none"> - Work and Meaningful Work - Work, Careers and Livelihoods • Traditional Occupations of India • Work, Age and Gender • Attitudes and approaches to work and life skills for livelihood <ul style="list-style-type: none"> - Attitudes and approaches to work - Lifeskills for livelihood - Essential soft skills at 	<p>WEEK 1</p> <p>Activities</p> <ul style="list-style-type: none"> • At the beginning for better understanding and knowing the content and the context of the textbook learners should read the following sections of the textbook, carefully: <ul style="list-style-type: none"> - Foreword - Preface - Note for Teachers - Contents - Chapter I 'Work, Livelihood and Career' <p>Prelims</p> <ul style="list-style-type: none"> • Referring to the preliminary sections try to understand the following: <ul style="list-style-type: none"> - Purpose of the textbook - Basis of its development - Content covered - Nature of content designed to improve the Quality of Life (QoL) of individuals, families, and communities in the global, socio-cultural, and socio-economic contexts. • Develop a 'flyer/ leaflet/ pamphlet/ brochure' having highlights of the information given in the prelims. Highlight the information using diagram or illustrations, slogans and share the developed 'flyer/ leaflet/ pamphlet/ brochure' with teachers, and classmates through email or WhatsApp groups. • Find out more information about the following from your family and nearby people and prepare a brief report and share with teachers, and classmates through email or WhatsApp groups: <ul style="list-style-type: none"> - Quality of Life (QoL) in your own context and in the context of the society.

<p>children and elderly</p> <ul style="list-style-type: none"> • Describes the characteristics of a healthy work environment 	<p>workplace</p> <ul style="list-style-type: none"> • Ergonomics • Entrepreneurship <p>Note:<i>In case learners do not have the hard copy of the textbook, they can open link given below and download the complete e-textbook/s (Part I and II) available in both Hindi and English language:</i> http://ncert.nic.in/ebooks.html</p> <p>Links</p> <ul style="list-style-type: none"> - 'Facilitating Career Choice of Students' (English video): https://youtu.be/TmWicjBKCLE - 'Role of Teachers in Facilitating Career Choice of Student' (English video): https://youtu.be/fUNTVDik7mk - 'Helping Career Choices of Students in School' (English video): https://youtu.be/tfrOq4XqpdQ - 'Terra Cotta' (Hindi video): 	<ul style="list-style-type: none"> - Relationship between Quality of Life (QoL) and economic achievement. - Pertinent issues related to work, employment and careers. • Teachers may organize a discussion using online meeting platforms or WhatsApp groups on 'pertinent issues related to work, employment and careers'. Learners should be encouraged to participate in the discussion and share their own experiences with regard to the topic. <p>Chapter I 'Work, Livelihood and Career'</p> <ul style="list-style-type: none"> • Write the examples for following views of work in their notebook and post on the WhatsApp requesting friends and classmates to add more examples. Collective response may be shared with the teachers: <ul style="list-style-type: none"> - 'Job' / means of making a 'living' - Task/ duty that entails a sense of obligation - 'Dharma' or duty - Part of spiritual practice - Source of joy and fulfillment - Scope - Hope - Self-esteem and dignity - Symbol of status, power and control - Rewarding experience - Self development and self-actualization • A debate may be conducted on the views of work. Mention examples, and the contribution of such work to oneself, one's family, one's employers, to society, or to the world. • Teachers can ask learners to create a T-chart. 'Title the chart' with "Factors to Determine Standard of Living." Label the left side of the chart as "Economic Factors" and the other side of the chart "Noneconomic Factors." • Learners can be asked to write difference between standard of living and quality of life on their understanding of the chapter. • Think of any occupation of your choice and prepare an illustration keeping yourself in the center showing responses to the following
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	<p>https://www.youtube.com/watch?v=Q7OGt8jao94</p> <ul style="list-style-type: none"> - <i>'Kashth Nakkashi Hasth Shilpkala'</i> (Hindi video): https://www.youtube.com/watch?v=hKzRNRA6mb8 - <i>'Lakh Ki Churiya'</i> (Hindi video): https://www.youtube.com/watch?v=sD_MbJqC6e0 - <i>'Fakra Ki Baat'</i> (Hindi audio): https://nroer.gov.in/55ab34ff81fccb4f1d806025/file/5ea0703216b51c0c7d238801 - <i>'Mat Roko'</i> (Hindi audio): https://nroer.gov.in/55ab34ff81fccb4f1d806025/file/5ea0703016b51c0c7d2387f0 - <i>'Rishta Pakka'</i> (Hindi audio): https://nroer.gov.in/55ab34ff81fccb4f1d806025/file/5ea06fb216b51c0c7d23850b - <i>'Hum Padhna Chahte Hai'</i> (Hindi video): http://e 	<p>questions with regard to the occupation option chosen:</p> <ul style="list-style-type: none"> - What are your special talents, traits and interests vis-a-vis an occupation? - Is the work challenging and stimulating? - Is the occupation likely to give you a sense of being useful? - Does the chosen occupation make you feel that I am contributing to the society? - Are the ethos and environment of the workplace likely to be suitable to you? <p>Now, based on the activity categorize your response about the occupation as 'Job' or 'Career'. Write the reason for mentioning response to chosen occupation as Job or as a career.</p> <ul style="list-style-type: none"> • Find out the information about SWOT analysis (Strengths, Weakness, Opportunities and Threats) and its role in transforming our life. • Teachers and learners may watch video programmes using following links. Learners must write down the learning or the important information: <ul style="list-style-type: none"> - 'Facilitating Career Choice of Students' (English video): https://youtu.be/TmWicjBKCLE - 'Role of Teachers in Facilitating Career Choice of Student' (English video): https://youtu.be/fUNTVDik7mk - 'Helping Career Choices of Students in School' (English video): https://youtu.be/tfrOq4XqpdQ • Learners may share the important information and learning with friends, classmates and family members. Teachers may get ideas to help the learners for making informed carrier choices. • Make masks and gloves from your discarded clothes and donate them to help the needy. There are places online that accept donations. You can also give it to cleaners, sweepers, sanitisation workers, and vendors roaming around your society. This can help you grow as a socially responsible citizen. • Cleaning up home and watering all plants. The motto of this activity is to create a sense of health and hygiene among you and make you
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	<p>pathshala.nic.in/watch.php?id=74</p> <ul style="list-style-type: none"> - 'Rajni Se Roshini' (Hindi video): http://epathshala.nic.in/watch.php?id=116 - 'Relevance of Gender Dimensions in Teaching and Learning Process' (Hindi video): https://www.youtube.com/watch?v=TtPsyQvg3w - 'Gender-based Violence in School' (Hindi video): https://www.youtube.com/watch?v=ail8IPKJQM8&t=3s - 'Innovation and Entrepreneurship' (English video): https://www.youtube.com/watch?v=6z1hsQtNrJg - 'Fostering the spirit of Innovation and Entrepreneurship (Atal Tinkering Lab)' (English video): https://www.youtube.com/watch?v=M6OA21ARuNk - 'Motivation in 	<p>independent at the same time. You can make a video of the same and share it with your teachers.</p> <ul style="list-style-type: none"> • Complete the Activity no 2 given in Chapter 1 and submit the report to the teachers. <p>WEEK 2</p> <p>Activities</p> <ul style="list-style-type: none"> • Prepare a list of cash crops in India, preferably state/region-wise using internet. Also find out the relation between cash crops and economy. • Search on the internet and find out at least five individuals/ institutions/ organizations opted for traditional occupations of India for example 'Khadi'. Prepare a report having following details: <ul style="list-style-type: none"> - Contact details - Kind of traditional occupation opted - Aim/ goal/ objective of the occupation - Inspiration behind opting such occupation - Process of running the occupation - Challenges faced - Financial assistance - Income <p>Mention other details and images, if available. Submit the report to the teachers and share with the classmates.</p> <ul style="list-style-type: none"> • Prepare a list of small-scale business that can help in "Make in India" programme for improving economic development of the nation. • List 10 Indian traditional occupations that are slowly treading towards extinction. Write about each one of them in detail with their importance and submit • Prepare a 'Resource Dossier' of local traditional arts, crafts, cuisines using internet. This dossier should have brief information, and its importance/ need. Dossier work may be supported by relevant photographs. • Watch video programmes using following links
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	<p>business' (Hindi video):https://www.youtube.com/watch?v=rIK0BjJvONQ</p>	<p>and write down the learning or the important information and share with teachers, friends, classmates and family members:</p> <ul style="list-style-type: none"> - 'Terra Cotta' (Hindi video): https://www.youtube.com/watch?v=Q7OGt8jao94 - 'Kashth Nakkashi Hasth Shilpkala' (Hindi video): https://www.youtube.com/watch?v=hKzRNRA6mb8 - 'Lakh Ki Churiya' (Hindi video): https://www.youtube.com/watch?v=sD_MbJqC6e0 <ul style="list-style-type: none"> • Find out the information about the 'Beti Bachao, Beti Padhao Yojana' of the Government of India and its provisions. Prepare an information brochure out of it and share with friends, family, and teachers. • Make a list of 10 job roles and categorize it as 'men's work or women's work' If so then why it helps in 'identifying and analysing traditional gender roles in the workplace'. Teacher's responsibility is to make learners aware about domestic work done by women that should needs to be valued as an economic contribution and productive activity. • Prepare a power point presentation (with the help of teachers) of distinguished women in Science, Technology, Mathematics, Sports, Education, Literature, Medicine, Cinema, Politics and other important areas. • Watch audio-video programmes using following links and write down the learning or the important information and share with friends, classmates and family members: <ul style="list-style-type: none"> - 'Fakr Ki Baat' (Hindi audio): https://nroer.gov.in/55ab34ff81fccb4f1d806025/file/5ea0703216b51c0c7d238801 - 'Mat Roko' (Hindi audio): https://nroer.gov.in/55ab34ff81fccb4f1d806025/file/5ea0703016b51c0c7d2387f0 - 'Rishta Pakka' (Hindi audio): https://nroer.gov.in/55ab34ff81fccb4f1d806025/file/5ea06fb216b51c0c7d23850b - 'Hum Padna Chahte Hai' (Hindi video):
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		<p>http://epathshala.nic.in/watch.php?id=74</p> <ul style="list-style-type: none"> - 'Rajni Se Roshini' (Hindi video): http://epathshala.nic.in/watch.php?id=116 - 'Relevance of Gender Dimensions in Teaching and Learning Process' (Hindi video): https://www.youtube.com/watch?v=TtPsyQvg3w - 'Gender-based Violence in School' (Hindi video): https://www.youtube.com/watch?v=ail81PKJQM8&t=3s <ul style="list-style-type: none"> • Do the following activities under sub-heading 'Work, Age and Gender' under Chapter 1: <ul style="list-style-type: none"> - Briefly, write the answers of the Review Questions - Complete the Activity no. 5, 6, and 7. <p>WEEK 3</p> <p>Activities</p> <ul style="list-style-type: none"> • Make a creative poster showing 'Essential Soft Skills at Workplace'. Hang it on the wall and also take photograph and share with teachers, family, friends, and classmates through email or WhatsApp. • Write atleast two example from your daily life experiences under each of the following ten categories of 'core set of skills' given under sub-heading 'life skills for livelihood': <ul style="list-style-type: none"> - Self-awareness - Communication - Decision making - Creative thinking - Coping with emotions - Empathy - Interpersonal relationships - Problem solving - Critical thinking - Coping with stress • Think and write those creative and innovative things you did in your life that has helped you performing better in academics or day-to-day chores. • Based on the text given under the sub-heading
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		<p>‘Attitudes and Approaches to Work’, prepare an interview schedule to understand if the person finds satisfaction or dissatisfaction in their work. Now, conduct an interview with atleast two people over phone or video call. Conclusion may be drawn with reasons and should be shared with teachers.</p> <ul style="list-style-type: none"> • Write about how you felt when you last came to school? Did you come with an attitude “just another day” or you burst with enthusiasm and positive energy? How can these attitudes affect your day at school? • Define work ethic. Work ethic is generally associated with people that work hard and do a good job. Many characteristics of work ethic can be summarised using three terms- interpersonal skills, initiative, and being dependable. If you have a positive attitude toward school and work, you generally have a good work ethic • Find out the information about any two great innovators in the world and prepare a write-up on their life and innovative work. Submit the report to the teachers and share their life story with the friends and classmates through WhatsApp groups. • Think of any entrepreneur around you/ in your locality. Try to get his/ her contact number. Ask about the following: <ul style="list-style-type: none"> - Motivation behind selecting the particular business - What are their strengths? - What are their weaknesses? - How do they manage their work? - What are the challenges they are facing? - What are their achievements? - Are they satisfied or not with their business? Prepare the case study and share it with the friends, classmates, and teachers. • Watch Live discussions on different aspects of entrepreneurship using following links and write down the learning or the important information and share with friends, classmates and family
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		<p>members:</p> <ul style="list-style-type: none"> - 'Innovation and Entrepreneurship' (English video): https://www.youtube.com/watch?v=6z1hsQtNrJg - 'Fostering the spirit of Innovation and Entrepreneurship (Atal Tinkering Lab)' (English video): https://www.youtube.com/watch?v=M6OA21ARuNk - 'Motivation in business' (Hindi video): https://www.youtube.com/watch?v=riKOBjJvONQ <ul style="list-style-type: none"> • Complete the Activity no. 13 given in sub-heading 'Entrepreneurship' under Chapter 1.
<p>The Learner</p> <ul style="list-style-type: none"> • Describes the significance and scope of clinical nutrition and dietetics • Describes the role and function of a clinical nutritionist/ medical • nutrition therapist • Explains the knowledge and skills required for a career in clinical nutrition and dietetics 	<p>UNIT II NUTRITION, FOOD SCIENCE AND TECHNOLOGY</p> <p>Chapter 2 Clinical Nutrition and Dietetics</p> <p>Content discussed in the textbook</p> <ul style="list-style-type: none"> • Significance • Basic Concepts • Types of diets • Preparing for a career • Preparing for a Career • Scope <p>Links</p> <ul style="list-style-type: none"> - Indian Council of Agricultural Research (ICAR): https://icar.org 	<p>WEEK 4</p> <p>Activities</p> <ul style="list-style-type: none"> • There are many other Home Science colleges under the State and Center run Universities including Universities under Indian Council of Agricultural Research (ICAR) and various institutions like Central Food Technological Research Institute (CFTRI) etc. which are running professional courses mentioned in the sub-heading 'preparing for a career' under Chapter 2. Explore on the internet about them and prepare a matrix of information needed for choosing 'Clinical Nutrition and Dietetics' as career (such as departments, courses, admission process etc.). For your help links to some of these Colleges/ universities/ institutions are being given below: <ul style="list-style-type: none"> - Indian Council of Agricultural Research (ICAR): https://icar.org.in/ - Central Food Technological Research Institute (CFTRI): https://www.cftri.res.in/ - Lady Irwin College: http://www.ladyirwin.edu.in/index.aspx - Institute of Home Economics http://www.ihe-du.com/ - The Maharaja Sayajirao University Baroda, here the Home Science is known as 'Faculty of Family and Community Sciences' https://msubaroda.ac.in/Academics/Faculty

	<p>.in/ - Central Food Technological Research Institute (CFTRI): https://www.cftri.res.in/ - Lady Irwin College: http://www.ladyirwin.edu.in/index.aspx - Institute of Home Economics http://www.ihe-du.com/ - The Maharaja Sayajirao University Baroda, here the Home Science is known as 'Faculty of Family and Community Sciences' https://msubaroda.ac.in/Academics/Faculty</p>	<ul style="list-style-type: none"> • Similar exercise can be conducted in finding job opportunities, qualification required for that particular job in the area of 'Clinical Nutrition and Dietetics'. Websites of hospitals, counseling centers and research institutes etc. may be surfed in this regard. • Find out the information about eminent nutritionists. Prepare a report and submit to the teachers. • Teachers may create a matrix of information on WhatsApp group where learners should be encouraged to find out above mentioned information and add in the matrix as soon as they get the information. Teacher may also open a discussion forum on the WhatsApp group for providing guidance on the queries of students regarding 'Clinical Nutrition and Dietetics'. • In order to know more about Recommended Dietary Allowances (RDA) you must read about RDA using internet. Share the same information with the classmates, friends, family members, and teachers. Teachers may provide some links for related text material and videos. • Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to clinical nutrition and dietetics. • As the summer had already hit the country, make info graphic about the hydrating foods and their importance. • Teachers can give learners task of enlisting some diseases with required nutrition for each of them. After that, learners may be asked to plan a diet for these diseases according to the required nutrients. • Write the answers of all the 'Review Questions' given at the end of the Chapter 2 and submit them to the teachers.
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		<ul style="list-style-type: none"> • Interview family members from three different generations to determine how the significance of food preparation, family meals, and food traditions has changed over time. Using the interview responses, develop an essay describing these changes as well as the implications for nutrition professionals who care for clients across life stages. • Practice writing a therapeutic, calorie-controlled menu. • Write the importance of therapeutic diet and how it is different from normal diet? • Create a diet guide to fill the knowledge void and list the most optimal therapeutic diets to recommend to patients based on their chronic condition or disease (diseases should be decided by teachers). • Write about the role, principals, and types of dietary modification? • Be a dietitian for a day. Now, can plan and write diet recommendation to your family members according to their age and health issues. • Visit many websites related to clinical nutrition and dietetics and then make a list of career opportunities related to this field. • Make a record of your 24 hours dietary intake and based on this you can modify your diet into nutritionally balanced diet. • Complete Practical 1, given at the end of Chapter 2 and share with teachers, friends, classmates, and family members. As suggested in the practical, in case there is no elderly at home, interview may be conducted with any neighborhood elderly over phone or the activity can be done with an adult in the house.
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FINE ARTS

Classes XI-XII

Guidelines

- The subject Fine Arts covers different visual art subjects, like, Painting, Sculpture and Graphics (also called creative painting, sculpture and applied art) Different Boards use different nomenclature. This calendar follows the NCERT Curriculum and Syllabus.
- All these subjects covered under Fine Arts have two components, (i) Theory and (ii) Practical. Students may follow the NCERT syllabus or the Syllabus of their respective Boards. For NCERT Syllabus of Fine Arts please refer to the given link; (http://www.ncert.nic.in/rightside/links/PDF/syllabus/Art_Education_final_syllabus.pdf)
- For 'Painting', theory part, students can refer to the NCERT textbooks.
- It is advisable for the students of Higher Secondary classes to engage themselves in creation of art and learning theory simultaneously while at home. Students can utilise this time to prepare for their internal assessment and board examination.
- Students need not go out to the market for buying art material. Rather they may think of using material easily available at/ home to create art.
- Students are advised to prepare their portfolio for maintaining all the work done during this period for assessment. This work can be part of their internal assessment for the finals or Board exams.
- All activities are suggestive in nature and students are free to modify them as per the facilities and resources available.
- The Learning Outcomes mentioned are general and not specific to any one activity. These are the outcomes of the processes suggested for the activities in column two.
- Parents and teachers should encourage and support children in doing their work of art as their performance in the subject can open attractive avenues for higher studies in the field.

Suggested Activities: Class XI

Learning Outcomes	Suggested Activities (History of Arts)	Resources/ Material
<p>The Learner</p> <ul style="list-style-type: none"> - tells about early developments in Indian art of sculpture, architecture and painting from the earliest times to the Ancient periods and early Medieval period in different part of the sub-continent, - identifies different characteristic features of Indian art during different periods, regions and regimes, and differentiate among them, - appreciate the rich tangible heritage of the Country and be proud of it, 	<p>Students can visit the NCERT website, and access the Class XI textbook, ‘An Introduction of Indian Art – Part I.’ http://epathshala.nic.in/process.php?id=students&type=eTextbooks&ln=en</p> <p style="text-align: center;">WEEK 1 (THEORY)</p> <p>The very first Chapter is about Pre-historic cave paintings, read the text carefully, open it’s QR Codes and read Exercises first. Make notes of your observations on different topics and sub-topics, how familiar you are with the names of the cave sites, do you find any similarities in your earlier works, child art, how did they paint the rough surfaces, what were the reasons/ objective behind the painting in your opinion etc. Visit different Museum websites, and look at the details of the paintings.</p> <p style="text-align: center;">WEEK 2 (THEORY)</p> <p>The second chapter is on Indus Valley Civilisation. Again, go through the same process. Now, can you make a toy or beads or any similar items used by people of the Indus Valley Civilisation. Visit different website for virtual visit of Museums, look at the details of the artifact which are given for detailed study in your course/textbooks. Note down your observations of detailed plates.</p> <p style="text-align: center;">WEEK 3 (THEORY)</p> <p>The thirdchapter is on the art of the Mauryan period. Like previous chapters, read it carefully, take note of full page pictures and their description, the artifacts you know, like, Lion Capital of Ashok, the stories related to it and how it became the National emblem, etc. Draw their diagrams and write about them. Can you make some object taking clue or using the motif from the sculptures?</p>	<p>https://nroer.gov.in/home/e-library/ http://ccrtindia.gov.in/visualarts.php http://www.nationalmuseumindia.gov.in/collections.asp https://nroer.gov.in/home/e-book/</p>

	<h3>WEEK 4 (THEORY)</h3> <p>Note: Collect photographs from magazines, calendars, greeting cards, or what all you can get at home, arrange them in a chronological order and make an album of Indian Arts of different periods. Write captions under each of them in 4-8 lines of information such as period, date, name of the object, material used in making it, name and place of Museum or Collection where it lies presently.</p>	
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Painting Practical (Class XI)

Learning Outcomes	Suggested Activities	Resources/ material
<p>The learner</p> <ul style="list-style-type: none"> - demonstrates safe and proper use of drawing and materials. - observes and selects subject matter and ideas for his/her work. - applies elements of art in painting to effectively communicates his/her ideas. - appreciates beauty in nature and in man made objects using skill of art elements. 	<p>Activity – 1 Sketching of nature and of geometrical objects/ structures in pencil/charcoal . Sketching of natural forms at home such as; live plants and trees, available vegetables and fruits, leaves and flowers etc., Geometrical forms such as; table, chair, TV, books, bucket, basket, building, monument etc. Any kitchen utensil as they are based on geometrical forms.</p> <p>While sketching focus should be on the use of line, form, light and shade, textures of objects etc. Any sketch book or plain notebook can be used for this purpose <i>(sketching should be part of everyday routine for students of visual arts)</i></p> <p>Activity – 2</p> <ul style="list-style-type: none"> - Explores means to make own colors and brushes with available material at home. - Make charcoal at home for sketching. <p>Activity – 3 Object Study – learn to arrange objects for study (still life). <ul style="list-style-type: none"> - Study 2-3 objects using pencil / charcoal or / and oil pastels (students can use poster or water colours also if they are comfortable with the medium). </p>	<p>NCERT Syllabus/ State board syllabus</p> <ul style="list-style-type: none"> - Sketchbook can be created with leftover papers of old notebooks - Objects for study as per choice and availability - If available use Mobile phone / computer for viewing art work of masters, view video clips suggested by the school teacher or in this calendar of activities - Colors and brushes for painting. Preference to be given to those created by students themselves. - Self made Portfolio for maintaining records of the art work done.

	<ul style="list-style-type: none"> - Use any two seasonal vegetables or fruits as object for the study. One object can be a kitchen utensil. - In study of objects the focus should be on use of line, form, light and shade, textures of objects and ratio and proportion of one object with the other, etc. <p>Activity - 4</p> <ul style="list-style-type: none"> - Make an artistic composition on subjects such as; 'Scene from my window', 'My neighborhood', 'Festival I like the most', etc. This composition can be from imagination as well as what you can see around. - Artwork created is to be maintained in portfolio for assessment. - Use of available colours will be appreciated. - Students can create composition as a collage making use of available colored papers/ graphics/ photos from old newspapers or /and old magazines. Use any glue (you can make your own also) for pasting. - Use of multimedia such as; cloth pieces, thread, flat colours, mirror pieces, leaves, flowers, bangles, etc., is encouraged for better effects. - If available make use of computer art for understanding design and composition. - Artwork created is to be maintained in portfolio for assessment. 	
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Suggested Activities: Class XII

Learning Outcomes	Suggested Activities - History of Arts	Resources/material
<p>The Learner</p> <ul style="list-style-type: none"> - knows and appreciate Indian art of painting during Medieval and Modern periods, - identifies the styles of Rajasthani, 	<p>In Class XI, you have already studied about early mural paintings in different parts of the Indian sub-continent. In Class XII, you will be taking the journey of around 1500 years where Indian painting saw a varied style.</p> <p>WEEK 1</p> <p>Find out about the manuscript paintings of eastern and western India, where we find the Jain and Buddhist manuscripts written and painted in leaf and tied together. From the websites, look at the painted manuscript</p>	<p>https://nroer.gov.in/home/e-library/ http://ccrtindia.gov.in/visualarts.php http://www.nationalmuseumindia.gov.in/collections.asp https://nroer.gov.in/home/e-book/ Visit other Museum sites and collections online.</p>

<p>Mughal, Pahari, Company paintings, Bengal School, Post-Independence trends in modern Indian arts etc.</p> <ul style="list-style-type: none"> - identifies different characteristic features of Indian art during different periods, regions and regimes, and differentiate among them, - appreciates the rich tangible heritage of the Country and be proud of it, 	<p>and find about the period, place and script. Can you make a folio of illustration on a topic which may be as current as COVID-19, as a documentation!</p> <p>WEEK 2</p> <p>There are several schools of Rajasthani miniature paintings, find out about the miniature traditions of painting, which were the schools/ styles, what were the themes, who painted them, etc. Have you seen a miniature painting? Can you copy it and paint it in the actual size?</p> <p>WEEK 3</p> <p>In the Mughal period, the miniature traditions saw new heights. There are many styles and influences which were amalgamated into the Mughal miniatures and make it a robust Indian style. Find about these influences and how they are reflected.</p> <p>Take one Mughal miniature and study it thoroughly, write a critique on it with illustrations, showing different features.</p> <p>WEEK 4</p> <p>Read online articles on Early, Middle and Later phases of Mughal Miniature styles and find out about the differences and similarities among them.</p>	
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Painting Practical (Class-XII)

Learning Outcomes	Suggested Activities	Resources/ materials
<p>The learner</p> <ul style="list-style-type: none"> - demonstrates safe and proper use of drawing and materials. - observes and selects subject matter and ideas for his/her work. - applies elements of art in painting to effectively communicate his/her ideas. - appreciates the beauty in nature and in man-made objects using the different elements of art. 	<p><i>Following activities are based on your experience of Class XI and will help you perform more skillfully and artistically. Explore, experiment and express freely for better results.</i></p> <p>Activity – 1</p> <ul style="list-style-type: none"> - Sketching of nature and of geometrical objects/ structures/ part of building in pencil / charcoal. - Sketching of natural forms at home such as; live plants and trees, available vegetables and fruits, leaves and flowers etc., - Geometrical forms such as; table, chair, TV, books, bucket, basket, building, monument etc. Any kitchen utensil as they are based on geometrical forms. - Sketching of clothes kept in different arrangements is interesting and important. - While sketching focus should be on the use of line, form, light and shade, textures of objects etc. <p>Any sketch book or plain notebook can be used for this purpose <i>(sketching should be a part of everyday routine for students of visual arts)</i></p> <p>Activity – 2</p> <p>Object Study (still life) of a group of 2-3 objects (natural and geometrical) in pencil colors /charcoal, pastel or water colours while focusing on light and shade from a fixed point of view.</p> <ul style="list-style-type: none"> - For natural objects take; any vegetable or fruit. - For Geometrical objects take; thick book, any one kitchen utensil such as tumbler/bowl, jug etc. Any object which is based on geometrical forms like cubes, cones, cylinders and sphere can be used. - The group of objects can be organised at a distance of 5-6 feet. <p>For Geometrical objects take; textbook, any one kitchen utensil such as tumbler/bowl, jug etc.</p> <ul style="list-style-type: none"> - Use quarter size paper sheet or use your drawing file for the study. <p>Activity – 3</p> <p>Make A Viewfinder – Use a thick paper of 4x6 inches to make your viewfinder. Cut a clean rectangle window of 2x3 centimeters in the center. This will help you select compositions of your choice.</p>	<p>NCERT Syllabus/ State board syllabus</p> <ul style="list-style-type: none"> - Sketchbook can be created with leftover papers of old notebooks - Objects for study as per choice and availability - If available use Mobile phone / computer for viewing art work of masters, view video clips suggested by the school teacher or in this calendar of activities - Colors and brushes for painting. Preference to be given to those created by students themselves. - Self made Portfolio for maintaining records of

	<ul style="list-style-type: none"> - Compose view from within the house or of outside visible from your house. - use pencil charcoal or any other dry colour available to make quick compositions in your sketchbook. <p>Activity – 4</p> <p>Composition -</p> <ul style="list-style-type: none"> - Select any composition of your choice from your sketches made earlier and complete it using available colours. - One can make composition using folk art style (warli, madhubani, gond, etc.) of his/her region as composition. <p>Try to make conscious use of line, shape, form, texture, color and space in your composition.</p> <ul style="list-style-type: none"> - Artwork created is to be maintained in portfolio for assessment. 	the art work done.
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APPLIED ARTS FOR CLASSES XI-XII

Applied Art (Class XI)

Learning Outcomes	Sources/Resources	Suggested Activities (History of Arts) (to be guided by teachers)
<p>The learner</p> <ul style="list-style-type: none"> • Understands early developments in Indian art of sculpture, architecture and painting from the earliest times to the Ancient periods and early Medieval period in different part of the sub-continent, • identifies different characteristic features of Indian art during different periods, regions and regimes, 	<p>https://nroer.gov.in/home/e-library/</p> <p>http://ccrtindia.gov.in/visualarts.php</p> <p>http://www.nationalmuseumindia.gov.in/collections.asp</p> <p>https://nroer.gov.in/home/e-book/</p>	<p>Learners can visit the NCERT website, and access the Class XI textbook, ‘An Introduction of Indian Art – Part-I’.</p> <p>http://epathshala.nic.in/process.php?id=Learners&type=eTextbooks&ln=en</p> <p>WEEK 1 (THEORY)</p> <p>The very first theme is about Pre-historic cave paintings. Read the text carefully, open its QR Codes and read the exercises first. Make notes of your observations on different topics and sub-topics. How familiar are you with the names of the cave sites? Do you find any similarities with your earlier works, i.e. art as a child, and these? How did they paint the rough surfaces? What were the reasons/objectives behind the paintings in your opinion?</p>

<p>and differentiate among them,</p> <ul style="list-style-type: none"> • understand the rich tangible heritage of the Country and be proud of it, 		<p>Visit different Museum websites, and look at the details of the paintings.</p> <p>WEEK 2 (THEORY)</p> <ul style="list-style-type: none"> • Second theme is based on Indus Valley Civilisation. Follow the same process as before. <p>Now, can you make a toy or beads or any similar items used by people of the Indus Valley Civilisation?</p> <p>Visit different websites for virtual tours of museums. Look at the details of the artifacts which are given for detailed study in your course/ textbooks. Note down your observations in detailed plates.</p> <p>WEEK 3 (THEORY)</p> <p>The third theme on art of the Mauryan period is also very interesting. Like previous themes, read it carefully, take note of full-page pictures and their description. Which are the artifacts that you know, like, lion seal of Ashok, the stories related with it and how it became the National emblem, etc.</p> <p>Make drawings of these as diagrams and write about them. Can you make some object taking a clue or using a motif from the sculptures?</p> <p>WEEK 4 (THEORY AND PRACTICAL)</p> <p>Collect advertisements in magazines, brochures, cards, etc. lying in the house. Observe; what type of printing has been used, which fonts have used,</p>
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Applied Arts Practical (Class XI)

Learning Outcomes	Resources/ materials	Suggested/ Activities
<p>The learner</p> <ul style="list-style-type: none"> • demonstrates safe and proper use of materials, and equipment. • observes, selects, and utilizes a range of subject matter, symbols, and ideas in his/her work. • applies elements and principles of Art while, preparing the layout with sketches and use of different fonts and languages while drawing, posters, and other publicity materials to effectively communicate the ideas. 	<ul style="list-style-type: none"> • NCERT Syllabus/ State board syllabus • Objects for study as per choice and availability • Ink pen, pencils, stencils, sketch pens, colors and brushes. 	<p>Activity – 1</p> <ul style="list-style-type: none"> • Make sketches from nature or human made or geometrical objects, structures with pencil/charcoal in a sketch book. • Observe lines, form, light and shade, textures etc. • Natural objects at/near home such as plants and trees, vegetables and fruits, leaves and flowers, etc. • Geometrical forms such as table, chair, TV, books, box, bucket, basket, building, monument etc. Any object which is based on geometrical forms like a square, rectangle, triangle or circle. • Structures from room, house, next building etc. • Any sketch book or plain notebook can be used for this purpose. <p>Activity – 2</p> <ul style="list-style-type: none"> • Make 2 detailed drawings of any two objects from subjects given above showing all elements such as lines, form, light and shade, textures etc. Write captions for objects, not the name of the objects using calligraphy. <p>Activity – 3</p> <p>Imagine, you are organizing a concert in your colony/ society/ campus. Prepare a layout and content for a Brochure with all information.</p> <p>Activity – 4</p> <p>Given above in the theory section.</p> <p>Prepare a portfolio and keep all your work to be submitted for assessment after reopening of school.</p>

Applied Arts (Class XII)

Learning Outcomes	Resources/ materials	Suggested Activities - History of Arts
<p>The learner</p> <ul style="list-style-type: none"> • understands Indian art of painting during Medieval and Modern periods, • identifies the styles of Rajasthani, Mughal, Pahari, Company paintings, Bengal School, Post-Independence trends in modern Indian arts etc. • identifies different characteristic features of Indian art during different periods, regions and regimes, and differentiate among them, • appreciates the rich tangible heritage of the Country and develops pride in it 	<p>https://nroer.gov.in/home/e-library/ http://ccrtindia.gov.in/visualarts.php http://www.nationalmuseumindia.gov.in/collections.asp</p> <p>https://nroer.gov.in/home/e-book/ Visit other museum sites and collections online.</p>	<p>You have already studied in Class XI about early mural paintings in different parts of the Indian sub-continent, in Class XII you will be undertaking a journey of around 1500 years wherein Indian painting saw a varied style.</p> <p style="text-align: center;">WEEK 1</p> <p>Find out about the manuscript paintings of Eastern and Western India, where we find Jain and Buddhist manuscripts written and painted in leafs and tied together. On websites, look at the painted manuscript and find about the period, place and script. Can you make a folio of illustrations on a topic which may be as current as COVID-19 as documentation?</p> <p style="text-align: center;">WEEK 2</p> <p>There are several schools of Rajasthani miniature paintings. Find out about the miniature tradition of painting, which were the schools/ styles, what were the themes, who painted them etc. Have you seen a miniature painting? Can you copy it and paint it in the actual size?</p> <p style="text-align: center;">WEEK 3</p> <p>In the Mughal period, the miniature traditions saw new heights. There are many styles and influences which were amalgamated into the Mughal miniatures and made it a robust Indian style. Find out about their influence and how they are reflected in the works.</p> <p>Take one Mughal miniature and study it thoroughly. Write a critique on it with illustrations showing different features.</p> <p style="text-align: center;">WEEK 4</p> <p>Note: Prepare a poster to promote domestic tourism in the country using photographs, drawing, line drawings or any technique taken from magazines, calendars, greeting cards or what all you can get at home of monuments of the country. Use a catchy slogan.</p>

Applied Arts Practical (Class XII)

Learning Outcomes	Resources/ materials	Suggested Activities
<p>The learner</p> <ul style="list-style-type: none"> • demonstrates safe and proper use of materials, and equipment. • observes, selects, and utilizes a range of subject matter, symbols, and ideas in his/her work. • applies elements and principles of Art while, preparing the layout with sketches and use of different fonts and languages while drawing, posters, and other publicity materials to effectively communicate the ideas. 	<ul style="list-style-type: none"> - NCERT Syllabus/ State board syllabus - Works of art studied in Art History for reference - Objects for study as per choice and availability 	<p>ACTIVITY 1</p> <ul style="list-style-type: none"> - Study (still life) of a group of three to four objects (natural and geometrical) in pencil colors /charcoal, pastel or water colours while focusing on light and shade from a fixed point of view. The group of objects can be organised at a distance of 5-6 feet. For natural objects take any one vegetable, fruit etc., For Geometrical objects take a thick book, any one kitchen utensil such as a tumbler/bowl, jug etc. Any object which is based on geometrical forms like cubes, cones, cylinders and spheres can be used. Half sheet of imperial size can be used for this purpose. In case of non-availability of such a sheet take a drawing sheet of quarter size or a page of a sketch book. <p>ACTIVITY 2 AND 3</p> <p>Make a story with some 4-5 characters, using your imagination as well as earlier readings and illustrate it in your own style. You can use the comic format or the regular text format with illustrations.</p> <p>ACTIVITY 4</p> <p>Based on the activity 4 above in theory part. Prepare a portfolio and keep all your work to be submitted for assessment after reopening of school.</p>

SCULPTURE FOR CLASSES XI-XII

Suggested Activities: Class XI

Learning Outcomes	Suggested Activities (History of Arts)	Resources
<p>The Learner</p> <ul style="list-style-type: none"> - tells about early developments in Indian art of sculpture, architecture and painting from the earliest times to the Ancient periods and early Medieval period in different part of the sub-continent, - identifies different characteristic features of Indian art during different periods, regions and regimes, and differentiate among them, - appreciate the rich tangible heritage of the Country and be proud of it, 	<p>Students can visit the NCERT website, and access the Class XI textbook, 'An Introduction of Indian Art – Part I'. http://epathshala.nic.in/process.php?id=students&type=eTextbooks&ln=en</p> <p>WEEK 1 (THEORY)</p> <p>The first chapter is about Pre-historic cave paintings. Read the text carefully, open it's QR Codes and read the Exercises first. Make notes of your observations on different topics and sub-topics, how familiar you are with the names of the cave sites, do you find any similarities in your earlier works, child art, how did they paint the rough surfaces, what were the reasons/ objective behind the painting in your opinion etc.</p> <p>Visit different Museum websites, and look at the details of the paintings.</p> <p>WEEK 2 (THEORY)</p> <p>-The second chapter on Indus Valley Civilization. Again, go through the same process. Now, can you make a toy or beads or any similar items used by people of the Indus Valley Civilisation.</p> <p>Visit different website for virtual visit of Museums, look at the details of the artifacts which are given for detailed study in your course/ textbooks. Note down your observations of detailed plates.</p> <p>WEEK 3 (THEORY)</p> <p>The third chapter is on the art of the Mauryan period. Like previous chapters, read it carefully, take note of full page pictures and their description, which are the artifacts you know like Lion Capital of Ashok, the stories related with it and how it became the National emblem etc.</p> <p>Make drawings of these as diagrams and write about them. Can you make some object taking clue or using the motif from the sculptures</p>	<p>https://nroer.gov.in/home/e-library/ http://ccrtindia.gov.in/visualarts.php http://www.nationalmuseumindia.gov.in/collections.asp https://nroer.gov.in/home/e-book/</p>

	<h3>WEEK 4 (THEORY)</h3> <p>Note: Collect photographs from magazines, calendars, greeting cards, or what all you can get at home, arrange them in a chronological order and make an album of Indian Arts of different periods. Write captions under each of them in 4-8 lines of information such as period, date, name of the object, material used in making it, name and place of Museum or Collection where it lies presently.</p>	
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Sculpture Practical- XI

Learning Outcomes	Suggested Activities	Resources/ materials
<p>The learner</p> <ul style="list-style-type: none"> demonstrates safe and proper use of drawing and modeling materials. observes and selects objects for 3-D study. makes quick sketches of objects from nature. handles clay and other modeling material appropriately makes use of art elements while sketching and constructing objects. makes 	<p>Activity – 1</p> <p>Sketching of nature and of geometrical objects/ structures in pencil / charcoal.</p> <p>Sketching of natural forms at home such as; live plants and trees, available vegetables and fruits, leaves and flowers etc.,</p> <p>Geometrical forms such as; table, chair, TV, books, bucket, basket, building, monument etc.</p> <p>Any kitchen utensil as they are based on geometrical forms.</p> <p>Sketching of birds, animals and people.</p> <p>While sketching focus should be on the use of line, form, light and shade, textures of objects etc.</p> <p>Any sketch book or plain notebook can be used for this purpose (sketching should be part of everyday routine for students of visual arts)</p> <p>Activity – 2</p> <ul style="list-style-type: none"> Make clay at home for clay modeling <ul style="list-style-type: none"> (take dry clay available at home or from field. Hammer it to make powder, sieve it to remove pebbles or other waste such as; dry roots, leaves or pieces of wood etc, mix water to make dough of clay). Make fruit and vegetable of your choice using clay modeling techniques with the clay. (this technique is called modeling in round) 	<p>NCERT Syllabus/ State board syllabus</p> <ul style="list-style-type: none"> Sketchbook can be created with leftover papers of old notebooks Objects for study as per choice and availability Clay for modeling can be prepared at home. Or availed from a potter if convenient. If available, use Mobile phone for taking pictures of art work created. Use of modeler for modeling. Preference to be given to those created by students themselves.

<p>simple design using relief technique to create images of tree foliage, birds, animals and geometrical patterns</p> <ul style="list-style-type: none"> creates models using round technique in clay and papier-mache appreciates beauty in nature and in man made objects using skill of art elements. 	<p>Note: Ready clay can be stored for months by wrapping it in thick poly sheet or by keeping it in a air-tight box for use and re-use.</p> <p>Activity – 3</p> <p>Relief work on clay – create relief work using subject/object of your choice. The common subject/objects are; trees, animals, birds, human figures etc. use geometrical shapes/figures for borders and patterns. Preferable size of the clay tile can be one feet.</p> <p><i>(Modeling in relief can be done two ways; (I) make slab of clay using pressing technique, make the surface even. Develop images using coil or roll made of clay by supper imposing it on the slab. (ii) Make a slab and use pinching and pressing technique to develop images in relief).</i></p> <p>Activity – 4</p> <p>Modeling in Round with clay – create 3-D clay model in round technique. Use subject / object of your choice from common subject/objects such as; trees, animals, birds, human figures etc. -Make use of geometrical shapes/figures -Make a solid pillar of clay of 10” height and 2” diameter. A cube of 4” x4”. Write number on each face in relief style.</p> <p><i>(Modeling in round means complete 3-D object which can be identified from any side. For example A mango will look like mango and a pineapple will look like a pine apple from any side; front back or sides. Where as in relief de: fight sign is created on a slab like surface which can be seen from front only).</i></p> <p>Art work created can be maintained in portfolio for assessment. Students can take pictures of there models and reuse the clay if they want.</p>	
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Suggested Activities (Class XII)

Learning Outcomes	Suggested Activities - History of Arts	Resources/ material
<p>The Learner</p> <ul style="list-style-type: none"> • knows and appreciate Indian art of painting during Medieval and Modern periods, - identifies the styles of Rajasthani, Mughal, Pahari, Company paintings, Bengal School, Post-Independence trends in modern Indian arts etc. - identifies different characteristic features of Indian art during different periods, regions and regimes, and differentiate among them, - appreciates the rich tangible heritage of the Country and be proud of it, 	<p>You have already studied in Class XI about early mural paintings in different parts of the Indian sub-continent. In Class XII, you will be taking the journey of around 1500 years where Indian painting saw a varied style.</p> <p>WEEK 1</p> <p>Find about the manuscript paintings of eastern and western India, where we find the Jain and Buddhist manuscripts written and painted in leafs and tied together. From the websites, look at the painted manuscript and find about the period, place and script. Can you make a folio of illustration on a topic which may be as current as COVID-19, as a documentation!</p> <p>WEEK 2</p> <p>There are several schools of Rajasthani miniature paintings, find out about the miniature tradition of painting, which were the schools/ styles, what were the themes, who painted them etc. Have you seen a miniature painting? Can you copy it and paint it in the actual size?</p> <p>WEEK 3</p> <p>In the Mughal period, the miniature traditions saw new heights. There are many styles and influences which were amalgamated into the Mughal miniatures and make it a robust Indian style. Find about these influence and how they are reflected. Take one Mughal miniature and study it thoroughly, write a critique on it with illustrations, showing different features.</p> <p>WEEK 4</p> <p>Read online articles on Early, Middle and Later phases of Mughal Miniature styles and find out about the differences and similarities among them.</p>	<p>https://nroer.gov.in/home/e-library/ http://ccrtindia.gov.in/visualarts.php http://www.nationalmuseumindia.gov.in/collections.asp https://nroer.gov.in/home/e-book/ Visit other Museum sites and collections online.</p>

Sculpture Practical (Class-XII)

Learning Outcomes	Suggested Activities	Resources/ materials
<p>The learner</p> <ul style="list-style-type: none"> • demonstrates safe and proper use of drawing and modeling materials. • observes and selects objects for 3-D study. - makes quick sketches of objects from nature. - handles clay and paeir-mache as modeling material appropriately. - makes use of art elements while constructing objects. - differentiates between 2-D and 3-D relief in modeling. • -makes given design using relief technique to create images of tree foliage, birds, animals and geometrical patterns 	<p><i>Following activities are based on your experiences in Class XI and will help you perform more skillfully and artistically. Explore, experiment and express freely for better results.</i></p> <p>Activity – 1 Sketching of nature and of geometrical objects/ structures in pencil/charcoal . Sketching of natural forms at home such as; live plants and trees,available vegetables and fruits, leaves and flowers etc., Geometrical forms such as; table, chair, TV, books, bucket, basket, building, monument etc. Any kitchen utensil as they are based on geometrical forms.</p> <ul style="list-style-type: none"> • Sketching of birds, animals and people. • While sketching focus should be on the use of line, form, light and shade, textures of objects etc. <p>Any sketch book or plain notebook can be used for this purpose (sketching should be part of everyday routine for students of visual arts)</p> <p>Activity – 2</p> <ul style="list-style-type: none"> - Make clay at home for clay modeling. <ul style="list-style-type: none"> • (take dry clay available at home or from field. Hammer it to make powder, sieve it to remove pebbles or other waste such as; dry roots, leaves or pieces of wood etc, mix water to make a dough of clay). • Make 5 seasonal fruit and 5 vegetable along with a fruit tray. • Fruit tray of 10"x6" can be made using coil on slab method method of clay modeling. • using clay modeling techniques (press, pinch, coil, roll etc). To create round models. • Dry it in shade if you want to color them. <p>Note: Ready clay can be stored for months by wrapping it in thick poly sheet or by keeping it in a air-tight box for use and re-use.</p> <p>Activity – 3 Relief work on clay – Create relief work using subject/objects such as; trees, animals, birds, human figures etc.</p>	<ul style="list-style-type: none"> • NCERT Syllabus/ • State board syllabus - Sketchbook can be created with leftover papers of old notebooks • Objects for study as per choice and availability Clay for modeling can be prepared at home. Or availed from a potter if convenient. • If available, use mobile phone for taking pictures of art work created. • Use of modeler for modeling. Preference to be given to those created by students themselves.

<ul style="list-style-type: none"> - creates models using round technique in clay and papier-mache - appreciates beauty in nature and in man made objects using skill of art elements. 	<p>Make a tile of 10x10”, of 1” thickness and create 3-D relief on it.</p> <p>Use of geometrical shapes/figures in side borders can be added as per liking. <i>(modeling in relief can be done two ways; (I) make slab of clay using pressing technique, make the surface even. Develop images using coil or roll made of clay by super imposing it on the slab. (ii) Make a slab and use pinching and pressing technique to develop images in relief).</i></p> <p>Activity – 4 Modeling in Round with Papier-mache – Practice making pulp for papier-mache at home.</p> <ul style="list-style-type: none"> - <i>Making pulp (small pieces of old news papers, old notebooks, chart papers can be soaked overnight and made paste by grinding and mixing with Multani Mitti (or any other material of similar kind)</i> - Create 3-D model in round technique using common subject/objects such as; trees, animals, birds, people etc. - Make use of 3-D geometrical shapes such as; cone, cube, cylinder and sphere. - Create art work using geometrical panels of square, triangle, circle etc, superimposing one on another to create 3-D sculpture. - <i>(modeling in round means complete 3-D object. Which can be identified from any side (front back or sides) it . Where as in relief design is created on a slab like surface which can be seen from front and if it is round relief then from side also).</i> - Art work created can be maintained in portfolio for assessment. Students can take pictures of there models and reuse the clay if they want.
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VOCAL MUSIC (HINDUSTANI)

Guidelines

- Features of Indian Classical Music should gradually be comprehended by learners
- The *shruti/swar sthana* of notes should be comprehended according to the guidance of a teacher or from recorded Music.
- They should know the different types of notes practiced in different ragas
- They should know simple *Taals* like *Tritaal, Keherva, Jhaptaal, Dadra*
- Placement of fingers and hand on any percussive instrument/melodic instrument should be very clear to learners as this is the basis of sound production according to syllables
- Folk Music or regional music needs to be practiced to understand the Music of common people.
- They should meaningfully comprehend the vastness and variety of Indian Film Music (old and new).

Music (Class XI)

Learning Outcomes	Suggested activities	Sources /Resources
<p>Learner</p> <ul style="list-style-type: none"> • sings / plays <i>aroha, avroha</i> and <i>pakad</i> of the ragas • identifies the notes (<i>shuddha, komal, tivra</i>) in the ragas • identifies swar patterns of the ragas • sings/plays one composition/<i>chhota khyal/gat</i> in the ragas • identifies the swar patterns of the given ragas 	<p>Teachers record the <i>swar</i> pattern and one composition and send them on WhatsApp to learners. Form a group on WhatsApp and teach learners to play taal on any percussive instrument</p> <p>Form a group on WhatsApp and help the learners understand the art of writing notation in the Bhatkhande Taal Paddhati</p> <p>Some weblinks</p> <p>https://www.youtube.com/watch?v=1xb7z6Ni8LI https://www.youtube.com/</p>	<p>Singing /Playing Raag Bhairavi and Raga Bhimpalasi</p> <p>Activity 1 Practise of <i>aroha, avroha</i> and <i>pakad</i> of the ragas. Practise of swar patterns in the raga.</p> <p>Activity 2 Creation of innovative swar patterns according to the nature of the raga. Document the swar combinations in your notebook.</p> <p>Activity 3 Find out similar swar patterns in Film Music/ Regional Film Music/ Folk Music and document the same in your notebook.</p>

<p>in Film Music/ Regional /Folk Music</p> <ul style="list-style-type: none"> recites/ plays bols of Tritaal on any percussive instrument sings/ plays compositions in Jhaptaal writes Tritaal according to the norms of Bhatkhandeswarlipi theory comprehends the relevance /importance of Folk Music 	<p>watch?v=r97bzs3fyTY</p> <p>https://www.youtube.com/watch?v=Br9xxlll1-0</p> <p>https://www.youtube.com/watch?v=OUT1OfIXWvI https://www.youtube.com/watch?v=SxRMsYre02k</p> <p>https://www.youtube.com/watch?v=41vThsMiV7c</p> <p>https://www.youtube.com/watch?v=LPjtbMn9Tns</p>	<p>Knowledge of Taal and the process of documentation</p> <p>Activity 4 To let the learners write the taalTeentaal in Thah, dugun, tigung, chaugun</p> <p>Drawing pictures of Musical Instruments</p> <p>Activity 5 Draw a picture of any Indian Musical Instrument of your own interest and label the diagram by using online resources.</p> <p>Knowledge of Folk Music and analysis</p> <p>Activity 6 Learn a folk song from any region /state on the theme of celebrating a birth,marriage orlocal festival. Try to find the meaning of the words if you don't know the dialect.Analyse the theme anddocument everything in your notebook.</p>
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Music (Class XII)

Learning Outcomes	Suggestive Activities	Source/ Resources
<p>The learner</p> <ul style="list-style-type: none"> sings /plays aroha, avroha and pakad of the ragas identifies the notes (<i>shuddha, komal, tivra</i>) in the ragas identifies <i>swar</i> patterns of the ragas 	<ul style="list-style-type: none"> Teachers record the swar pattern and one composition and share them with the learners via WhatsApp. Form a group on WhatsApp and teach the learners how to play taal on any percussive instrument 	<p>Singing /Playing Raag Malkauns and Raga Bageshwari</p> <p>Activity 1 Practise of aroha, avroha and pakad of the ragas Practise of swar patterns in the raga</p> <p>Activity 2 Creation of innovative swar patterns according to the nature of the raga. Document the swar combinations in your notebook.</p>

<ul style="list-style-type: none"> - sings/ plays one composition/<i>chhota khyal / gat</i> in the ragas - identifies the swar patterns of the given ragas in Film Music/ Regional /Folk Music - recites /plays bols of Jhaptaal on any percussive instrument - sings/ plays compositions in Jhaptaal - writes Jhaptaal according to the norms of Bhatkhande swarlipi theory - comprehends the relevance /importance of Folk Music - comprehends the style/ shaili of Dhamar 	<ul style="list-style-type: none"> - Form a group on WhatsApp and help the learners understand the art of writing notations in the Bhatkhande Taal Paddhati <p>Some weblinks</p> <p>https://www.youtube.com/watch?v=wWMZGZnSoEc</p> <p>https://www.youtube.com/watch?v=fiRfulUvldU</p> <p>https://www.youtube.com/watch?v=BkinFn_6_HI</p> <p>https://www.youtube.com/results?search_query=ncert+official+dhamar</p>	<p>Activity 3 Find out similar swar patterns in Film Music/ Regional Film Music/ Folk Music and document the same in your copy</p> <p>Activity 4 Introduction of the Dhamar shaili</p> <p>Knowledge of Taal and the process of documentation</p> <p>Activity 5 Let learners write the taal Jhaptaal in <i>Thah, dugun, tigan, chaugun</i></p> <p>Drawing pictures of Musical Instruments</p> <p>Activity 6 Draw a picture of any Indian Musical Instrument of your own interest and label the diagram by using online resources.</p> <p>Knowledge of Folk Music and analysis</p> <p>Activity 7 Learn a folk song of any region /state on the themes of celebration of birth, marriage, festivals etc. Try to find the meaning of the words if you don't know the dialect. Analyse the theme and document everything in your copybook.</p>
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HEALTH AND PHYSICAL EDUCATION: HIGHER SECONDARY STAGE

Yoga and other physical exercises need be considered as an integral part of everyday activities for everyone during this lockdown period. This is most true for learners who are in the phase of adolescence. WHO has defined adolescence both in terms of age (10-19 years) and as a phase of life marked by special attributes. These attributes include rapid physical, psychological, cognitive and behavioural changes and developments, including, the urge to experiment, attainment of sexual maturity, development of adult identity, and transition from socio-economic dependence to relative independence.

During this period of social distancing, it is most important for learners (of this age group especially) to do some fitness activities at home. Since learners at this stage are also passing through the stage of adolescence, it is important for them to know about the various aspects of growth and development occurring in them. They should be able to clarify myths about issues relating to growing up and empower themselves to develop the ability to apply life skills in challenging situations.

For holistic health, knowing is not enough. One needs to be physically active, and mentally alert. Therefore, know about yourself and how doing yoga and physical activities at home is beneficial. Along with other assignments, spare at least 60 minutes for Yoga and other physical exercises. One can select from a range of Yogic practices and practice them daily at a specific time. If you were not doing Yogic practices earlier then start with simple and comfortable ones. In Yoga, both Do's and Don'ts are very important. To begin with, as said earlier, simple practices need to be selected.

These activities will enable you to achieve the following objectives even while staying at home.

Learning Outcomes	Sources/ Resources	Suggested Activities
<p>The learner</p> <ul style="list-style-type: none"> • Understands healthy eating habits, and personal hygiene. • Becomes aware of the importance of sanitation and cleanliness among people. • Identifies factors affecting health and wellbeing • Explores the relationship between endurance activity choices (jumping, skipping or any other exercise, etc.) and health. • Performs yogic activities for holistic health, • Analyses factors affecting growth and development during adolescence period. 	<p>Training and Resource Materials on adolescence Education (http://www.eparc.org/upload/39.pdf)</p> <p>Health and Physical Education Textbook for Class IX</p> <p>http://ncert.nic.in/textbook/textbook.htm?iehp1=9-14</p> <p>Yoga A Healthy Way of Living Secondary Stage http://www.ncert.nic.in/gpPDF/pdf/Yoga-Secondary-Stage-13128.pdf</p> <p>Yoga for Adolescent MDNIY) http://yogamdniny.nic.in/WRITEReadData/LINKS/2662c9a05-ddd4-41b9-be5d-15284952607c.pdf</p> <p>http://yogamdniny.nic.in/Contents.aspx?lsid=1084&lev=1&lid=691&langid=1</p>	<p>Learners at home to be asked to do the following activities</p> <ul style="list-style-type: none"> • Prepare a menu for a healthy meal- breakfast, lunch and dinner. Involve yourself in the preparation. • Develop at least 6 slogans on promoting healthy eating habits and explain their importance. Share them with friends. • Create a public service advertisement to build awareness about healthy eating habits, and personal hygiene among your family members and peers. • Gather information about communicable and non-communicable diseases through pictures and news items. Note their causes, risk factors, and preventive measures, etc. • Gather information on the mission 'Swachh Vidyalaya- Swachh Bharat' • Do exercises daily at home like jumping, skipping, sit-ups, pull-ups, push ups, etc. • If you have space in your home, you can practice honing skills of a game you like. • You may also see videos given on the website of the official federation of the game/sport. • Observe changes in your body because of physical activities and yoga and write them down daily in your diary. <p>Yogic practices are found effective for the development of all dimensions of one's personality. Before starting asanas, Yoga Sukshma Vyayama (micro yogic practices) is to be done. These micro yogic activities practices are as follows. Movement of neck shoulder, knee, and ankle movement each for 3 rounds as suggested by the Morarji Desai National Institute of Yoga (MDNIY) which is an autonomous organisation under Ministry of AYUSH, Government of India. In Yoga protocol, the neck movement includes forward and backward, right and left bending; twisting the neck right and left followed by rotation of the neck both clockwise and anti-clockwise. The ankle movement includes ankle stretches and rotation. All these activities require about 8 minutes. These Micro Yogic Activities are also important for making one ready to undertake the following <i>yogasanas</i></p>

Neck Movement

- Forward and backward bending,
- Right and left bending,
- Right and left twisting and
- neck rotation.

Shoulder Movement

- Shoulder stretch
- Shoulder rotation
- Trunk Movement
- Trunk twisting
- Knee Movement
- Ankle Movement

All these should be done without any jerks.

Some of the yogic practices are given below. You can do the asanas for 15 minutes overall.

Asanas

- *Surya Namaskar*
- *Tadasana*
- *Katichakrasana*
- *Bhujangasana*
- *Shalabhasana*
- *Dhanurasana*
- *Makarasana*
- *Halasana*
- *Hastottanasana*
- ✓ *Padhastasana*
- ✓ *Trikonasana*
- ✓ *Shashankasana*
- ✓ *Ushtrasana*
- ✓ *Ardhamatsyendrasana*
- ✓ *Bhujanagasana*
- ✓ *Shalabhasana*
- ✓ *Matsyasana*
- ✓ *Shavasana*

Kriya

- *Kapalabhati*

Pranayama

- *Anuloma-viloma Pranayama*
- *Bhramari Pranayama*
- *Bhastrika Pranayama*

Meditation

Yoga Nidra

All these asanas are explained in the textbooks mentioned as resources

Remember to take at least eight hours of sound sleep.

STRESS COPING ACTIVITIES

It is important to recognise that stress is something that can be tackled, controlled and decreased. The following suggestions may help harness the additional adrenaline released during stress:

- (a) S-T-R-E-T-C-H! Stand on your toes whenever you feel under pressure and stretch your body. Pretend you are reaching out to grasp something a few centimeters beyond your immediate reach. Hold this posture for a few seconds and relax.
- (b) Laugh loud, as much as you can. Read a comic, see a cartoon film or share jokes and funny stories with your family and friends.
- (c) Discover the 'yogi' in you. Yoga has always been a panacea for stress. Pick up a yoga book. Get started with short sessions (for 20-45 minutes).
- (d) Listen to your favourite music. It always has a restful effect.
- (e) Talk less, listen more. Listening banishes stress, makes you more popular, more sensitive, and overall a nicer person.
- (f) Feel the morning sunshine soak into every pore of your body.
- (g) Eat the right kind of fibre contained in food (green peas, vegetables, fresh fruits)
- (h) Count your blessings. This is the best way to decrease or even eliminate stress.
- (i) Make a mental note of good things that have come your way and record them on a sheet of paper. Refer to your 'blessings sheet' each time you feel stressed.
- (j) Compare yourself only with yourself rather than with others.
- (k) Remember that nothing stays bad forever.
- (l) Always remember that there are many people less fortunate than you.
- (m) Positive forms of expression may include writing, talking to a trusted person, or undertaking physical activity.
- (n) Take charge. Believe that you are in charge of your life.
- (o) Responding to stress assertively can:
 - (i) improve our reactions to events
 - (ii) reduce demands on us
 - (iii) increase our capacity to cope

MY VALUES

A list of commonly understood values that inform the decisions we take is provided below. The list is only suggestive. You may think of more such values

Sincerity	Honesty	Integrity	Stability
Fairness	Justice	Loyalty	Safety
Independence	Friendship	Love	Achievement
Comfort	Courage	Perseverance	Equality
Cooperation	Generosity	Honour	Kindness
Punctuality	Respect	Trust	Tolerance
Compassion	Security	Freedom	Commitment

Write the values from the table provided above, in the space provided at the end of each sentence. You may have multiple values for each statement. This will help you to understand the values that you follow in your day-to-day life:

1. Protecting school property_____.
2. Taking care of younger students during different school events_____.
3. Following safety rules while crossing the road_____.
4. Keeping your surroundings clean_____.
5. Switching off fans and lights when not in use_____.
6. Eating meals with the family at least once a day_____.
7. Saying no to physical fighting and hitting other students in school and outside_____.
8. Helping parents with their work without giving an excuse_____. Keeping bags, books, clothes, etc., neatly and tidily every day_____.
9. Sparing a few minutes to talk to old/ needy people_____.
10. Respecting all genders irrespective of difference_____.

You should be aware that respecting each other's differences is an important value in mentioned in the Constitution of India.

Make your way to healthy eating and follow hygienic practices with the Snakes and Ladders board game.

100	99 Not eating fruits & green vegetables	98	97	96	95	94	93	92	91 Skipping WFS blue tablets
81	82	83	84	85	86	87	88	89	90
80 Skipping meal	79	78	77	76	75 Open defecation	74	73	72 Poor personal & food hygiene	71
61	62	63	64	65	66	67	68 Washes hands before eating	69	70
60 Ensure equal food distribution at home	59	58	57	56 Drink plenty of water	55	54	53	52	51
41	42	43 Not washing hand before meal	44	45	46	47	48	49	50 Washes hands before eating
40	39	38	37	36	35	34	33	32	31
21 Eat green leafy vegetables & fruits	22	23	24	25	26	27	28 Use sanitary latrines	29	30
20	19	18	17	16	15	14	13	12	11
1	2	3 Avoids Junk foods	4	5	6	7	8	9	10

Analyse the relationship and note your thoughts

Not eating fruits and green vegetables	Lack of essential nutrients
Skipping weekly iron folic acid supplementation (WIFS) blue tablets	Can lead to anemia
Not washing hands before meal and after going to toilet.	Can lead to infections
Open defecation	Can lead to diseases and infections like worm infestation, loose motions.
Poor personal and food hygiene	Increases chances of catching Infections
Skipping meal	Affect growth and development of adolescents
Washes hands before eating	Prevents infection
Drinks plenty of water	Equally important for growth, like nutrients
Ensures equal food distribution at home	Healthy family values equality
Eats green leafy vegetables and fruits	Provides essential nutrients for growth
Avoids Junk foods	Promotes growth and development
Use sanitary latrines	Prevents infection and diseases (worm), prevents water contamination

Balanced diet means inclusion of proteins, carbohydrates, fats, vitamins in requisite proportions. As a child in the stage of rapid growth and development, you need to eat a balanced diet so that you can remain healthy. Maintaining proper standards of sanitation are necessary for improving and protecting the health and wellbeing of everyone.

Social Media for Synchronous and Asynchronous Communication: A Guideline for Teachers and Educators

Social media platforms facilitate communication in quick and convenient ways. There are various social media platforms such as Facebook, WhatsApp, Twitter, Instagram, LinkedIn, Google+, Telegram, etc. that are being used worldwide by people of all ages. These platforms have quickly reached even the remotest places on earth and help people access various kinds of information without having to travel and at a very cheap price.

We can communicate with individuals as well as with groups through different media – text, image, audio, and video. This communication is either synchronous – which means that all participants send and reply to each others’ messages in real-time or live; or it can be asynchronous – which means that one sends a message and the others reply at their own convenience. Synchronous communication includes individual or group audio and video calls, chatting through instant messaging apps. Asynchronous communication includes emails, messages or chats that may not be replied to instantly.

Precautions for using Online Learning Tools and Social Media: Safety of Students is our Priority

With the outbreak of COVID-19 pandemic, we are using a variety of web tools and mobile apps for synchronous and asynchronous communication with school students and pupil teachers for teaching-learning and assessment. Video and audio (JITSI, Telegram, WhatsApp) calls are used for synchronous communication and emails. SMS, MMS, audio-video clipping, text chatting are used for asynchronous communication. Many teachers are also teaching with Learning Management Systems (LMS) like SWAYAM, MOODLE, GOOGLE class etc. and Content Management Systems (CMS) and Open Educational Repositories like NROER, DIKSHA, NDL, CLIX, OLABs, etc. All of us know very well that the learners with whom we are dealing are young, energetic and keen to explore new knowledge in a proactive manner. Mostly, they use electronic gadgets (mobile phone, desktop, tablet and laptop) of their parents and other family members as well as use Internet connections (both satellite and cable connections as well). Knowingly or unknowingly, they may share vital security information like passwords or may use an unsecure website and put themselves and others in trouble. Therefore, it is the responsibility of us teachers and teacher educators to keep learners and their parents safe and secure while using the online learning facilities.

Given the unprecedented social distancing measures and home quarantine due to COVID-19, social media platforms have immense potential to contribute to teaching-learning processes. When physical access to schools and colleges is not possible, we can leverage these platforms to effectively carry out academic activities in innovative ways. In the following section, 12 different social media platforms are identified and their possible usage mentioned. Teachers and educators are at liberty to choose any of these tools as per their convenience for reaching out to learners and pupil teachers to provide online support for facilitating learning. Also, teachers and educators are advised to inform learners below 14 years of age to seek permission to share and use gadgets (Smartphone, iPad, tablet, laptop and desktop) owned by their parents, grandparents and elder sibling(s). Guidance of elders at home is necessary for accessing learning materials from home.

The following tips can help all of us protect ourselves from cyber threats

- Don't invite or accept friend requests from unknown persons.
- Don't share personal information (name, date of birth, address etc) with strangers.
- Never download unwanted and pirated software, games and apps.
- Don't reply to a call or reply to a stranger and be aggressive on social media.
- Inform your parents and elders immediately in case of any issue.
- If required and if elders in the family feel they can lodge a complaint of any misbehavior and breach in security in online mode or inform the local police and resolve the issue.
- Don't over use technology; rather use it judiciously.

Also, pursue physical activities and relaxing exercises for your eye, neck, back and hand etc. while and after using devices. So be safe, practice social distancing and learn from home online.

Please read detailed cyber safety and security tips and guidelines from the following

link: <https://ciet.nic.in/pages.php?id=booklet-on-cyber-safetysecurity&ln=en&ln=en>

1. WHATSAPP

It is a mobile application which has to be downloaded on a user's mobile phone. It can also be accessed on a computer (laptop or desktop) if a user registers on the official site with their individual mobile number. We can send messages and make audio and video calls using WhatsApp if we have access to the Internet. We can also share a wide variety of media like photos, audio, video, and other documents on it. We can communicate one-to-one or in a group in the above-mentioned ways. Up to 256 people can join a group and interact with each other on WhatsApp. One can create any number of groups (e.g., one group for each class or subject or course) on WhatsApp.



Use case: A teacher or educator can use WhatsApp group call to organise a virtual class and post an assignment on a group. Later learners can post their completed assignment. A teacher can share the link for learning resources in a group or share a downloaded document/ own recorded voice/ a self-created document on a topic. The teacher can also help parents with tips on how to engage learners at home. The School Head can form a WhatsApp group to interact with and mentor fellow teachers.

2. FACEBOOK

Facebook can be accessed on a laptop/desktop computer as well as through a mobile application. One needs to create an account to log into Facebook. Facebook allows us to share or post information consisting of text, image, audio, video and other documents. It gives a sense of community as we can add and connect with other users as 'friends'. Facebook also provides options to have closed as well as open groups. Creators and users can control who can contribute, comment, join, etc.



Use case: Teachers can create subject or class wise groups and share content in various forms. In addition, they can interact with learners, deliver live lectures, organise a watch party etc. Personalised feedback can also be

given to learners via Facebook chat/messenger. Facebook for education (<https://education.fb.com/>) is a dedicated platform of Facebook for educators to collaborate and innovate.

3. TWITTER

Twitter is a micro blogging and social networking service on which users can post and interact through messages known as 'tweets'. It can be accessed on a laptop/desktop computer as well as through a mobile application. It allows users to write and share their ideas and opinions in real time (instant messaging) within 280 characters. We can also upload and share images, audio, video and other documents through Twitter. While sharing, one can mention another person or group through a feature called hashtag (#) or @followed by the user's account name on Twitter. Twitter can be used for self-expression, social interaction, and information sharing.



Use Case: Teachers can use it as an effective pedagogical tool to gain information, engage students, follow interested communities, share their insights on specific topics, conduct quick polls on specific themes, etc. It can enhance engagement and collaboration among peers, learners and teachers. The teacher can tweet assignments, link to other resources or web pages. Learners can work collaboratively on assignments using Twitter. Teachers and learners can subscribe to relevant and important hashtags for further learning.

4. EDMODO

Edmodo is a free and secure online educational learning network. It is a social network to interact with others. Teachers can use it to create and manage an online classroom community, and learners can connect and collaborate with their peers. It helps to schedule homework and assignments, network with other teachers, and monitor learners' progress.



Use Case: Teachers can manage their classes and consolidate all of their activities in one place. Teachers can create a digital classroom space for learners to work together and share ideas and resources. Edmodo's quiz builder or poll feature can be used to assess learners' learning during or after a unit of study. Teachers can divide a class into smaller groups and have them post their work to their group for peer review and feedback. Teachers can further use Edmodo Badges to help motivate learners to advance their learning and increase their practice time on new topics. Badges let learners show off their accomplishments and motivate others. Administrators can use the platform to coordinate and collaborate with fellow teachers. Planning professional development seminars is easy, especially with SchoolTube, Edmodo's video service.

5. INSTAGRAM

Instagram is a photo and video-sharing social networking service that has millions of active users all over the world. It can be accessed on a laptop/desktop computer as well as through a mobile application. It can be used to share short videos, pictures, audio, quotations, write-ups and much more. Teachers can also make groups on Instagram and post photos and other media to these groups. They can either keep a group open for all or make a closed group.



Use Case: Through Instagram, teachers can effectively engage in visual storytelling. One can use hashtags (#) that are relevant and often searched to be discoverable. There are other features as well, which teachers and learners can use, such as video recording from 3 up to 60 seconds for a post and 15 seconds for time bound stories. Other features such as unlimited story additions, direct messaging within stories and IGTV gives users the ability to share videos that are up to an hour long – like a TV episode.

6. TELEGRAM

Telegram is a mobile application-based communication tool. It has the capability to enable users to share a wide variety of media, be it photos, audio, video, and even documents. It supports one-to-one communication as well as group communication. Subject groups can be created, and each group can have even 1,00,000 members. It provides various kinds of administrative support that facilitate collaboration. Groups can also be controlled to have only one-way or two-way communication. Telegram can also be used for making audio and video calls. Group conference calls are also an additional support that will help teachers take online sessions and encourage interaction by learners. Every time when someone accesses their mobile phone, they just need click on the telegram icon, it will start working. Telegram channels can be helpful for providing the desired information to an unlimited number of learners and teachers.



Use Case: Teachers can create large groups of teachers and learners and continuously interact on various themes. During NISHTHA training many states like Assam, Karnataka, Odisha, Punjab, Rajasthan used Telegram for sharing of information and best practices.

7. BLOGGER

A blog can be considered an online journal or an informational website. Individuals setup a blogging website and regularly post articles called blogs. Users can subscribe to blogs to receive notifications about new articles through their email or they can directly go to a blogging site and read the articles.



Blogger is a blog publishing service provided by Google. A user with a Google account (Gmail ID) can freely use the blogger facility to create a blogging website of their own and start writing articles on a topic or area such as travel, experiences, marketing, product description, education, etc.

Use Case: Teachers and learners can create accounts on Blogger through their Gmail accounts. Teachers can write and share blogs on difficult topics related to the subject areas they teach, for instance, Science, Mathematics, Language, etc. They can display teaching-learning material on blogs by adding pictures, videos, audio, PPTs, etc. A common classroom blog can also be created using WordPress, and a community of teachers and learners can together post and discuss about concepts and ideas.

8. SKYPE

Skype is generally used to communicate through video conferencing either one-to-one or in groups. It can be accessed on a laptop or desktop computer as well as through a mobile application. Users are required to create an account and then log in. Skype group calling includes conference calling and group chats. It can be used to host a group video chat or conference call for up to 50 people. Adding people who already have Skype is free.



Use Case: Skype provides an excellent way for teachers to introduce the world beyond the classroom to their learners. Through video calling, learners can connect with teachers, educators and other learners for live discussions and solving their queries. We can also use Skype to explore virtual field trips, organize guest speaker sessions with two-way communication between the presenter and the audience. Special events can be conducted like live discussion with authors, celebrities, technology experts, doctors, artists, etc. Sharing of screens, files, resources and other information with learners, teachers and parents can also be part of an e-learning process through Skype.

9. PINTEREST

Pinterest is a visual social network in a multilingual format available on the web as well as a mobile application (both android and iOS). It is like an open bulletin board in which communities, teachers, learners and parents can interact, share and post or pin on a



single forum. It enables posting, saving, blogging and discovery of information using images, GIFs, interactive videos, documents and blogs etc. The resources which are pinned get segregated into various categories. There are a lot of categories to choose from, including diversified fields of learning. These categories or boards are displayed on the user's Pinterest profile. Since these pins can be shared and are easily searchable, they have the potential to become a very useful educational tool.

10. YOUTUBE

YouTube is an online video sharing platform wherein the users can watch, upload, edit and share videos. They can also like or dislike the content and comment on it. The platform allows users to create free of cost YouTube channels in which they can upload videos created by them. Also, users can sort videos and create their own playlists. Video lectures, animation videos, 360 videos are useful resources to engage learners and help them learn difficult concepts.



Use Case: Teachers, for example, can create 'Geometry' as a playlist containing all the videos related to it for a Mathematics class. Teachers can search and share with learners' videos on various topic which are correct both conceptually and pedagogically. The videos can be auto-translated in local languages, making them useful for everyone. Subtitles, which can also be in a local language, can be added to the videos to promote inclusion. Teachers can also Live Stream the lectures wherever they are to the selected group or public.

11. LINKEDIN

LinkedIn is mostly used by professionals for social networking. Companies use this platform for posting jobs and job seekers posting their curriculum vitae. It's a social media exchange platform for employers and employees. LinkedIn allows members (both workers and employers) to create profiles and can establish



connections to each other in an online social network mode which may represent real time professional relationships. Members can invite anyone (whether an existing member or not) to become a connection on this platform.

12. GOOGLE HANGOUT

It is a unified communications service that allows members to initiate and participate in text, voice or video chats and communication, sharing content either one-to-one or in a group. Hangouts are built into Gmail, and mobile Hangouts apps are available for iOS and Android devices. A Gmail account is all you need to use this application. Up to 150 people can participate in a Google Hangout, though a video call is limited to 25 participants.



Use Case: Teachers can use hangout to live stream classes from their homes. Learners can join the live class from their respective homes. Smaller groups can be formed within a class for group discussion and peer learning among learners through audio or video chats.

Guidelines to Cope with Stress and Anxiety in the Present Situation

The novel Coronavirus (COVID-19) pandemic presently is a situation that calls for vigilance and all of us, including our teachers and learners, have been advised to remain at home so as to maintain social distancing and stop the chain of virus spread. This is affecting individuals not only physically but also psychologically. Learners, teachers and parents may feel stress since the pandemic has caused strong emotions such as, sadness, fear, anxiety, feeling of helplessness, uncertainty, loss of interest and hopelessness among others. Such emotions are understandable given that this sudden outbreak has resulted in unexpected and abrupt changes to daily life activities (e.g. going to school, meeting friends, socialising, going out with family, disruption/uncertainty about examination, future admission, career, travel plans, etc.). That the situation demands social distancing and self-isolation, is an additional challenge.

Some emotions, feelings and reactions generally felt by people experiencing stress are:

- negative thoughts
- anxiety, worry, fear
- sadness, tearfulness, loss of interest in usual enjoyable activities
- frustration, irritability, or anger
- restlessness or agitation
- feeling helpless
- feeling disconnected from others
- difficulty in concentrating
- trouble relaxing or sleeping
- physical signs such as stomach upset, fatigue, uncomfortable sensations

It is, therefore, important to be mindful of the wellbeing of all around us and to take constructive action to help learners, teachers and parents to cope with, handle, and relieve stress and anxiety.

Strategies for Learners to Cope with Stress and Anxiety

- **Try to have a routine:** Maintaining a routine is the first thing that is compromised in stressful situations. It may be simple enough; not having a fixed time to bathe, have food, sleep, etc. After all, it does not matter. Or does it? It must be remembered that maintaining a routine helps to create discipline and that can have a positive effect on your thoughts and feelings. There are ways to stay healthy and develop new routines. Create a list of activities which you want to do. These can relate to both studies and fun activities (e.g. try to give time to those areas of study which require more focus and time, playing or trying new indoor games, starting a new hobby, sharing daily household work, solving puzzles, develop puzzles and quizzes related to different subjects, general knowledge etc., start reading a book, organizing, cleaning and arranging clothes yourself and helping your brothers and sisters to do the same, physical exercises, learn to cook new kinds of dishes and serve them to your parents and siblings, play an instrument, learn a language, learn how to sew, take up gardening, observe birds, trees, stars etc and relate them to the relevant subjects – geography, science, social science etc).

Prepare a plan for daily activities and attempt to be consistent in following it as much as possible

- **Focus on your 'self' and recognise your feelings:** We have been trying to fit so many things in the daily schedule such as school, studies, homework, examinations, coaching, etc. that we are not able to take out time for ourselves. It is important to recognise your feelings and acknowledge that it is okay to feel what you are going through as everyone is feeling the same way. The present time at home needs to be seen as an opportunity to allow yourself space to *reflect* on what you have been doing in your life for yourself and for others, which aspects you would like to change. What kind of effort, thinking or action would it require from your side? Try to *observe*, i.e., become aware of your sensations and express what you are feeling. Write down your reflections about what you observed in yourself. Did these help you to

understand yourself better? Try to maintain a daily chronicle of your activities and reflections.

Become aware of your thoughts, feelings and actions

- **Stay connected:** As social beings, connecting with friends and family brings a sense of comfort and stability to us. Receiving support and concern from others has a powerful impact on our emotional wellbeing and helps us cope with challenges. To deal with the present situation and resultant stress there is a need to create a sense of “we” i.e. community. In present times we have the advantage of technology that has made it possible to be connected globally with people through phones, emails, Facebook; Skype, Zoom, WhatsApp, etc. So, use these mediums to talk with others, know about their concerns, thoughts and feelings and share your feelings and viewpoints with them. There are many ways in which we can use technology to stay connected, such as:
 - call, text, or video-chat with friends and family
 - share quick, easy and nutritious recipes
 - start a virtual book or movie club
 - schedule a workout together over video chat
 - share your understanding of a topic, equation, experiment etc. with others in an online group or peer forum.

Remember social distancing does not mean social disconnection. It is only the absence of physical connections. You can still be connected with your friends and family - in your thoughts and emotions.

- **Inculcating positive thinking:** In a situation like the present one, where there is uncertainty, it is normal for learners to feel anxious and have negative thoughts. The key to avoiding, managing and reducing stress is a positive attitude. Never lose hope; begin with your own self and help others around you be hopeful too. Be persistent in keeping positive thoughts by asking yourself some questions, such as:
 - What are the things which I am supposed to do to control the situation?

- Am I overthinking about the pandemic?
- What strategies have helped me in the past to cope with challenging situations?
- What helpful or positive action I can take now at home?
- How are others (particularly elders – parents, teachers) dealing with the present situation?

Exercise caution with negative thoughts and indulge in more and regular physical movements within home.

- **Take care of your body:** Eating a healthy and well-balanced diet is important for our body and mind. As learners you might have received training in school on meditation and yoga. Now is the best time to start practicing it daily for building better mental and physical health. Fix a time to do it regularly once a day. Do some form of physical activity like aerobics, stretch exercises, yoga *asanas*, deep breathing, dance, etc. Also, drink plenty of water and get enough (7-8hours) sleep every day. This will give you energy, boost your immune system and keep your spirits high. This, in turn, will help release the stress and anxiety.

Healthy mind is in a healthy body. This is the mantra of well-being.

- **Be informed and updated:** Do not act in a manner where you become an agent in spreading rumours. Take appropriate caution to pass on messages as sometimes these are not based on authentic information. It is vital to stay informed and updated and listen to trustworthy media sources. Constant monitoring of news and social media updates may lead to anxiety. To help reduce fear and anxiety, limit your media consumption to a specific time to listen to the news.

Set restrictions around news and social media

- **Contribute towards wellbeing of all beings:** The interdependence and existence of all living beings needs to be acknowledged and respected. Helping people who are old, vulnerable and in need of care can promote a sense of hope and meaning in life. Showing love and

care towards your family and friends can boost up your sense of purpose in life. Some ideas you could consider are ensuring that people who are providing essential services are respected; delivering food items, groceries etc. to old, needy people in your neighbourhood; feeding birds and stray dogs and sending messages of encouragement, positivity, etc.

Become an active member of the ecosystem to ensure existence of all beings

Guidelines for Teachers to Cope with Stress and Anxiety

The present attempt of arising from the outbreak of Coronavirus (COVID-19) has led to restrictions on our social life and disrupted our daily routines. To handle the situation the suggested measures of self-isolation and distancing ourselves from others are to be practiced, which is not our natural or normal behaviour. Therefore, this has several consequences. We may experience a lack of control over life, feel helpless, worried, angry, sad, restless or irritated these days. This can be emotionally exhausting and lead one to feel weak emotionally (which may not be our normal emotional self).

As teachers, we are responsible not just for ourselves but are also role models for our learners and for society at large. Therefore, we need to know how to deal with stressful times and help ourselves and others in the process. Some of the ways to cope with the feelings associated with such forced social isolation during a pandemic are:

- **Take a proactive approach:** Accept and help others (learners, parents, colleagues) to accept that the present times are difficult. Also, it is necessary to address emotions such as despair and reassure everyone that since medical research is being undertaken through global cooperation, times will change for the better. Plan for yourself. This will help give you a sense of purpose and progress both in your personal and professional life. Prepare a daily timetable or routine. Ensure variety in the schedule such as work, leisure, exercise, learning, etc. Learn something new that sparks your intrinsic motivation and curiosity.
- **Stay connected:** Advances in mobile technology will help to stay connected through calls, text, WhatsApp, email, etc. Use this time to connect with people, whom you have not been able to connect to due to distance, lack of time, etc. Sharing concerns with trusted others have significant positive psychological benefits. Therefore, try to contribute to a sense of togetherness by sharing your feelings and helping others to cope with similar emotions that you too are experiencing. Utilise the additional time available at home to reconnect and strengthen relationships within the family.
- **Focus on your health:** Quarantine and isolation are stressful, and stress weakens our immune system. Hence, being proactive about

staying healthy becomes even more important. Stick to regular meals with the correct nutritional variety and avoid snacking. Anxiety can sometimes prompt us to comfort eat, so we need to manage these urges. Daily exercise will help regularise sleep patterns. All these boost our psychological health. Maintain healthy sleep habits. The negative impact of sleep disruption on one's mood is already well-known. Without the structure of having to get to school, college or the workplace, it can be easy to fall into unhealthy sleep habits like going to bed late and getting up late. However, this may be detrimental in later days. So, it will be useful to schedule a balanced range of activities in our day by including physical exercise and engaging in pleasant and relaxing activities. This will help with getting quality sleep. Preparing balanced and nourishing meals for yourself and your family members is an important aspect for maintaining good health.

- **Reflect and connect to yourself:** Take time to engage in observing your surroundings (at home and immediate nature) by identifying the smells, textures and visuals. This will help soothe anxious minds. Self-care also means maintaining boundaries such as refusing visitors, reducing unnecessary demands, and saying "no". In our otherwise hectic everyday schedule, we had difficulty in maintaining a 'self-care' schedule. Take the opportunity to take up any such activity which will help you to connect with your own self - meditation, yoga, walking, baking, reading etc. Think of the small changes which you can bring in your life.
- **Manage your media time:** Information received through various social media channels may make you feel overwhelmed and confused. Hence, even though staying digitally active in present times is almost a necessity, it is important to carefully choose news and media sources. Choose one or two well-informed sources such as the Government of India's Coronavirus (Covid-19) Helpdesk and WHO's website and set fixed times during the day to check for updates. Restrict consumption of news, particularly on social media. Depend on traditional national media with direct lines to trustworthy medical professionals, decision-makers and administrators when accessing news. Use social media platforms meaningfully to connect with people (friends, family, learners, colleagues, etc.) rather than passing on unverified messages.

Guidelines for Parents to Cope with Stress and Anxiety

The primary role of parents now is to keep their children well and that means looking after their emotional well-being as well as their physical health. Rather than worrying that children are not doing enough school work, parents should view the enforced break as an opportunity for some learner-led, individualised learning, which most schools struggle to offer. Parents can ask their children to write down all the different things that they could do during this time to learn, do and experience. It can be anything-watering plants, developing a reading habit, leaning to cook, painting, playing music, etc.

- **Help your children develop life skills:** A way parents can help even young children develop life skills is that while they are at home empower them to help with housework or cooking. It is not necessary that everything around their life should be based on academics only. Now, parents have an opportunity to connect with their children and develop in them the sensibility to understand the curriculum of life. From learning how to make a cup of tea to helping with daily chores, a learner would be able to feel that connection even in the moment of isolation.
- **Understand your anxiety:** As a parent, the uncertainty surrounding Coronavirus can be the hardest thing to handle. One doesn't know how exactly one would be impacted. Instead of remaining in confusion, parents can note what exactly is making them anxious. It can be loss of studies for your child, academic worries, etc. After contemplating about them, parents can have a clearer idea as to their source of anxiety.
- **Avoid fake news and superstitions:** Parents can adhere to dependable sources such as Government of India's Coronavirus (COVID-19) Helpdesk and WHO. They can move away from checking the news if they feel overwhelmed and should also be careful about what they share through social media platforms.
- **Focus on the things they can control:** In this scenario of global pandemic, many things are outside our control like how long the pandemic would last and what is going to happen in our community, etc. Focusing on things which are out of control can make one feel drained, overwhelmed, and anxious. As a parent, one can help in reducing personal risk by asking their child/children to wash their hands regularly with soap for at least 20 seconds and

do the same themselves. Using a hand sanitiser with alcohol content not exceeding 60 percent is also advisable. Apart from maintaining hand hygiene, avoid touching your face especially your eyes, nose, and mouth. Stay at home, avoid crowds, and maintain six feet distance between yourself and others when out. Most importantly, get deep sleep.

- **Physical exercise:** Our body is meant for movement. There are innumerable benefits by doing physical exercises such as release of endorphins (feel good hormones), proper blood circulation, and feeling light, etc. Stretching, alternate toe-touching along with jumping jacks for 10 minutes can have a significantly reduce stress and anxiety.
- **Yoga and meditation:** The word Yoga means union. When your body and mind are balanced, when one reaches a state of unwavering attention, one has reached a state of yoga. Grounding yourself in the present moment can help you reach that union. One effective technique is to pay attention to your breath. *Prana* is the key here. Paying attention to inhaling and exhaling can help in attaining the state of *Dhyana*—getting in touch with the inner stillness. This time can be utilised to perform yoga yourself and also to teach it to your children.
- **Paying attention to one's diet:** One of the ways of coping with stress and anxiety can be stress-eating and taking in excess of calories by indulging in deep fried, carbohydrate rich and sweet foods. This can make one feel anxious as the nourishing aspect of food is eliminated through such indulgences. This can also take a toll on your immunity. This is the right time to understand and to also make your children understand that immunity is maintained not only from the outside by social distancing, soaping one's hands or using sanitisers but also from the inside by eating healthy i.e. eating fruits and vegetables and having the right proportion of carbohydrates, proteins and fats.
- **Take care of your body and spirit:** Apart from eating healthy meals, getting plenty sleep and meditating, one should not forget to practice self-care in this situation. Be kind to yourself, maintain a routine, wake up early in the morning, and take time out for activities you enjoy. Avoid self-medicating, and be a calming influence in the life of your children and those around you.

In stressful times such as the present one, as a parent or teacher do remember that the social distancing and isolating of self is not only for our own good but also for all those around us and for everyone who is closely or remotely connected with our life and living. Help your children and learners understand this and encourage them to feel the same way.

For Learners

Where in the World Image Quiz

<https://www.nasa.gov/stem-ed-resources/where-in-the-world-image-quiz.html>

YouTube

<https://www.youtube.com/watch?v=KlhIE79yOyU>

Map work: Lets learn it through School Bhuvan

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