

Hansraj Model School
Holidays Homework 2021-22
Class XI

English

1. Make a PPT on - Pen Portrait of your Grandparents. Prepare 3 to 4 slides.
Slide 1 write the Topic , Your name , class-sec , R.No.
Slide 2 Paste pictures of your grandparents.
Slide 3 & 4 Write about your grandparents and the bond you share with them.
(Take clues from - Portrait of A Lady) 125 -150 words

2. Covid times have shut us all in our homes. We miss those days - when we were at School , with friends , attending parties , eating out and travelling around.
On an A4 ruled sheet paste a picture of yours of the happier times and write a short Poem of 14 to 16 lines in reflection of the happy days.
(Take clues from the poem - A Photograph.)

Mathematics

1. Write all the 10 Maths Lab Activities (in maths lab file) given in the link :

https://docs.google.com/document/d/1d5E0R_TkYjAy2ZwdyB6ixZG5qz_VvLCJK66JYAE2SSs/edit

2. Select one sport of your choice.
Make the following sets for the chosen sport
 - 1.no of players in the team.
 - 2 extra player allowed in the team
 3. type of players, eg in cricket batsman etc.
 4. International tournaments
 5. Other tournaments
 6. Popular in the countries.

Write the pair of equivalent sets and equal sets (if any).

3. Make a cover of the activity file using different geometric figures.
Write the following information in the form of a set on the first page of the activity file(after index).
 1. Name of figures used
 2. No of each figure used.
 - 3 Total no of figures used.Name these Sets and write their number of elements.

Applied Mathematics

1. Make a project file on any ONE of the following topics:

- Cardinality of a set and orders of infinity
- Comparing sets of natural numbers, rational numbers, real numbers and others
- Use of Venn diagram in solving practical problems
- Fibonacci Sequence: it's history and presence in nature
- Vehicle registration data - correlating with pollution and number of accidents
- Weather predictions (prediction of monsoon from past data)

Expected Checklist:

- Introduction of topic/title
- Identifying the causes, consequences and/or remedies
- Various stakeholders and effect on each of them
- Advantages and disadvantages of situations or issues identified
- Short-term and long-term implications of strategies suggested in the course of research
- Validity, reliability, appropriateness and relevance of data used for research work and for presentation in the project file
- Presentation and writing that is succinct and coherent in project file
- Citation of the materials referred to, in the file in footnotes, resources section, bibliography etc.

2. Select one sport of your choice.

Make the following sets for the chosen sport

1. No. of players in the team.
2. extra player allowed in the team
3. type of players, eg in cricket batsman etc.
4. International tournaments
5. Other tournaments
6. Popular in the countries.

Write the pair of equivalent sets and equal sets (if any).

3. Make a cover of the practical file using different geometric figures.

Write the following information in the form of a set on the first page of the Practical file(after index).

1. Name of figures used
2. No of each figure used.
3. Total no of figures used.

Name these Sets and write their number of elements.

Physics

1. Students have to make art integrated or sport integrated project in Physics

You can make poster collage ,comic strips, picture story ,crossword , any game, ppt(not more than 5 slides).You can also add some videos

2. Project can be made manually or printed or online Use A3 sheet if you are making hard copy

3 You can work either individually or in a group of 2

4 You can choose any of the topics given below.Make sure that your work is original and not copied.Use your creativity and innovation.

Physics in life

Waves, projectile motion, friction, surface tension, streamline flow, gravity, weightlessness, collision, elasticity, motion graphs, Newton laws, vertical circle, banking of roads

Chemistry

Read the Environmental chemistry chapter and make notes followed by chapter's exercise question answers in the chemistry register.

Students have to work in groups of 5 (roll no.wise) to make art integration and sports integration projects for chemistry e.g. You can make poster/ collage / comic strips/ picture story on Canva app, mind maps on Popplet app, information resource on any chemistry topic on Padlet, games/crossword puzzles and memory aids like mnemonics for periodic table. Use your creativity and innovative ideas.

- Projects may be made manually or online. Every student in the group has to contribute.
- First half of the class has to make art integration projects and the remaining students to make sports integrated projects.
- Make chemistry file.

A hyper doc is being shared with links videos with narration for anions under Salt Analysis for chemistry practicals (Same order of experiments to be followed):

https://docs.google.com/document/d/1dImEZtqQlscKFmAs1QRosrlGG485deGcUnoeT-IYJ_Y/edit

Biology

- Students select any one chapter from Animal physiology or Cell unit to prepare a project of biology.
- You can work in groups of five (groups to be made roll number wise) each student must contribute.
- You have to make an art integrated and sports integrated project. You can make posters, collage ,comic strip, pictures story ,crossword or PPT.
- Project can be made manually or printed or online.
- All the best, stay safe and healthy,take good diet ,utilise your time properly for studies and meditation.

Engineering Graphics

Art integrated project on Rectilinear Figures

1. On the first page write your Name, Class, Roll No.
Give title Art integrated project on Rectilinear Figures
Mentor/ Teacher name
2. Cut following shapes from paper/ thick sheet
 - (i) Equilateral triangle (angle 60 degree)
 - (ii) Square (angle 90 degree)
 - (iii) Pentagon (angle 108 degree)
 - (iv) Hexagon (angle 120 degree)
 - (v) Circle
3. Write briefly how model cutting of different polygons strengthen your concepts of different shapes.

NOTE : Use your own creativity to create a beautiful pattern by pasting all shapes on a sheet.
Can use different colors and multiple figures to enhance the effect.

Keep a hard copy of this project ready and also create a soft copy by taking pics of each sheet and model.

Can use A4 sheet/ sketch file sheet

Informatics Practices

Search the internet and create a presentation on any one of the following topics:

- Artificial Intelligence, Machine Learning, Natural Language Processing
- Immersive experience (AR, VR)
- Robotics
- Big data and its characteristics
- Internet of Things (IoT), Sensors
- Smart cities
- Cloud Computing and Cloud Services (SaaS, IaaS, PaaS), Grid Computing, Block chain technology.

You can use PowerPoint, Microsoft Sway, Adobe Spark, etc. for creating a presentation of 5-6 slides.
Make them creative by adding images, video etc.

Computer Science

Task 1: Research and prepare a PowerPoint Presentation with minimum 5-6 slides on any of the following topics:

1. Basic computer organization: description of a computer system and mobile system, CPU, memory, hard disk, I/O, battery.
2. Types of software: Application software, System software and Utility software.
3. Memory Units: bit, byte, MB, GB, TB, and PB
4. Encoding Schemes: ASCII, UTF8, UTF32, ISCII and Unicode.

5. Concept of Compiler and Interpreter
6. Operating System (OS) - need for an operating system, brief introduction to functions of OS, user interface
7. Concept of cloud computing and cloud services (SaaS, IaaS, PaaS), cloud (public/private), Blockchain technology.

(Reference: NCERT COMPUTER SCIENCE - Textbook for Class XI - Chapter 1: Computer System)

OR

Task 2 : An Infographic is a collection of imagery, charts, and minimal text that gives an easy-to-understand overview of a topic. Prepare an Infographic on any of the following:

1. Net Etiquettes
2. Intellectual Property Right (IPR)
3. Cyber Crime
4. E-waste management

You can use MS-Word, PowerPoint or any other software for creating the Infographic.

(Reference: NCERT COMPUTER SCIENCE - Textbook for Class XI - Chapter 11: Societal Impact)

Accountancy

Make a ppt on source documents used in business transactions (first slide with topic-Art integrated learning in Accountancy)

Business Studies

All students of class XI are required to do an activity as part of project work
The topics are allocated in the following manner

Group 1 Students whose name begin with alphabet A to F

- Role play activity- Make a video of an interview in which you are acting as a Sole proprietor and sharing problems faced in Business

Group 2 Students whose name begin with alphabet G to M

- Make a PPT showing outside appearance of any 10 Banks along with their unique features

Group 3 Students whose names begin with alphabet N to T

- Make a collage depicting Social responsibilities assumed by various Companies or Individuals in past 1 year as a fight against COVID 19

Group 4 Students whose name begin with alphabet U to Z

-These students are required to revise topic (out of any chapter in Business Studies) while doing Skipping or any Yogasan/Pranayama. The activity needs to be performed for 3 days for the same topic. Each day you are required to make video and record time taken each day

Economics

1. Choose any 5 terms related to Economics (E.g., Scarcity, Bank, Credit etc.) and explain them in a creative way (E.g., A cartoon Sketch, Animation, Rap Song etc.).
2. Create a Snakes and Ladders game to depict the changes in the Indian or Global economy. Ladders should include the policies or conditions that led to the economic growth, and Snakes should depict the policies or conditions that pulled the economy down.

Political Science

Students have to prepare a project on the topics corresponding to their roll numbers-

1-20 Constitution, Fundamental Rights, Directive Principles of State Policy

21-40 Legislature, Executive and Judiciary

41-60 Liberty, Equality, Social Justice

61 onwards - Peace, Development, Elections

Geography

1. Prepare a Physical Map of India to LOCATE & LABEL famous Mountain Ranges as well as major Rivers in the same map. The features to be shown are as follows;
 - a. Mountain Ranges and Hills
 - i. Great Himalayan Range
 - ii. Karakoram Range
 - iii. Ladakh Range
 - iv. Zaskar Range
 - v. Aravali Range
 - vi. Vindhya Range
 - vii. Satpura Range
 - viii. Mahadeo and Maikala Range
 - ix. Ajanta Range
 - x. Kaimur Hills
 - xi. Western Ghats with its locally known hill ranges like Cardamom Hills , Anaimalai Hills, Sahyadri Hills,
 - xii. Eastern Ghats with its regional hill ranges like Nallamala Hills, Mahendragiri Hills , Palkonda Range , Javadi Hills
 - b. Rivers
 - i. Indus
 - ii. Satluj
 - iii. Beas
 - iv. Brahmaputra
 - v. Ganga with its Tributaries like Yamuna, Chambal, Sindh, Son, Kosi
 - vi. Luni
 - vii. Sabarmati
 - viii. Mahanadi

- ix. Narmada
- x. Tapi
- xi. Godavri
- xii. Krishna
- xiii. Kaveri

NOTE - Be precise with the location of Mountain Ranges as well as Courses of Rivers originating from these Mountains. You can take help of ATLAS and India Book - Physical Environment page No - 10.

2. Prepare a map of India showing various Types of Soil of India. (you can take help of India Book- Physical Environment page No - 70)
3. Now the following assignment is to be prepared for the ASSESSMENT UNDER ART INTEGRATION PROJECT. Record your study on A-4 SIZED SHEETS or in the form of DIGITAL SHEETS. Your work should be INNOVATIVE, RESEARCH BASED and INCORPORATING DIAGRAMMATIC REPRESENTATIONS of WATER CYCLE or WATER CONSERVATION.

‘India is famous as the Land of Monsoons’. In your own words state the observations of weather conditions and the importance of Monsoon Rainfall for the country. (You can take help of India Book- Physical Environment page No - 47 & 53).

4. The following assignment is to be prepared for the ASSESSMENT UNDER SPORTS INTEGRATION PROJECT. Record your study on A-4 SIZED SHEETS or in the form of DIGITAL SHEETS. Your work should be INNOVATIVE, RESEARCH BASED and INCORPORATING DIAGRAMMATIC REPRESENTATIONS of the PROCESSES. Just to give you suggestions to create this project as SPORTS INTEGRATION, Concepts of Sports Events like RELAY RACE, GOVINDA HANDI PYRAMID can be used to explain Integration of Various Components within Each Cycle.

There are various gaseous cycles that exist in our ecosystem, being part of various natural phenomena, circulating in the land , water and air. Briefly describe the process of -

- a. The Carbon Cycle
- b. The Oxygen Cycle
- c. The Nitrogen Cycle

Note - You can take help of World Book - Fundamentals of Physical Geography , page No 127 & 128.

Psychology

Q1. Study the work of any five psychologists and record about their contribution followed by an image (of the psychologist).Record your study on A-4 SIZED colored sheets .Use your creativity and psychological temper.

Q2. Prepare an Art / Sport Integrated project on (ANY TWO areas of your choice)

- Scope of Psychology
- Evolution of Psychology
- Use of psychology in everyday life
- Applied vs Basic psychology
- Problems of adolescents

NOTE:

1. Project can be in the form of e-document or on A-4 size sheets .
2. Integrate concepts of art and sports in your work.
3. Work should be original and innovative.
4. You can use concepts like comic strips, collage, leaflet of pamphlet, PPT, mind maps, illustrations.
5. At least 8 pages in each topic to be covered.

Home Science

1. List 4-5 areas of agreement and disagreement with

- a. Mother
- b. Father
- c. Siblings,
- d. Friends
- e. Teacher

Also mention how you would resolve the disagreements to reach a state of harmony and mutual acceptance.

2. Prepare a poster or chart or leaflet on any one of the following:

(digital or handmade)

- a. Health and Fitness
- b. Eat Healthy Be healthy
- c. Ways to Improve / Boost your Immunity

3. Prepare a single presentation and record video while preparing five healthy snacks for an adolescent.

Note: Submission should include five recipes in single power point file and five separate videos for each recipe (it is up to you if you want to merge all 5 videos in the presentation itself)

Painting

Practice 50 human sketches in different postures.

10 still life (5 in colour and 5 in pencil/ charcoal/ dry pastels)

Physical Education

Task 1 Read the Changing Trends & Career in Physical Education chapter and make a table of available career options in Physical Education based on their related sectors.

Task 2 Make a Creative PowerPoint presentation of any two Asana from the following list, depicting their procedure, benefits and contradictions with the help of pictures/ Video/ images etc .

[Sukhasana, Tadasana, Padmasana, Shashankasana, Naukasana, Vrikshasana (Tree Pose) & Garudasana (Eagle Pose)]

Task 3

Practical 1: Make a labelled diagram of 400M Track & Field with computation in your Practical File

Hindi

निम्नलिखित विषयों पर पत्र लेखन कीजिए।

- 1) पढ़ने लिखने की उम्र में भीख मांगने वाले बच्चों की समस्या पर किसी समाचार पत्र के संपादक को पत्र लिखिए और एक समाधान भी सुझाइए।
- 2) सड़क को चौड़ा करने के बहाने पेड़ों की अंधाधुंध कटाई पर चिंता व्यक्त करते हुए वन एवं पर्यावरण विभाग के अधिकारी को पत्र लिखिए।
- 3) भक्तिकालीन कवियों पर परियोजना कार्य कीजिए।
(यह कार्य रंगीन पृष्ठों वाली पुस्तिका में किया जाएगा)