



HIGHER | STRONGER | BRIGHTER



# Summer Vacation Homework SESSION: 2024-25

**GRADE: XII** 

#### **ENGLISH: -**

# 1. Write a report on:

- a. The Summer Camp organized in your school recently
- b. Investiture Day celebration held in your school
- c. A road accident you witnessed while coming home

# 2. Write a job application with biodata for:

- a. The post of accountant in a reputed firm. Attach your biodata.
- b. For the post of mathematics teacher in St. Stephens public school Noida.
- c. For the post of computer operator in a reputed company.

# 3. Write Notices on the following occasions:

a. Tours b. Sports

c. Cultural / Extra- curricular activities d. Lost & Found

The following assignments should be completed in the English Note Book and should be positively submitted to the subject teacher on 25 June 2024.

PROJECT WORK (Complete anyone of the given projects)

# CONTENT OF THE PROJECT FILE:

The project file may include the following:

- **Cover page**, with the title of the project, school details and details of the student (sample will be sent)
- Certificate of Completion under the guidance of the teacher (sample will be sent)
- **Objectives** of the topic
- Action Plan for the completion of assigned tasks (steps involved in doing the project)
- The 800-1000 words essay/report
- Student reflections (what new learning experience/outcome you have achieved after completing the project)
- If possible, photographs that capture positive learning experience of the students (collages/pics from various online sources)



List of Resources/Bibliography (Last page of the project file)

PROJECT TO BE TYPED ON A4 SHEET.

## **GENERATION GAP:**

#### Links for reference:

https://youtu.be/lEqX4QhMj3k https://youtu.be/uEd6dhOegn4 https://youtu.be/p656FvLHupY

SOCIAL NETWORKING PLATFORMS: IS SOCIAL MEDIA AN EFFECTIVE TOOL FOR QUICK AND CONVENIENT COMMUNICATION, OR IS IT JUST A SOPHISTICATED MEANS FOR STALKING PEOPLE?

#### Links for reference:

https://youtu.be/ABOgsV2XTEk

https://www.intelligencesquaredus.org/?jwsource=cl

https://www.ted.com/talks/cal\_newport\_why\_you\_should\_quit\_social\_media

#### CLIMATE CHANGE IS THE GREATEST THREAT FACING HUMANITY TODAY:

#### Links for reference:

https://youtu.be/vy3gMVGwjuc https://youtu.be/cl4Uv9\_7KJE https://youtu.be/ViboIJvWqiw

#### **VIOLENT VIDEO GAMES SHOULD BE BANNED:**

#### Links for reference:

https://youtu.be/uaf Xjz6Mxs https://youtu.be/vxUeDIiBYMY https://youtu.be/gv1SsYeKXXE



#### **PHYSICS:-**

# Prepare investigatory projects on any one of the following topics

- 1. To study various factors on which the internal resistance/EMF of a cell depends.
- 2. To study the variations in current flowing in a circuit containing an LDR because of a variation in (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.
- 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.
- 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.
- 6. 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.
- 7. To study the factor on which the self-inductance of a coil depends by observing the effect of this coil, when put in series with a resistor/(bulb) in a circuit fed up by an A.C. source of adjustable frequency.
- 8. To study the earth's magnetic field using a compass needle -bar magnet by plotting magnetic field lines and tangent galvanometer.

**CHEMISTRY:** Complete the literature part of the practical's in the Lab Journal.

#### **BIOLOGY:-**

- 1. Prepare investigatory projects on any of the following topics.
- a. Human Reproduction
- b. Cancer
- c. Genetics
- d. Diabetes
- e. Drug abuse
- f. Evolution
- g. DNA separation techniques
- h. Embryogenesis
- i. Gene therapy
- j. Pollination
- k. HIV- AIDS
- 1. ABO blood group
- m. Hydroponics
- n. Aquaponics



## **MATHEMATICS:-**

- If A is a 2×3 matrix such that AB and AB' both are defined, then find the order of 1. the matrix B.
- If the matrix  $\begin{bmatrix} 0 & a & 3 \\ 2 & b & -1 \end{bmatrix}$  is a skew symmetric matrix, find the values a, b and c. 2.
- Prove that AA' is always a symmetric matrix for any square matrix of A. 3.
- If A and B are square matrices, each of order 2 such that |A|=3 and |B|=-2, then 4. write the value of |3AB|.
- If A is a square matrix of order 3 such that |adj|A| = 225, find |A'|. 5.
- If  $\begin{vmatrix} 2x & 5 \\ 8 & x \end{vmatrix} = \begin{vmatrix} 6 & -2 \\ 7 & 3 \end{vmatrix}$ , then find the possible value(s) of x. 6.
- Find the equation of the line joining A(1,3) and B(0,0) using determinants and find 7. k if D(k,0) is a point such that area of triangle ABD is 3 sq units.
- 8.
- Find A, if  $\begin{bmatrix} 4 \\ 1 \\ 3 \end{bmatrix}$  A =  $\begin{bmatrix} -4 & 8 & 4 \\ -1 & 2 & 1 \\ -3 & 6 & 3 \end{bmatrix}$ Given A =  $\begin{bmatrix} 1 & -1 & 0 \\ 2 & 3 & 4 \\ 0 & 1 & 2 \end{bmatrix}$  and B =  $\begin{bmatrix} 2 & 2 & -4 \\ -4 & 2 & -4 \\ 2 & -1 & 5 \end{bmatrix}$ , find BA and use it to find the 9.

values of x, y, z from given equations:

$$x - y = 3$$
,  $2x + 3y + 4z = 17$ ,  $y + 2z = 17$ 

values of x, y, z from given equations.  

$$x - y = 3$$
,  $2x + 3y + 4z = 17$ ,  $y + 2z = 17$   
10. If  $f(x) = \begin{bmatrix} \cos x & -\sin x & 0 \\ \sin x & \cos x & 0 \\ 0 & 0 & 1 \end{bmatrix}$ , prove that:  $f(x)f(-y) = f(x - y)$ 

#### ACCOUNTANCY: -

1. Complete the Assignments uploaded on Google Classroom for the following chapters and revise them thoroughly:

#### Book 1-

- Ch-1- Fundamentals of Partnership
- Ch-2- Goodwill: Nature and Valuation
- Ch-3- Change in Profit-Sharing Ratio among the existing partners

#### Book 3-

Ch-2- Analysis of Financial Statements of a Co.



#### 2. LEARNING WORK

#### **BOOK-3**

Ch-1 Study the Financial Statement of a company. Learn Headings and Sub- Headings of Balance Sheet and Statement of Profit and Loss.

#### 3. RESEARCH WORK

See the Annual report of different Companies to relate to the topic discussed.

#### 4. ART INTEGRATION ACTIVITY

Design a comic strip based on features of Partnership. You may depict 1 or more than 1 features.

#### **BUSINESS STUDIES:-**

Each student has to make a project file and do the holiday homework in it. Project can be in the form of a spiral folder with an attractive cover sheet. Creativity and dedication are important aspects. It should be handwritten and 30-35 pages required.

I. Project One: Elements of Business Environment. Select any one of the following

#### **Elements:**

1. Changes witnessed over the last few years on mode of packaging and it's economic

Impact. The teacher may guide the students to identify the following changes:

- a) The changes in transportation of fruits and vegetables such as cardboard crates Being used in place of wooden crates, etc. Reasons for above changes.
- b) Milk being supplied in glass bottles, later in plastic bags and now in tetrapack and through vending machines.
- c) Plastic furniture [doors and stools] gaining preference over wooden furniture.
- d) The origin of cardboard and the various stages of changes and growth.
- e) Brown paper bags packing to recycled paper bags to plastic bags and cloth bags.
- f) Reuse of packaging [bottles, jars and tins] to attract customers for their products.
- g) The concept of pyramid packaging for milk.
- h) Cost being borne by the consumer/manufacturer.
- i) Packaging used as means of advertisements.



- 2. The reasons behind changes in the following: Coca Cola and Fanta in the seventies to Thumbs up and Campa Cola in the eighties to Pepsi and Coke in nineties. The teacher may guide the students to the times when India sold Coca Cola and Fanta which were being manufactured in India by the foreign companies. The students may be asked to enquire about
- a) Reasons of stopping the manufacturing of the above-mentioned drinks in India THEN.
- b) The introduction of Thums up and Campa cola range.
- c) Re entry of Coke and introduction of Pepsi in the Indian market.
- d) Factors responsible for the change.
- e) Other linkages with the above
- f) Leading brands and the company having the highest market share.
- g) Different local brands venturing in the Indian market.
- h) The rating of the above brands in the market.
- i) The survival and reasons of failure in competition with the international brands.
- j) Other observations made by the students The teacher may develop the following on the above lines
- 3. Changing role of the women in the past 25 years relating to joint families, nuclear families, women as a bread earner of the family, changes in the requirement trend of mixers, washing machines, micro wave and standard of living.
- 4. The changes in the pattern of import and export of different Products.
- 5. The trend in the changing interest rates and their effect on savings.
- 6. A study on child labour laws, its implementation and consequences.
- 7. The state of 'anti plastic campaign,' the law, its effects and implementation.
- 8. The laws of mining /setting up of industries, rules and regulations, licences required for running that business.
- 9. Social factors affecting acceptance and rejection of an identified product. (Dish washer, Atta maker, etc)
- 10. What has the effect of change in environment on the types of goods and services?
  - The students can take examples like:
- a) Washing machines, micro waves, mixers and grinder.
- b) Need for crèche, day care centre for young and old.
- c) Ready to eat food, eating food outside, and tiffin centres.
- 11. Change in the man-machine ratio with technological advances resulting in change of cost structure. 12. Effect of changes in technological environment on the behaviour of employee.



- II. Project Two: 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.
- 3. Unity of direction.
- 5. Espirit de corps
- 7. Order.
- 9. Discipline
- 10. Subordination of individual interest to general interest.
- 11. Initiative. 12. Centralisation and decentralisation.
- 13. Stability of tenure.

- 2. Unity of command.
- 4. Scalar chain
- 6. Fair remuneration to all.

Authority and Responsibility

8. Equity.

**ECONOMICS:-**

#### Dear Students,

Please follow the guidelines enlisted below for the project work which you have to do for the Board Examination 2024-25. Do carry out research, read extensively, explore and think 'out of the box' to make your project unique and more meaningful. The project will give you added benefit and required exposure for university admissions too. You will be evaluated out of 20 marks for these project files and a viva.

14.

Best wishes to all of you-Please stay healthy and be safe.

Date of Submission: 5th July 2024

Guidelines for Project Work in Economics (Class XII)

At the end of the stipulated session, each student will present the work in the Project File (with viva voice) to the External examiner.

The expectations of the project work are:

- Learners will complete only ONE project in each academic session
- Project should be of 3,500-4,000 words (excluding diagrams & graphs), preferably
- hand-written
- It will be an independent, self-directed piece of study



# Scope of the project:

- Student may work upon the following lines:
- Content/Index
- Acknowledgement
- Certificate

# Students are supposed to pick any ONE of the following suggested projects:

- 1. New Education Policy (NEP) 2020: A Promise for a New Education System
- 2. G-20: Inclusive and Action Oriented
- 3. Amrit Kaal: Empowered and Inclusive Economy
- 4. e-Rupee (e- ₹)
- 5. Aatmnirbhar Bharat-The Road Ahead
- 6. Micro, Small and Medium Enterprises (MSME)
- 7. Sri Lanka's Economic Crisis
- 8. Environmental Crisis
- 9. Disinvestment policy of the government
- 10. Make in India The way ahead
- 11. Sarva Siksha Abhiyan
- 12. Government Budget & its Components
- 13. Organic Farming Back to the Nature
- 14. Currency War reasons and repercussions
- 15. Monetary policy in India
- 16. Balance of Payment and Economic effects
- 17. Digital India- Step towards the future
- 18. Waste Management in India Need of the hour
- 19. Foreign Direct Investment in India "First Develop India"
- 20. Role of RBI in Control of Credit
- 21. Medical Tourism in India
- 22. Rural Credit Analysis of Credit Facilities to Small Scale Farmers

# Following essentials are required to be fulfilled in the project:

- Cover page (Topic Name, Picture related to project, Name of the Student, Board Roll No., Academic year 2024-25)
- Introduction
- Details of the topic
- Pros and Cons of the economic event/happening.
- Major criticism related to the topic (if any)
- Students' own views/perception/ opinion and learning from the work
- Any other valid idea as per the perceived notion of the student who is actually working and presenting the Project-Work.
- Case Study
- Bibliography



Arrange the presentation of the project file

#### **HISTORY:-**

(i) THE HISTORY AND LEGACY OF MAURYAN EMPIRE(PROJECT FILE)

#### **GOEGRAPHY: -**

- (i) DATA
- (ii) DATA PROCESING (PRACTICAL FILE)

## **POLITICAL SCIENCE: -**

- (I) WRITTEN ASSIGNMENT:-
- 1. Explain in detail the following fundamental rights (with their Articles)
  - RIGHT TO EQUALITY
- RIGHT TO LIBERTY AND PERSONAL FREEDOMS
- RIGHT TO FREEDOM OF RELIGION
- RIGHT AGAINST EXPLOITATION
- CULTURAL AND EDUCATIONAL RIGHTS OF MINORITY GROUPS
- RIGHT TO CONSTITUTIONAL REMEDY
- 2. Explain the Directive principles of state policy? Write about their relationship with fundamental rights?
- 3. Which of the fundamental right is in your opinion the most important right? Summarise its provisions and give arguments to show why it is most important.
- 4. Write a short note on fundamental duties.
- (II) ACTIVITY: -

Find out about the articles, parts and schedulesof Indian constitution

- 1. At the time of independence
- 2. In today's scenario

#### (III) READING TASK-

- 1. Read newspapers especially the Editorial page everyday.
- 2. Read more about Indian constitution.

# PHYSICIAL EDUCATION:-

#### **PROJECT WORK - 1**

Prepare the project on any one game of your choice out of Athletics, Basketball, Football, Kabaddi, Kho-Kho, Volleyball, Handball, Hockey, Cricket.



The project has to be written based on following guidelines:-

- History of the game
- Draw the diagram of court/field of related game
- Specifications of the playfield and sports equipment
- Latest general rules of the game
- Fundamental skills of the game
- Terminology
- Important tournaments of related game

# **PROJECT WORK - 2**

Prepare a project on 10 Yogic Asanas that help in preventing lifestyle diseases- Asthma, Hypertension, Diabetes, Obesity (Write Benefits, Contraindications with pictures)

#### **COMPUTER SCIENCE:-**

- Write a Program to show whether entered numbers are prime or not in the given range.
- Input a string and determine whether it is a palindrome or not.
- Find the largest/smallest number in a list/tuple
- > WAP to input any two tuples and swap their values.
- > WAP to store students' details like admission number, roll number, name and percentage in a dictionary and display information on the basis of admission number.
- > Write a program with a user-defined function with string as a parameter which replaces all vowels in the string with '\*'.
- > Recursively find the factorial of a natural number.
- > Write a recursive code to find the sum of all elements of a list.
- > Write a recursive code to compute the nth Fibonacci number.
- > Read a text file line by line and display each word separated by a #.
- Read a text file and display the number of vowels/ consonants/ uppercase/ lowercase and other than character and digit in the file.
- > Write a Python code to find the size of the file in bytes, the number of lines, number of words and no. of character.





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