# Hansraj Model School Holidays Homework 2021-22 Class XII

# **English**

- 1. Prepare a project on the chapter Indigo. (Use coloured A4 sheets)

  Points to be covered: Gandhi's struggle for freedom, visit to Champaran, Issue of Civil

  Disobedience, promotion of personal hygiene related to Swach Bharat Abhiyan. Paste
  pictures and must be handwritten.
  - Take 6 sheets On the 1st sheet write the topic, Your Name, Class -sec, R.No. Use 5 sheets for the project.
- 2. On a ruled A4 sheet write a Report for the Newspaper Second Wave of Covid-19: Fast and Ferocious. (200-250 words)
- 3. Taking clues from the chapter Journey to the End of the Earth- prepare a PPT of 6 slides, Unveiling the secrets of The Antarctic. On the first slide mention the topic, Name, class-sec, R.NO. Use colorful pictures and highlight relevant information.

For Q. No 1 and 2 keep your hard copies with you to be submitted later and click their pictures to be sent to your concerned teachers, when asked for.

#### **Mathematics**

- 1. Write all the 10 Maths Lab Activities (in maths lab file) given in the link https://docs.google.com/document/d/17Qnce2Vy4gx6RAlyu4fYBrl9SX\_kcf2Qr4tLzSsoUP4/edit
- 2. Use graph paper Art to create geometric pattern. Paste this on the cover of ActivityFile..A few examples are shown below:





3. From your favourite sport,

select a tournament or player(s). Collect information about the selected tournament or player(s) Put the information in the form of matrix in your Mathematics Register defining what each row and column denote. Name the matrix

Write the

- order of the matrix
- Number of elements of the matrix
- Taking this number of elements, how many matrices of different orders can be formed?

# **Applied Mathematics**

- 1. Make a project file on any **ONE** of the following topics:
  - Stock price movement / Predicting stock market crash
  - Predicting the outcome of an election Exit Poll
  - Predicting mortality of infants
  - Analysis of career graph of a sportsperson
  - Analysis of population migration data Positive and negative influence of urbanisation
  - Logarithm for financial calculations such as interest, present value, future value etc. with large values
  - Risk assessments by insurance firms from 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. Use graph paper Art to create geometric patterns. Paste this on the cover of Practical File. A few examples are shown below:



- 3. From your favourite sport, select a tournament or player(s). Collect information about the selected tournament or player(s). Put the information in the form of a matrix defining what each row and column denotes on an excel spreadsheet. Name the matrix. Write the
  - order of the matrix
  - Number of elements of the matrix
  - Taking this number of elements, how many matrices of different orders can be formed?

# **Physics**

- 1). Use your creativity to sketch the electric lines of force for the following cases (art integration)
  - i) electric dipole
  - ii) isolated positive charge
- iii) isolated negative charge
- iv) two equal positive charges
- v) two equal negative charges
- 2) Draw equipotential surfaces for the following cases using your creativity
  - I) isolated positive charge
  - ii) uniform electric field
  - iii) electric dipole
  - iv) two equal positive charges
- 3) Draw five circuits with different series and parallel combinations of capacitors and find the equivalent capacitance in each case.
- 4) Make a presentation of minimum slide 6 to explain the concept behind any of the given topic
  - I) Reflecting Telescope
  - ii) Refracting Telescope
  - iii) microscope
  - iv) ac generator
  - V) moving coil galvanometer
  - vi) Transformer
  - vii) cyclotron
- 5)Make a crossword/ comic strip/ game/poster /collage/video on any topic of your choice.

#### **Chemistry**

- Haloalkanes and Haloarenes chapter's exercise to be done in chemistry register.
- Complete your chemistry file.

A hyper doc is being shared with links to all the chemistry practicals:

# https://docs.google.com/document/d/1AhkkfcZi7DIj7oFBDm8l3FurBpYB3TlGenxJzHz1p9A/edit

Experiments to be uploaded before 9th june.2021, in the assignment already shared with you on teams.

- XIIG: A book creator code is being shared. Every student has to put details of the name reaction from organic chemistry on one page of the book. This will be an important resource for every student's use. Give correct details with the reaction involved.

Steps to be followed:

- 1.create your account as a student on book creator app using your teams official id.
- 2. Join library created by me with the code MS586L9
- 3. First name reaction (Wurtz in the list of contents) has been done to show you the example.
- 4. Pick one name reaction (Roll no.wise i.e. reaction 2 to 31 from

Contents starting from roll no 1 to 30) from the list after Wurtz reaction and add information in the same manner. (When you click the + button on the right corner, it gives you option to add online pics, text etc. explore the app and start contributing.

Remaining roll numbers 31 to 37 will review the reactions of and verify information from NCERT to ensure no mistakes.

Roll no.31 (Review reaction 2 to 5)

Roll no. 32 (Review reaction 6 to 9)

Roll no. 33 (Review reaction 10 to 13) Roll no. 34 (Review reaction 14 to 17) Roll no. 35 (Review reaction 18 to 21) Roll no. 36 (Review reaction 22 to 26) Roll no. 37 (Review reaction 27 to 31)

- For art integrated/Sports integrated projects some suggested tools that may be used are: Canva(For making posters/ advertisements/ comic strips / collage etc., padlet(mnemonics/memory aids), wakelet, thinglink, popplet (for flow diagrams /mindmaps). Games/puzzles may also be created online. Short videos explaining use of every tool, available easily on YouTube. Explore and use your creativity.

# **Biology**

- Complete the assignments given for the chapter sexual reproduction in flowering plants and sexual reproduction in human beings in your register.
- Complete notes of both the chapters with all the diagrams in your biology register.
- Make Biology file and write practical of slide preparation of pollen germination, permanent slides of testis, ovary and blastula.
- Students work in groups of five (groups to be made roll number wise) and make an art integration project related to biology. Each group will make one project with the contribution of every student.
- You can also make a crossword/video/presentation on any topic of your choice.
- All the best, stay safe and healthy, take good diet utilise your time properly.

# **Engineering Graphics**

Art integrated project on Isometric projection

- On the first page write your Name, Class, Roll No. Give title Art integrated project on Isometric projection Mentor/ Teacher name
- 2. Make a model of Hexagonal Prism with base side 30mm & height 70mm by using thick paper
- 3. Draw isometric projection of a hexagonal prism with base side 30mm & height 70mm with its axis perpendicular to H.P. Keep one of the base sides parallel to V.P. Give dimensions and direction of the arrow head.
- 4. Make a model of pentagonal Pyramid with base side 30mm & height 70mm by using thick paper
- 5. Draw isometric projection of a pentagonal pyramid with base side 30mm & height 70mm with its axis perpendicular to H.P. Keep one of the base sides perpendicular to V.P. Give dimensions and direction of the arrow head.
- 6. Make a model of cylinder with base diameter 40mm & height 70mm by using thick paper
- 7. Draw isometric projection of a cylinder with base diameter 40mm & height 70mm with its axis perpendicular to V.P. Give dimensions and direction of the arrow head.
- 8. Mention how use of 3D models & pictures enhanced your concepts of isometric projection. NOTE: Use your own creativity like can add or draw 3D pictures/Models of solids in different ways.
  - 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.

## **Computer Science**

Create a useful project based on Python file handling/ Python-SQL connectivity. This should be done by an individual or group of two students. The aim of the project is to find a real world problem that is worthwhile to solve. You should have the following functions in the project:

- a. Create a database, use and create a table
- b. Add, Update, delete a record

- c. Sort and grouping
- d. Display the result

#### **Informatics Practices**

Aim: To create a tangible and useful IT application.

**Task 1: Understanding Data:** Understand the functioning of the organization/business/shop in the real world, and how data is generated, stored and managed.

**Task 2: Import Data in Pandas:** Import data from a CSV file into a DataFrame (pandas.read\_csv()) or a database table into a DataFrame (pandas.read\_sql())

**Task3: Analysis and Visualization:** Analyse using Python libraries and then generate appropriate customized charts to visualize. (line plot, bar graph, histogram, pie chart, frequency polygon, box plot and scatter plot etc.)

Note: You are strictly advised to avoid plagiarism and violation of copyright issues, any resources (data, image etc.) used in the project must be suitably referenced.

Reference: NCERT Informatics Practices - Text book for class - XII

## **Accountancy**

Do a role play (make a video) in groups of 6 students, explaining the 'provisions in the absence of partnership deed'. Video's beginning title should mention 'Art integrated learning in Accountancy'.

#### **Business Studies**

All students of class XII 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 interaction in which you are acting as a representative (Personal Selling activity) and convincing a prospective customer to buy your Product (You may select any Product of your choice)

## Group 2 Students whose name begin with alphabet G to M

- Make a PPT showing changes incorporated by any 10 Companies to adapt as per changes in Business Environment due to COVID-19

## **Group 3** Students whose name begin with alphabet N to T

- Make a Poster depicting Consumer rights and responsibilities

# Group 4 Students whose name begin with alphabet U to Z

-These Students are required to revise topic (out of any chapter of Business Studies) while dribbling a ball. The activity needs to be performed for 3 days for the same topic. Each day they are required to make video and record time taken each day

#### **Economics**

- 1. Make a Time Trail for all major economic events during the British rule in India, with their economic impacts. It can be depicted in the form of a relay race where one event gave rise to another and so on.
- 2. Select any topic of your choice related to your economics syllabus or current economic scenario and collect information related to the topic which can be presented in the form of collage, cartoon, graph, diagram, or any other visual tool, for your project.

#### **Political Science**

- 1)prepare a project related to the topics given in the syllabus It can be in the form of collage, quiz, slogans etc.
- 2)complete the assignment given in your registers
- 3)Revise the chapters covered
- 4)Ensure that you do a lot of research and present it in a very creative manner

## **Psychology**

QI. Prepare a **NEWSLETTER** on the topic "**Psychology - The Need Of The Hour** "keeping in mind art /sports integration.

SIZE: A3

NO. OF SHEETS :4 Colored sheets (First sheet to have your details and index of the content) What you can include: Article, self-composed poem, illustrations, mind -maps, crossword puzzles, quiz, comic strips, dialogue etc.

- Q2. Read the Chapter Variations in psychological attributes and select a topic of your interest. Prepare a one page (A-4) **ILLUSTRATION** on the same.
- Q3. Complete the part 1 (Introduction to Experimental psychology) and 2 (conduction of Self Concept Questionnaire) in practical.

# Geography

# Fundamentals of Human Geography Class XII - Textbook I (NCERT)

## Map Items for identification only on outline political map of the World.

Unit-1	Ch1	Nil	
Unit-2	Ch. 2 to 4	1	The largest country in each continent in terms of area
Unit-3	Ch. 5 to 7	1	Areas of subsistence gathering
	Primary Activities	2	Major areas of nomadic herding of the world
		3	Major areas of commercial livestock rearing
		4	Major areas of extensive commercial grain faming
		5	Major areas of mixed farming of the World
	Secondary Activities	1	Ruhr region, Silicon Valley, Appalachian region, Great lakes region
Unit - 4	Ch. 8 to 9	2	Transcontinental Railways: Terminal Stations of transcontinental railways- Trans Siberian, Trans Canadian, Trans-Australian Railways
		3	Major Sea Ports :
			Europe: North Cape, London, Hamburg
			North America: Vancouver, San Francisco, New Orleans
			South America: Rio De Janeiro, Colon, Valparaiso
			Africa: Suez and Cape Town
			Asia: Yokohama, Shanghai, Hong Kong, Aden, Karachi, Kolkata
			Australia: Perth, Sydney, Melbourne
		4.	Inland Waterways: Suez canal, Panama canal, Rhine waterway and St. Lawrence Seaway
		5.	Major Airports:
			Asia: Tokyo, Beijing, Mumbai, Jeddah, Aden
			Africa: Johannesburg & Nairobi
			Europe: Moscow, London, Paris, Berlin and Rome
			North America: Chicago, New Orleans, Mexico City
			South America: Buenos Aires, Santiago
			Australia: Darwin and Wellington
Unit - 5	Ch. 10		Mega cities of the world – Tokyo, Delhi, Shanghai, Mumbai, Sao Paulo

#### India - People and Economy Class XII-Textbook II (NCERT)

## Map Items for locating and labeling only on the outline political map of India

Units - 6 & 7	Ch. 1 to 4	<ul> <li>State with highest level of urbanization and lowest level of urbanization</li> </ul>
		One state with highest level of HDI & One lowest level of HDI
		<ul> <li>State with higher level of population density &amp; one state with lowest level of population density (2011)</li> </ul>
		<ul> <li>Any city with more than 10 million population – Greater Mumbai, Delhi, Kolkata, Chennai, Bengaluru</li> </ul>
Unit - 8	Ch. 5 to 9	Leading producing states of the following crops:
		(a) Rice (b) Wheat (c) Cotton (d) Jute (e) Sugarcane (f) Tea and (g) Coffee
		Mines:
		· Iron-ore mines: Mayurbhanj, Bailadila, Ratnagiri, Bellary
		Manganese mines: Balaghat, Shimoga
		<ul> <li>Copper mines: Hazaribagh, Singhbhum, Khetari</li> </ul>
		<ul> <li>Bauxite mines: Katni, Bilaspur and Koraput</li> </ul>
		<ul> <li>Coal mines: Jharia, Bokaro, Raniganj, Neyveli</li> </ul>
		<ul> <li>Oil Refineries: Mathura, Jamnager, Barauni</li> </ul>
		Iron and Steel Plants: Bhadravati, Bhilai, Bokaro, Durgapur, Rourkela and Jameshedpur
		Cotton Textile: Surat, Varanasi, Murshidabad, Solapur and Coimbatore
		Software Technology Parks: Gandhinagar, Srinagar, Mohali, Noida, Indore, Hyderabad, Bengaluru and Major Industrial Regions
Unit - 9	Ch. 10 - 11	Transport:
		(i) Important nodes on north south corridor, East west corridor & golden quadrilateral
		<ul><li>(ii) Major Sea Ports: Kandla, Mumbai, Marmagao, Kochi, Mangalore, Tuticorin, Chennai, Vishakhapatnam, Paradwip, Haldia</li></ul>
		(iii) International Air ports: Ahmedabad, Mumbai, Bengaluru, Chennai, Kolkata, Guwahati, Delhi, Amritsar, Thiruvananthapuram & Hyderabad
Unit-10	Ch.12	NIL

Locate the features given in the above map lists in the World and India Political Maps, as precisely as possible. You can use maps given in the NCERT text books as reference for your work.

#### **Home Science**

#### **INSTRUCTIONS**

- 1. Complete all the work on **A4 SIZE COLORED SHEETS.**
- 2. Use colored pens only for headings or important highlights.
- 3. Each question has to be attempted separately.
- 4. Be creative in your presentation of work.
- Q1. Preparation and use of any one **teaching aid** to communicate socially relevant messages for-children/adolescents /adults in the community.

Make any one teaching aid – with <u>socially relevant message</u> (any scheme of public nutrition / Beti Bachao Beti Padao / women empowerment/ child labor) (ONLY ONE from the options given below in color)

- 1. Flip book /charts for file (put matter in file in 4 boxes on 1-2 pages)
- 2. Flash cards for file (4 -6) put matter in file in 4 boxes on 1-2 pages.
- 3. Bulletin board / chart /Poster for file.
- Q2. Preparation of any one **toy for children** (age appropriate) using locally available and indigenous material (keeping in mind Sports Integration concept)
- Q3. Develop a **leaflet/pamphlet** for Consumer Education and Protection on <u>any one</u> of the following keeping in mind Art Integration concept
  - i. Consumer Protection Act (CPA)
  - ii. Consumer responsibilities
  - iii. Consumer organization
  - iv. Consumer Problems v. Consumer Rights
  - v. Standardization Marks

#### Q4. PROJECT -

Study of an integrated community based, nutrition/health program being implemented in own area, with reference to

- a) Program objectives
- b) Focal Group/Beneficiaries
- c) Modalities of implementation (You can visit online Govt. portal) ANY ONE OF FOLLOWING-
- 1. ICDS
- 2. MIDDAY MEAL
- 3. PULSE POLIO
- 4. REPRODUCTIVE AND CHILD HEALTH (POSHAN ABHIYAAN)
- 5. SAFE CLEAN WATER AND SANITATION
- 6. ANEMIA MUKT BHARAT
- 7. BETI BACHAO BETI PADAO
- 8. SWACHH BHARAT
- 9. MGNREGA- WAGE EMPLOYMENT
- 10. SELF EMPLOYMENT SCHEME
- 11. ONE NATION ONE RATION CARD SCHEME / PDS

#### AREAS TO COLLECT INFORMATION ON-

a. Focal Group/Beneficiaries (focal group intended to be covered).

- $b.\ Modalities\ of\ implementation\cdot Stakeholders\ (organizations/persons)\ involved/\ responsible\ for\ planning$
- & implementation, Planning required, sources of funds) · media used.
- c. methods of communication used.
- d. duration of the campaign.
- e. comment on relevance of project (advantages) responses to the campaign.
- f. evaluation done by organization Actual coverage of focal group (regards to number /age groups, difficulties faced)
- g. suggestions (if any)

# **Painting**

Practice 50 human sketches in different postures.

Practice composition keeping all the principles as well as elements of art in mind-

line

Tone

**Texture** 

Rythm

Balance

Perspective

Harmony etc. (5 works)

Observe the shapes, sizes, patterns, texture of various objects and create an interesting still life using these observations. (5 sheets)

Human as well as animal anatomy practice

10 sheets

Create question bank from unit 1 and 2

20 questions each.

#### **Physical Education**

(Assignment to be done on the assignment notebook or A-4 sheets)

#### **ASSIGNMENT-1**

# **UNIT-1 PLANNING IN SPORTS**

#### VERY SHORT ANSWER TYPE QUESTIONS

- Q1 What do mean by planning?
- Q2 List the various types of tournaments.
- Q3. What is seeding?
- Q4. What is meant by extramural sports activities?
- Q5. Write the formula for giving bye.
- Q6. What do you mean by tournament?

#### SHORT ANSWER TYPE QUESTIONS

- Q1 Define planning. Discuss about the objectives of planning in sports.
- Q2 What are the objectives of intramurals?
- Q3 Explain the advantages and disadvantages of knock-out tournaments.
- Q4 Explain the procedure of placement of teams on each quarter on knock-out basis.
- Q5 Explain different steps to be taken to form committees for organizing a health run in your school.

# LONG ANSWER TYPE QUESTIONS

- Q1. While specifying all calculations, prepare a knock-out fixture for 21 teams.
- Q2 What is a league tournament? Draw a fixture of 6 teams using a round-robin method.
- Q3 Run for unity is organized to foster peace and unity among the people. Enlist the advantages of Run for Unity.
- Q4 What is the significance of Extramural?

Make presentation on the following topics: -

Meaning and objectives of planning.

Various committees & Their responsibilities (Pre, During and Post).

Tournament (Knock-out, League or Round robin and combination).

Procedure to draw fixtures Knock-out (Bye and seeding) and League (Staircase and cyclic).

Intramural and extramural Meaning, objectives and its significance.

\*(To be made in group consisting of two people and submission link will be provided at the end of summer vacations)

#### **ASSIGNMENT-2**

#### **UNIT-2 SPORTS AND NUTRITION**

## VERY SHORT ANSWER TYPE QUESTIONS

- O1 Enlist the elements of diet.
- Q2 How many amino acids are found your diet?
- Q3 What do you mean by balanced diet?
- Q4 what do you mean by nutrition?
- Q5 What do you mean by health weight?
- Q6 What do you mean by food intolerance?

## SHORT ANSWER TYPE QUESTIONS

- Q1 What is importance of balance diet and nutrition for body?
- Q2 What are the functions of carbohydrates in human body?
- Q3 Briefly explain any three myths.
- Q4 What do you mean by macro and micro nutrients?

Q5 Discuss any three pitfalls of dieting.

# LONG ANSWER TYPE QUESTIONS

- Q1 Discuss about the methods to control healthy body weight for life time.
- Q.2 Explain about any four macro nutrients.
- Q3 What do you mean by nutritive components of diets? Explain about any three of them briefly.

#### **PRACTICAL FILE:**

Practical -1 Fitness tests administration for all items.

Practical -2 Procedure for Asanas, Benefits & Contraindication for any two Asanas for each lifestyle disease.

#### Hindi

निम्नलिखित विषयों पर अपनी रचनात्मक अभिव्यक्ति प्रस्तुत कीजिए -

- लॉक डाउन का अर्थव्यवस्था पर प्रभाव
- 2. कोरोना काल में मीडिया की अहम भूमिका
- 3. कृत्रिमता त्याग कर सादगी और सरलता को अपनाइए |
- 4. हे प्रभ्! कोरोना का कहर ...... ( प्रार्थना)
- 5. किव जयशंकर प्रसाद व लेखक रामचंद्र शुक्ल में से िकसी एक का जीवन परिचय लिखते हुए उनकी रचनाओं व भाषा शैली पर प्रकाश डालिए। यह परियोजना कार्य रंगीन शीट्स पर आकर्षक व चित्रात्मक ढंग से प्रस्तुत कीजिए। परियोजना कार्य हेतु 15 से 20 शीट्स का प्रयोग किया जा सकता है।

नोट - समस्त कार्य आंतरिक मूल्यांकन के अंतर्गत जांचा जाएगा।