



**Class: XII**  
**Session 2023-2024**

Dear Students,

As the warmth of the summer sun approaches, it's time to embrace the much-anticipated summer holidays! We hope this break provides you with ample opportunities to relax, recharge, and explore new horizons. However, before you embark on your well-deserved vacation, we have some exciting yet enriching homework assignments to keep your mind engaged during this period.

We believe that learning doesn't have to be confined to the four walls of a classroom, and the summer holidays offer the perfect canvas for expanding your knowledge and nurturing your creativity. These assignments are designed to provide you with a sense of adventure, intellectual stimulation, and personal growth.

Throughout the summer, our dedicated team of educators will be available to guide and support you whenever needed. Feel free to reach out to us for any clarification, inspiration, or assistance you may require on your homework assignments.

We eagerly await your return in the coming academic year to hear about your captivating experiences and witness the growth you have achieved. Make the most of this summer break, embrace the joy of learning, and let your enthusiasm shine through!

Wishing you a truly unforgettable and enriching summer holidays!

**‘TO-DO’ LIST DURING THE HOLIDAYS:**

- *Spend time outdoors, walking, playing, jogging etc.*
- *Speak to your friends, don't just message them on social media.*
- *If you are lucky enough to have siblings, plan some special time to hang-out together or play with them.*
- *Try to have meals without a mobile phone so that you can interact with your family members without distraction.*
- *Read good books. A few of them are suggested in this assignment too.*
- *Do something kind such as pulling weeds out in garden, watering the plants, helping your family members in their daily chores.*
- *Tidy your room and make your bed, you have plenty of time!*
- *Relax... and come back refreshed to take up school tasks with full zeal after vacation!*

## INSTRUCTIONS

- ❖ Entire work would be assessed for internal assessment.
- ❖ Work should be based on creativity, productivity and clarity.
- ❖ Punch the A-4 size sheets and submit in a single file for all subjects. Scrapbook to be submitted separately.
- ❖ Revise & prepare syllabus of PA-1 for upcoming exam for all subjects in the month of July for a glorious achievement.

### Sub: English

1. Make posters showing various human emotions on A4 size sheets. Use your creativity to design the posters.
2. Prepare a file of any five types of classified advertisement.

### Sub: Mathematics

#### **To do the following activities using creative ideas:**

1. To verify that the relation  $R$  in the set  $L$  of all lines in a plane, defined by  $R = \{(l, m) : l \text{ is perpendicular to } m\}$  is symmetric but neither reflexive nor transitive.
2. To demonstrate a function which is not one-one but is onto.
3. To draw the graph of  $\sin^{-1}x$ , using the graph of  $\sin x$  and demonstrate the concept of mirror reflection (about the line  $y = x$ )

#### **Project work**

**Project -1:** Make a project on Matrices and their applications ( ex- coding and decoding, cryptography).

**Project -2:** Learn how to use Microsoft Excel for addition, subtraction, and transpose of matrices. Make a soft copy of the same and paste a screenshot of the output on the file along with project.

### Sub: POLITICAL SCIENCE

Prepare a project as per the given guidelines on any one topic as suggested here:

Suggested Topics: Students may choose any topic from the given list or the topic of their interest from the contemporary politics.

1. NAM- 1961 to present times.
2. Division of Germany with special focus on the construction and dismantling of the Berlin Wall.
3. CIS-Central Asian Republics
4. Disintegration of USSR with special focus on Gorbachav.
5. Arab Spring
6. Cover the negative as well as positive aspects of relationship between India and the following countries.

Focus on any one of the following (current updates should be highlighted):

- a) Relationship between India and Russia
- b) Relationship between India and China
- c) Relationship between India and Pakistan
- d) Relationship between India and Bangladesh

7. ASEAN

8. European Union and BREXIT

9. BRICS

10. SAARC

11. India's Nuclear Policy

12. United Nations with focus on India's candidature in Security Council.

13. UN Agencies – UNICEF, UNESCO, WHO

14. Pandemics: Covid 19- Its global impact (focus on worldwide cooperation and preparedness along with controversies (please collect newspaper clippings for the same)

15. Partition of India-Theory behind it and its legacy

16. Comparison between NITI AAYOG and Planning Commission and their contribution in India's Development.

17. Election 2019- Rise of BJP and Downfall of Congress (1989-2019).

18. Emergency – A blot on Indian Democracy

19. NDA III and NDA IV – Social and Economic welfare programmes.

### 1. The objectives of the project work:

Objectives of project work are to enable learners to:

# Probe deeper into personal enquiry, initiate action and reflect on knowledge and skills, views etc. acquired during the course of class XII.

# Analyze and evaluate real world scenario using theoretical constructs and arguments.

# Demonstrate the application of critical and creative thinking skills and abilities to produce an independent and extended piece of work

# Follow aspects in which learners have interest.

# Develop the communication skills to argue logically.

### 2. Steps involved in the conduct of the project:

Students may work upon the following lines as a suggested flow chart:

Choose a Title/Topic → Need of the Study, Objective of the Study → Hypothesis → Content -Timeline, Maps, Mind maps, Pictures, etc. → (Organization of Material/Data → Presenting Material/Data) → Analyzing the Material/Data for Conclusion → Drawing the Relevant Conclusion → Bibliography

Note: The project should be handwritten: It should contain minimum 30 pages.

The cover page of the project should be **Art Integrated**.

Sr No	Components	Marks
1.	Introduction/overview	2
2.	Expanse of contents	3
3.	Presentation	3
4.	Conclusion	1
5.	Bibliography	1
6.	Viva-voce	10
7.	TOTAL	20

### Sub: Informatics Practices

Make a file and practise the following using SQL

1. Create a student table with the student id, name, and marks as attributes where the student id is the primary key.

2. Insert the details of a new student in the above table.

3. Delete the details of a student in the above table.
4. Use the select command to get the details of the students with marks more than 80.
5. Find the min, max, sum, and average of the marks in a student marks table.
6. Write a SQL query to order the (student ID, marks) table in descending order of the marks.

## Sub: Psychology

Q.1 Create a family tree and analyze the psychological attributes present within your family. Discuss the potential genetic and environmental factors contributing to these attributes.

### Use these guidelines -

**Start by gathering information:** Collect data on your family members, including names, birthdates, and relationships. You can also ask relatives for any additional details or stories that may be relevant.

**Use a family tree template:** Use a family tree template or software to organize and visualize your family's relationships. This will help you see the connections and identify patterns more easily.

**Identify psychological attributes:** Look for common psychological attributes or traits within your family members. This can include personality traits, mental health conditions, or behavioral patterns. Pay attention to both positive and negative attributes.

**Consider genetic factors:** Reflect on the potential genetic factors that may contribute to these psychological attributes. Research suggests that certain mental health conditions can be hereditary, so take note of any conditions that run in the family. Look for patterns across generations to identify potential genetic influences.

**Explore environmental factors:** Environmental factors can also play a significant role in shaping psychological attributes. Consider factors such as family dynamics, upbringing, cultural influences, socioeconomic status, and exposure to stress or trauma. These environmental factors can interact with genetics to shape a person's psychological attributes.

**Gather additional information:** Conduct interviews or have open conversations with family members to gain insights into their experiences, upbringing, and life events. This information can help you understand the potential environmental influences on psychological attributes.

**Analyze and interpret the data:** Analyze the data you have collected and look for connections and patterns. Look for similarities or differences in psychological attributes among family members. Consider both genetic and environmental factors when interpreting the data.

**Document your findings:** Record your observations and interpretations in a structured manner. This can include written notes, charts, or diagrams that summarize the psychological attributes within your family and the potential factors contributing to them.

**Seek professional input:** While conducting your analysis, it's important to keep in mind that you may not have the expertise to make definitive conclusions. If you notice significant or concerning patterns, consider consulting a mental health professional or genetic counselor who can provide further insights and guidance.

**Maintain privacy and respect:** When discussing and sharing your findings, respect the privacy and confidentiality of your family members. Some individuals may not be comfortable with their psychological attributes being openly discussed, so be mindful and sensitive to their preferences.

Remember that conducting a family tree analysis and understanding psychological attributes within your family is a complex task. It requires careful consideration of multiple factors and may not provide definitive answers.

Q.2 Choose a famous historical figure or celebrity and analyze their personality using the Five Factor Model (Big Five) traits. Provide evidence and examples to support your analysis.

**Guidelines for analyzing a historical figure or celebrity using the Five Factor Model (Big Five) traits:**

Familiarize yourself with the Five Factor Model (Big Five) traits: The Big Five traits include Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism. Understand the characteristics associated with each trait.

Choose a suitable historical figure or celebrity: Select someone with sufficiently available information about their personality and behavior. Ensure there are credible sources to draw evidence from.

Research and gather information: Study biographies, interviews, articles, and other reliable sources to collect data on the individual's actions, beliefs, and attitudes.

Analyze Openness: Assess the person's level of intellectual curiosity, imagination, and openness to new experiences. Look for examples of their willingness to explore diverse perspectives, embrace change, and engage in creative endeavors.

Examine Conscientiousness: Evaluate the individual's organization, responsibility, and diligence. Analyze their work ethic, discipline, and commitment to achieving goals. Identify instances where they display a sense of duty and demonstrate reliability.

Evaluate Extraversion: Consider the person's level of sociability, assertiveness, and energy. Look for evidence of their preference for social interactions, public speaking, and their ability to draw energy from being around others. Observe whether they tend to take charge or enjoy being the center of attention.

Assess Agreeableness: Analyze the individual's tendency to be compassionate, cooperative, and considerate. Look for examples of their empathy, willingness to help others, and their ability to maintain harmonious relationships. Consider whether they prioritize the needs of others over their own.

Examine Neuroticism: Evaluate the person's emotional stability, anxiety levels, and resilience. Identify instances where they display emotional volatility, stress sensitivity, or susceptibility to negative emotions. Assess their ability to cope with challenges and bounce back from adversity.

Support your analysis with evidence: Use specific examples, quotes, or actions from the individual's life to illustrate their personality traits. Refer to credible sources to back up your claims.

Provide a balanced assessment: Consider that individuals are complex and may exhibit a range of traits. Avoid oversimplifying or reducing their entire personality to a single trait. Provide a nuanced analysis that acknowledges the interplay of multiple traits.

Remember to ensure that your analysis remains respectful and avoids making assumptions or speculations unsupported by evidence.

## **Sub- Geography**

1) Prepare MAP BOOK.

On outline political map of India.

1. Areas of highest population density
2. Areas of lowest population density.
3. Areas showing high human resource development.
4. Areas showing low human resource development.
5. Areas showing high infant mortality rate.
6. Areas showing low infant mortality rate.
  - a) Areas with high per capita income
  - b) Areas with low per capita income

NOTE: The practical file should be handwritten with cover page, index page and acknowledgement.

## **Sub- Accountancy**

1. Worksheet given for Chapter 1 & 2
2. Project work :-
  - a) Main features of partnership
  - b) LLP

- c) What is partnership Deed & its main points
- d) Rules applicable in the absence of partnership deed
- e) P & L appropriation all
- f) Journal entries
- g) Distinction b/w P & L A/C & P & L appropriation A/C

### Sub- Economics

Worksheet given of Ch-1 & 2 (Macroeconomics)

#### Project Work:-

1. Food supply channel in India.
2. Health expenditure of any state.

### Sub: Business Studies

**Project One: Elements of Business Environment**

**Project Two: Principles of Management**

**Project Three: Stock Exchange**

**Project Four: Marketing**

❖ **Add one comparative case study of Rajasthan and Nagaland on the selected topic.**

Presentation and Submission of Project Report At the end of the stipulated term, each student will prepare and submit his/her project report.

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.
4. The project report should be developed in the following sequence-
  - Cover page should include the title of the Project, student information, school and year.
  - List of contents (Index).
  - Acknowledgements and Preface (acknowledging the institution, the places visited and the persons who have helped). Introduction.
  - Topic with suitable heading.
  - Planning and activities done during the project, if any.
  - Observations and findings of the visit.
  - Conclusions (summarized suggestions or findings, future scope of study).
  - Photographs (if any).
  - Appendix

#### ASSESSMENT

- The marks will be allocated on the following heads.

1	Initiative, cooperativeness and participation	2 Mark
2	Creativity in presentation	2 Mark
3	Content, observation and research work	4 Marks
4	Analysis of situations	4 Marks
5	Viva	8 Marks
	Total	20 Marks

**For guidance you may follow the link: -**

[Microsoft Word - Curriculum Business Studies XI-XII\\_2023-24\\_\(cbseacademic.nic.in\)](https://www.cbseacademic.nic.in/)

<https://image.slidesharecdn.com/cprojectonpolicestationsoftware-131216072242-phpapp02/95/c-project-on-police-station-software-2-1024.jpg?cb=1387178669>

[CBSE Class 12 Project Topics & Samples \(hscprojects.com\)](#)

[Business Studies Class 12th Marketing management Project- Fruit Juice \(slideshare.net\)](#)

[Business Studies \(Principles of Management\) Project Class 12th CBSE \(slideshare.net\)](#)

[Business Studies Project on Stock Exchange \(slideshare.net\)](#)

## Sub: Entrepreneurship

Portfolio

Topic : 1. Business Plan  
2. Market Survey

Material used :

A-3 size file

Interleaf page

Black and blue pen

**Instructions:** Students will make a portfolio an A3 size file using black pen, blue pen & colours.

## Sub: Physics

Dear Students, Kindly note that the following points:-

- It is an individual project.
- Design a cover page as per your imagination. To be written on A-4 sheets. Approx. no. of sheets- 15-20 sheets. The project is to be done using loose sheets - white/coloured A4 size sheets. The Project Report should be hand written by the students themselves.
- You have to arrange your project sheets according to the topics – Certificate, Acknowledgment, Table of Content, Objective, Introduction, Materials, Methodology, Data Collection and Analysis, Results and Discussion, Conclusion & Bibliography.
- Keep your work neat, well-organized, and free from grammatical errors.
- Cite your sources for any information or images used.
- Demonstrate creativity, critical thinking, and a genuine interest in Physics.
- Submit your completed projects in the format specified on 3rd July, 2023 (Monday).

List of Investigatory Projects

1. To study various factors on which the internal resistance/EMF of a cell depends. **(Roll No. 1 to 4)**
2. To study the variations in current flowing in a circuit containing an LDR because of a variation in **(Roll No. 5 to 8)**
  - (a) the power of the incandescent lamp, used to 'illuminate' the LDR (keeping all the lamps at a fixed distance).
  - (b) the distance of a incandescent lamp (of fixed power) used to 'illuminate' the LDR.
3. To find the refractive indices of (a) water (b) oil (transparent) using a plane mirror, an equiconvex lens (made from a glass of known refractive index) and an adjustable object needle. **(Roll No. 9 to 12)**
4. To investigate the relation between the ratio of (i) output and input voltage and (ii) number of turns in the secondary coil and primary coil of a self-designed transformer. **(Roll No. 13 to 16)**
5. To investigate the dependence of the angle of deviation on the angle of incidence using a hollow prism filled one by one, with different transparent fluids. **(Roll No. 17 to 22)**

## Sub: Chemistry

### 1. Make scientific Investigatory project

Study of the presence of oxalate ions in guava fruit at different stages of ripening.

- Study the quantity of casein present in different samples of milk.
- Preparation of soybean milk and its comparison with natural milk with respect to curd formation, the effect of temperature, etc.
- Study of the effect of Potassium Bisulphate as a food preservative under various conditions (temperature, concentration, time, etc.)
- Study of digestion of starch by salivary amylase and effect of pH and temperature on It.
- Comparative study of the rate of fermentation of the following materials: wheat flour, Gram flour, potato juice, carrot juice, etc.
- Extraction of essential oils present in Saunf (aniseed), Ajwain (carum), Illaichi (cardamom).
- Study of common food adulterants in fat, oil, butter, sugar, turmeric powder, chilli powder and pepper.

### 2. Working model on any one of the following –

- To show conductivity of electrolytes (Roll no. 1 to 7)
- Electrolytic cell (Roll no. 8 to 15)
- Make battery by potato/lemon (Roll no. 15 to 22)

## Sub: Biology

Dear Students, Kindly note that the following points:-

- It is an individual project.
- Design a cover page as per your imagination. To be written on A-4 sheets. Approx. no. of sheets- 15-20 sheets. The project is to be done using loose sheets - white/coloured A4 size sheets. The Project Report should be hand written by the students themselves.
- You have to arrange your project sheets according to the topics – Certificate, Acknowledgment, Table of Content, Objective, Introduction, Materials, Methodology, Data Collection and Analysis, Results and Discussion, Conclusion & Bibliography.
- Keep your work neat, well-organized, and free from grammatical errors.
- Cite your sources for any information or images used.
- Demonstrate creativity, critical thinking, and a genuine interest in Biology.
- Submit your completed projects in the format specified on 3rd July, 2023 (Monday).

1. Myocardial Infarction
2. Human Genome Project
3. DNA fingerprinting
4. To Study the DNA the mysterious molecule
5. To Study the Chromosomes and DNA Packaging
6. To Study the Structure of the RNA and Its Functions
7. To Study the Genetic Mutation: Types and its Causes
8. To Study the Isolation of DNA from Animal Cell

9. Study of the Developments in the Rice Genome Research
10. To Study the Hemophilia: Types, Symptoms, and Treatment
11. To Study the Adaptive Radiation and Ecological Opportunity
12. To Study the Adaptive radiation in the aquatic vertebrates
13. Brain tumor
14. Possible effect of maternal behaviour on fetal development
15. Human embryonic development
16. Immunity
17. Go smart with organic farming
18. Ageing and sleeping



19. Infertility
20. Drug addiction
21. Malnutrition
22. Cancer or oncology
23. AIDS
24. Autism
25. Malaria
26. Diabetes
27. Polio
28. Heart attack
29. Hormones and their roles
30. Gene therapy
31. Effect of cannabis on the human body
32. DNA fingerprinting
33. Anaemia
34. PCR
35. Immune system
36. Cervical spondylitis
37. Possible effect of maternal behaviour on fetal development
38. Effects of diet on blood glucose
39. Role of recombinant DNA technology in modern medicine
40. Influenza
41. Insect diversity in your area
42. (ART) Assisted reproductive techniques
43. Algal blooms and preventive measures
44. Blood clotting
45. IVF treatment
46. Cloning
47. Twins monozygotic or dizygotic
48. Pregnancy problems
49. Leukaemia
50. Erythroblastosis fetalis

### **Sub: Fine arts**

Draw 50 sketches in A3 drawing book.

Including (human figures, land scape, nature study) and 5 layouts of compositions.

### **Sub: Music**

1. Write biography of Pt. Krishna Rao Shankar.
2. Learn and write 'Taal Jhaptal' in your music notebook.
3. Paste a well labeled diagram of 'Tanpura' in your music notebook.

### **Sub: Physical Education**

Complete lab manual file on Basketball.