

# ADRIEL HIGH SCHOOL HOLIDAY HOMEWORK SESSION-2021-2022 CLASS-XII

## **ENGLISH**

- 1. Sketch an advertisement (or ppt.) Inviting students for the summer camp to be held at your school campus describing activity and age group for participating.
- 2. Improve and shape up your vocabulary and speaking skills by reading one of the assigned book. Prepare to make a short presentation focusing on the character, the plot, the context and the critical appraisal. Your speaking skills assessment will be on the basis of your class presentation
  - i. Harry Potter and the philosopher's stone by J.K. Rowling.
  - ii. Macbeth by William Shakespeare.
- iii. The Invisible Man by H.G. Wells
- 3. Write articles of 150-200 words on the topics
- a. Global Warming
- b. Dowry/ honour killing/ human trafficking.

## **CHEMISTRY**

- A. Make a investigatory project on any one of the following topic:
- 1) On green chemistry- Bio-diesel and bio-petrol
- 2) On sterilization of water using bleaching powder
- 3) On analysis of fertilizers
- 4) On measuring the amount of Acetic acid in vinegar
- 5) On determination of contents of cold drinks
- 6) To study the quantity of casein in milk
- 7) On presence of insecticides and pesticides in fruits and vegetables
- 8) On preparation of soyabean milk
- 9) On study of rate of fermentation of juices

- 10) Determination of caffeine in tea samples
- 11) Determination of content of toothpaste
- 12) Dyeing of wool, silk and cotton in malachite green
- 13) Effect of Potassium Bisulphite as a food preservatives

Things should be mentioned:

- a) Aim
- b) Apparatus required
- c) Chemicals used
- d) Principle
- e) Procedure
- f) Observation table
- g) Result
- h) Precautions
- B. Learn the given chapters thoroughly and do practice of NCERT and extra question from these chapters in chemistry notebook.
- \* Solid States
- \* Solutions
- \* Haloalkanes and Haloarenes

## **PHYSICS**

- (A) Do as Directed:-
- 1) Do the Exercise Questions of Chapter-1 Electric Charges and fields in your Notebook.
- 2) Do the Exercise Questions and Examples of **Chapter-2 Electric Potential and Capacitance** in your Notebook.
- (B) Prepare an Investigatory Project based on the any topic from NCERT Textbook.

## **BIOLOGY**

- 1. Complete your Biology Practical File.
- 2. Prepare An Investigatory Project.

**Practicals** 

#### A. List of Experiments:

- 1. Prepare a temporary mount to observe pollen germination.
- 2. Collect and study soil from at least two different sites and study them for texture, moisture content, pH and water holding capacity. Correlate with the kinds of plants found in them.
- 3. Collect water from two different water bodies around you and study them for pH, clarity and presence of any living organism.
- 4. Study the presence of suspended particulate matter in air at two widely different sites.
- 5. Study the plant population density by quadrat method. 6. Study the plant population frequency by quadrat method.
- 6. Prepare a temporary mount of onion root tip to study mitosis.
- 7. Study the effect of different temperatures and three different pH on the activity of salivary amylase on starch.
- 8. Isolate DNA from available plant material such as spinach, green pea seeds, papaya, etc.

#### **B.** Study/observation of the following (Spotting)

- 1. Flowers adapted to pollination by different agencies (wind, insects, birds).
- 2. Pollen germination on stigma through a permanent slide or scanning electron micrograph.
- 3. Identification of stages of gamete development, i.e., T.S. of testis and T.S. of ovary through permanent slides (from grasshopper/mice).
- 4. Meiosis in onion bud cell or grasshopper testis through permanent slides. 5. T.S. of blastula through permanent slides (Mammalian).
- 6.Mendelian inheritance using seeds of different colour /sizes of any plant. 7. Prepared pedigree charts of any one of the genetic traits such as rolling of tongue, blood groups, ear lobes, widow's peak and colour blindness.
- 9. Controlled pollination emasculation, tagging and bagging.
- 10. Common disease causing organisms like Ascaris, Entamoeba, Plasmodium, any fungus causing ringworm through permanent slides, models or virtual images. Comment on symptoms of diseases that they cause.
- 11. Two plants and two animals (models/virtual images) found in xeric conditions. Comment upon their morphological adaptations.
- 12. Two plants and two animals (models/virtual images) found in aquatic conditions. Comment upon their morphological adaptations.

#### **Suggested Investigatory Projects**

1. Diabetes and exercise.

- 2. Drug addiction.
- 3. Study of effects of antibiotic on microorganism.
- 4. Study on Probiotics and their preparation.
- 5. Recombinant DNA technology in Today's Medicine.
- 6. Study on Gene Therapy.
- 7. Spermatogenesis.
- 2. Comparing Varying Levels of Oxygen Aeration in Increasing Plant Production.
- 3. Sexually Transmitted Diseases and their prevention.
- 4. Case Study on Algal Blooms and preventive measures.

## **Guidelines for Projects:**

- 1. Each project should have minimum 15 to 20 A4 size (Executive Bond) sheet including conclusion and index.
- 2. Need to research on the topic and learn.
- 3. Photographs and creative presentation will be a part of project.
- 4. Projects should be hand written using blue / blue black ink and no prints should be kept (Except the photographs).
- 5. No striking is allowed in the project and to be neat and should have good handwriting.
- 6. Prepare Chart related to the project.

## **HISTORY**

History is one of the most important disciplines in school education. It is the study of the past, which helps us to understand our present and shape our future. It promotes the acquisition and understanding of historical knowledge in breath and in depth across cultures. The course of history in senior secondary classes is to enable to students to know that history is a critical discipline, a process of enquiry, a way of knowing about the past rather than just a collection of facts. The syllabus helps them to understand the process, through which a historian collects, chooses, scrutinizes and assembles different types of evidences to write history. The syllabus in class-XI is organized around some major themes in world history. In class XII the focus shifts to a detailed study of some themes in ancient, medieval and modern Indian history. CBSE has decided to introduce project work in history for classes XI and XII in 2013-14 as a part of regular studies in classroom, as project work gives students an opportunity to develop higher cognitive skills. It takes students to a life beyond text books and provides them a platform to refer materials, gather information, analyze it further to obtain relevant information and decide what matter to keep and hence understand how history is constructed.

## A. Objectives of Project Work:

Project work will help students:-

- ✓ To develop skills to gather data from a variety of sources investigate diverse viewpoints and arrive at logical deductions.
- ✓ To develop skills to comprehend, analyze, interpret, evaluate historical evidence and also understand the limitations of historical evidence.
- ✓ To develop 21st century managerial skills of co-ordination, self-direction and time management.
- ✓ To give a multidisciplinary approach to topics.
- ✓ To learn to work on diverse cultures, races, religions and lifestyles.
- ✓ To learn through constructivism a theory based on observation and scientific study.
- ✓ To inculcate a spirit of inquiry and research.
- ✓ To communicate data in the most appropriate form using a variety of techniques.
- ✓ To provide greater opportunity for interaction and exploration.
- ✓ To understand contemporary issues in context to our past.

### B. Assessment of the Project Work

| Sl No       | Allocation of Marks      | Division of Marks |
|-------------|--------------------------|-------------------|
| 1           | Project synopsis         | 2 Marks           |
| 2           | Data/Statistical         | 3 Marks           |
|             | analysis/Map work        |                   |
| 3           | Visual/overall           | 5 Marks           |
|             | presentation             |                   |
| 4           | Analysis/explanation and | 5 Marks           |
|             | interpretation           |                   |
| 5           | Bibliography             | 1 Marks           |
| 6           | Viva                     | 4 Marks           |
|             |                          |                   |
| Total Marks |                          | 20                |

## C. Suggested Topics for Project Work

Please choose from the mentioned suggested topics.

- 1. Town planning and Artifacts of the Harappan civilization
- 2. Mahabharata through a Readers eye.

- 3. The mysteries behind the mound of dead –Mohenjo-Daro.
- 4. Find out if there are any museums in your town. Visit one of them and write a report on any items, describing how old they are, where they were found, and why you think they are on display
- 5. Great philosophers of India- Gautam Buddha and Mahavira.
- 6. Insight and Reflection of Bernier's notions of The Mughal Empire
- 7. "Mahatma Gandhi" A legendary soul.
- 8. To reconstruct the History of Vijayanagar through the Archaeology of Hampi.
- 9. The tribal groups of India- The pahariyas and the Santhals.
- 10. Through the Travelers Eyes. Ibn Batuta, Al Biruni, Marco Polo, Nicolo Conti, Abdur Razaq, François Bernier Athanasius Nikitin, Duarte Barbosa
- 11. Understanding the Bhakti-Sufi Movement in India. Kabir, Guru Nanak, Mira Bai, Bassavana.
- 12. Depiction of Life during Mughal period through Paintings. Role of women in the Mughal empirewith special reference to Nur Jahan, Gulbadan Banu, Jahanara, Roshanara.
- 13. The process behind the framing of the Indian Constitution.
- 14. How the Partition in 1947 was not just a division of territory but also a division of hearts and how it affected the common people.

#### D. Mandatory guidelines for Project Work

- The project work to be done in individually or group.
- Each group to select one topic.
- Each student to have a separate project file.
- The project should be of minimum of 30-40 pages each.
- > Use colorful sheets for the work and spiral binding.
- Each group has to prepare Power point presentation related to their topic.
- The groups can present role play, drama, songs, bulletin board, poem related to the topic.
- The project should be totally research and survey based.
- The project must be neat and well presented and must be completely handwritten.
- The topic and the group members must be first approved by the teacher.
- The project should be done on inter leaf A-4 sized sheets.
- Students have to preserve the initial draft of the project as well as any research papers that they may have used. (To be attached at the end of the project)
- Revise and write all the assignments of the chapters done in the class.
- Prepare Power Point Presentation of the chapters allocated to the Groups.
- Revise and practice the map work

## **POLITICAL SCIENCE**

Political Science Project- Prepare a project according to CBSE guidelines. Topics as discussed in the classroom. Some suggested topics are:

- 1. Analyze the importance of elections in a democratic country.
- 2. Partition- Theory behind it and its legacy.
- 3. Partition- Theory behind it and its legacy
- 4. State Reorganisation—Do we still require it?
- 5. Election Commission- its changing role and importance
- 6. One Party Dominance-Congress to BJP post 2014 (depending upon the election results)
- 7. Change in India's Foreign Policy
- 8. India's relation with its neighbours- any one country can be studied
- 9. Emergency- Reasons and Consequences- a role play or skit with a group of five students.
- 10. Popular movements- Any one movement can be used from chapter 6 and a relation drawn with the any current protest on that issue
- 11. Regional Aspiration Separatist Movement- Kashmir
- 12. Role of Regional Parties- A detailed study of any one
- 13. Naxalite Movement- How can government address the problem
- 14. Politics of Reservation in India- Constitution- SC and ST, Mandal- OBC, NDA- EWS 14.
- 15. Coalition Politics- Study of UPA and NDA 15. Cold war- Is the world heading to Cold war 2- USA and China
- 16. China The next Super Power 17. Post Soviet Republics- Life after Disintegration.
- 17. Environment- Sustainable development- Need of the hour
- 18. Globalisation Eco. Pol., and Cultural Impact on Third World.

- 19. Cold war Situation.
- 20. Lockdown Situation in India.

#### **General Instructions:**

- 1. Project can be individual/ pair/ group of 4-5 each.
- 2. It should be a handwritten project on a A4 size sheet.
- 3. Project should be summed up in 10-15 pages. (in case of pair and group the no. of pages can exceed to 20-25)
- 4. It should be well researched based on facts and figures and pictorial.
- 5. The project must have a Table of contents, Title/ Cover page, Acknowledgement, Bibliography, Analysis with headings and sub-headings.
- 6. It must include relevant news clippings, facts and figures, and pictures.
- 7. You can plan a survey or an interview to support your research.
- 8. As per CBSE suggestive list of activities are Role Play, Presentation, Model, Field Survey, Mock Event etc.

#### Students should prepare the Political Science Project under the following headings:-

- 1. Acknowledgement
- 2. Index
- 3. Cover page
- 4. Project synopsis
- 5. Data/Statistical analysis/Map work
- 6. Analysis/explanation and interpretation
- 7. Bibliography Political Science: A. Political Science Project- Prepare a project according to C.B.S.E Guide lines.

Read and revise the chapters taught in the class. Answer the questions sent through the worksheet.

Read the newspaper daily especially the editorial.

#### **ECONOMICS**

#### Attempt any Two topic for the Project:

- Micro and Small Scale Industries
- ➤ Food Supply Channel in India
- > Contemporary Employment situation in India
- > Disinvestment policy of the government
- ➤ Goods and Services Tax Act and its Impact on GDP
- ➤ Health Expenditure (of any state)
- ➤ Human Development Index
- ➤ Inclusive Growth Strategy
- ➤ Self-help group
- > Trends in Credit availability in India

- Monetary policy committee and its functions
- > Role of RBI in Control of Credit
- ➤ Government Budget & its Components
- > Trends in budgetary condition of India
- ➤ Exchange Rate determination Methods and Techniques
- Currency War reasons and repercussions
- ➤ Livestock Backbone of Rural India
- ➤ Alternate fuel types and importance
- ➤ Sarwa Siksha Abhiyan Cost Ratio Benefits
- ➤ Golden Quadrilateral- Cost ratio benefit
- > Minimum Support Prices
- > Relation between Stock Price Index and
- > Economic Health of Nation
- ➤ Waste Management in India Need of the hour
- ➤ Minimum Wage Rate approach and Application
- > Digital India- Step towards the future
- ➤ Rain Water Harvesting a solution to water crises
- ➤ Vertical Farming an alternate way
- > Silk Route- Revival of the past
- ➤ Make in India The way ahead
- ➤ Bumper Production- Boon or Bane for the farmer
- ➤ Rise of Concrete Jungle- Trend Analysis
- ➤ Organic Farming Back to the Nature
- Any other newspaper article and its evaluation on basis of economic principles

#### **Revise Chapter:**

- 1. Introduction of Macro Economics
- 2. Money and Banking

## PHYSICAL EDUCATION

## **Practical File:**

**Practical-1:** Fitness tests administration for all items.

- i) AAHPER Physical fitness test
- ii) Conduct barrow three general motor fitness test on 10 students

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

i) obesity Ii)Diabetes iii) Asthma iv) Hypertension v) back pain

#### **Assignment(notebook)**

Q1 Make 20 MCQ from each chapter 1 (Planning in sports) and 2 (Sports and Nutrition)

## **BUSINESS STUDIES**

#### Attempt any one Project

## I. Project One: Principles of Management

The students are required to visit any one of the following:

- 1. A departmental store.
- 2. An Industrial unit.
- 3. A fast food outlet.
- 4. Any other organisation approved by the teacher.

They are required to observe the application of the general Principles of management advocated by Fayol.

Fayol's principles

- 1. Division of work.
- 2. Unity of command.
- 3. Unity of direction.
- 4. Scalar chain
- 5. Espirit de corps
- 6. Fair remuneration to all.
- 7. Order.
- 8. Equity.
- 9. Discipline
- 10. Subordination of individual interest to general interest.
- 11. Initiative.
- 12. Centralisation and decentralisation.
- 13. Stability of tenure.

#### OR

They may enquire into the application of scientific management techniques by F.W.

Taylor in the unit visited.

Scientific techniques of management.

- 1. Functional foremanship.
- 2. Standardisation and simplification of work.
- 3. Method study.
- 4. Motion Study.
- 5. Time Study.
- 6. Fatigue Study

7. Differential piece rate plan.

#### II. Project Two: Stock Exchange

The purpose of this project is to teach school students the values of investing and utilising the stock market. This project also teaches important lessons about the economy, mathematics and financial responsibility. The basis of this project is to learn about the stock market while investing a specified amount of fake money in certain stocks. Students then study the results and buy and sell as they see fit.

This project will also guide the students and provide them with the supplies necessary to successfully monitor stock market trends and will teach students how to calculate profit and loss on stock.

The project work will enable the students to:

- understand the topics like sources of business finance and capital market
- understand the concepts used in stock exchange
- inculcate the habit of watching business channels, reading business
- journals/newspapers and seeking information from their elders.

The students are expected to:

- a) Develop a brief report on History of Stock Exchanges in India. (your country)
- b) Prepare a list of at least 25 companies listed on a Stock Exchange.
- c) To make an imaginary portfolio totalling a sum of Rs. 50,000 equally in any of the 5 companies of their choice listed above over a period of twenty working days.
  - The students may be required to report the prices of the stocks on daily basis and present it diagrammatically on the graph paper.
  - They will understand the weekly holidays and the holidays under the Negotiable Instruments Act.
  - They will also come across with terms like closing prices, opening prices, etc.
  - During this period of recording students are supposed to distinctively record the daily and starting and closing prices of the week other days under the negotiable instrument act so that they acquire knowledge about closing and opening prices.
  - The students may conclude by identifying the causes in the fluctuations of prices. Normally it would be related to the front page news of the a business
  - journal, for example,
  - Change of seasons.
  - Festivals.
  - Spread of epidemic.
  - Strikes and accidents
  - Natural and human disasters.
  - Political environment.
  - Lack of faith in the government policies.
  - Impact of changes in government policies for specific industry.
  - International events.
  - Contract and treaties at the international scene.
  - Relations with the neighbouring countries.
  - Crisis in developed countries, etc.

The students are expected to find the value of their investments and accordingly rearrange their portfolio. The project work should cover the following aspects;

- 1. Graphical presentation of the share prices of different companies on different dates.
- 2. Change in market value of shares due to change of seasons, festivals, natural and human disasters.

- 3. Change in market value of shares due to change in political environment/ policies of various countries/crisis in developed countries or any other reasons
- 4. Identify the top ten companies out of the 25 selected on the basis of their market value of shares. It does not matter if they have made profits or losses.

## III. Project Three: Marketing

- 1. Adhesives
- 2. Air conditioners
- 3. Baby diapers
- 4. Bathing Soap
- 5. Bathroom cleaner
- 6. Bike
- 7. Blanket
- 8. Body Spray
- 9. Bread
- 10. Breakfast cereal
- 11. Butter
- 12. Camera
- 13. Car
- 14. Cheese spreads
- 15. Chocolate
- 16. Coffee
- 17. Cosmetology product
- 18. Crayons
- 19. Crockery
- 20. Cutlery
- 21. Cycle
- 22. DTH
- 23. Eraser
- 24. e-wash
- 25. Fairness cream
- 26. Fans
- 27. Fruit candy
- 28. Furniture

- 29. Hair Dye
- 30. Hair Oil
- 31. Infant dress
- 32. Inverter
- 33. Jams
- 34. Jeans
- 35. Jewellery
- 36. Kurti
- 37. Ladies bag
- 38. Ladies footwear
- 39. Learning Toys
- 40. Lipstick
- 41. Microwave oven
- 42. Mixers
- 43. Mobile
- 44. Moisturizer
- 45. Music player
- 46. Nail polish
- 47. Newspaper
- 48. Noodles
- 49. Pen
- 50. Pen drive
- 51. Pencil
- 52. Pickles

Following essentials are required to be fulfilled for its preparation and submission.

- 1. The total length of the project will be of 25 to 30 pages.
- 2. The project should be handwritten.
- 3. The project should be presented in a neat folder.
- Q.2 Revise Chapter-1 (Nature and Significance of Management)

Chapter-2 (Principles of Management)

## **ACCOUNTANACY**

- 1. Do exercise of Chapter-1(Not-for- Profit-Organization) in your notebook (from T.S.GREWAL)
- 2. Do exercise of Chapter-2 (Accounting for Partnership firms-fundamental) in your notebook. (from T.S.GREWAL).

## **MATHEMATICS**

- 1) Do all the NCERT Examples of Chapter-3 (Matrices) & Chapter-4 (Determinants) in a Practice Notebook.
- 2) Revise Chapter-3 and Chapter-4

## विषय हिंदी

प्रश्न १ प्रताप नारायण मिश्र का निबंध 'बात' और नागार्जुन की कविता'बातें दूंढ कर पढ़ें और दोनों की समीक्षा करें।
प्रश्न २ महादेवी वर्मा की किसी एक कहानी को पढ़िए जो आपकी पुस्तक से अलग हो तथा उसकी कहानी समीक्षा कीजिए।
प्रश्न ३ हरिवंश राय बच्चन जी की विभिन्न कविताओं का संग्रह एक मैगजीन के रूप में कीजिए।
प्रश्न ४ दिल्ली में पाए जाने वाले विभिन्न अखबारों के प्रति जानकारी एकत्र कीजिए और एक प्रेजेंटेशन तैयार कीजिए।
प्रश्न ५ भारतेंदु युग के विभिन्न कवियों व लेखकों के चित्र एकत्रित कीजिए और एक कोलाज बनाइए तथा उनकी एक एक रचना का नाम भी लिखिए

## **PAINTING**

On A3 sheet of paper with the use oil pastels draw still life placed in front of you.

