S.D. Vidya Mandir City
A Unit of Shri S.D. Education Society (Regd.), Panipat
Holidays Homework (2026–27)

English

Project Work -

Project Topic : " Changing Educational Ideologies": Traditional Values vs Modern Curriculum

Project Overview:

Through this project, students will explore the transformation in educational values from traditional methods of learning to the modern curriculum system.

The Project Should Include the Following Sections:

1. Introduction

- Brief introduction of the chapter "The Portrait of a Lady"
- Introduction to traditional and modern educational ideologies
- Relevance of education in present-day society

2. Traditional Values vs Modern Curriculum

Students should analyze:

- Features of traditional education
- Features of modern education
- Advantages and disadvantages of both systems
- Grandmother's perspective on modern education in the chapter
- Importance of balancing moral values with technological advancement

3. Conclusion
Summarize the findings and highlight the importance of preserving traditional values while adapting to modern education and development.

Project File Must Include:

1. Attractive Cover Page
2. Certificate of Authenticity
3. Acknowledgment
4. Index / Table of Contents
5. Main Content / Research Work
6. Conclusion
7. Bibliography

Bibliography Should Mention:

- Books referred
- Articles and journals
- Educational websites
- Newspapers or magazines (if used)

Important Instructions:

- Maintain neat presentation and proper formatting
- Use formal and grammatically correct language
- Include relevant pictures,
- Ensure originality of content
- The cover page should be creative and attractive

✨ Projects will be evaluated on the basis of creativity, presentation, research quality, organization of content, and originality.

Speaking Activity
Prepare a one-minute speech on any ONE of the following topics:

1. The Impact of Social Media on Human Relationships
2. Role of Youth in Nation Building
3. Importance of Mental Health Awareness Among Students
4. Environmental Conservation: Our Shared Responsibility
5. Online Learning vs Traditional Classroom Learning

Assignment Questions
Reference Book : Devjyoti Bravia
Reading comprehensions
Complete Reading Comprehension Exercises (Pages 4–13)

Advertisement Writing
Do Advertisement Writing Worksheet - 50 (Pages 147–148).

Poster Writing
Do Poster Writing Worksheet- 56 (Pages 168–169).

Grammar Section
Do Tenses Exercises 1–5 from (Pages 97–98)
Do Sentence Rearranging from Worksheet 39 (Pages 115–116).
Important Note

- Learn and complete all the work done in class.

PHYSICS

- Complete the lab manual with 4 experiments and 3 activities given.
- Revise all notes thoroughly.

- Solve the assignment given below.

ASSIGNMENT

1. 1.In the relation $h = 2T\cos\alpha / r^2\rho g$, where h is the height, T is surface tension ρ is density and r is the radius of a capillary tube, α is angle of contact and g is acceleration due to gravity. Verify the correctness of the equation.
2. Give one example each of physical quantities which have SI unit but no dimensions, which neither have unit nor dimension.
3. What will be the value of G in CGS units if in SI units it is $6.67 \times 10^{-11}\ m^3kg^{-1}s^{-2}$.
4. Give the number of significant digits in each of the following measurements:
   a) 1278.50
   b) 7.8002
   c) 13.43.050
   d) 2.120000
   e) 8.823.012
   f) 3.90027.00
   g) 0.0053567
   h) 542000
5. The side of a square plate is measured as 12.6 cm. Calculate its area with proper significant figures.
6. Determine which of the following are dimensionally correct-
   (i) Pressure = Energy per unit volume
   (ii) Pressure = Momentum / (volume × time)
7. Young's modulus of steel was calculated to be $18 \times 10^{12}\ N/m^2$. Express it in CGS units.
8. A large fluid star oscillates in shape under the influence of its own gravitational field. Using dimensional analysis, find the expression for period of oscillation (T) in terms of radius of star (R), mean density of fluid (ρ) and universal gravitational constant (G).
9. Find the dimensional formulae for the following physical quantities:
   a) Torque
   b) Coefficient of Viscosity
   c) Voltage
10. If energy E is proportional to mass m and c, the speed of light, determine the relation in these quantities using the concept of dimensions.
11. Find the dimensions of latent heat and specific heat.
12. E, m, l and G denote energy, mass, angular momentum and gravitational constant respectively. Determine the dimensions of EL^2 / m^5G^2.
13. Two trains A and B of length 400 m each are moving on two parallel tracks with a uniform speed of 72Km/hr in the same direction, with A ahead of B. The driver of B decides to overtake A and accelerates by 1m/s2. If after 50 s, the guard of B just brushes past the driver of A, what was the original distance between them?
14. A ball is dropped from a height of 125 m. Calculate the distance travelled during the last second of motion.
15. Two trains moving in opposite directions with speeds 54 km/h and 72 km/h cross each other in 12 s. If one train is 150 m long and the other is 200 m long, verify whether the crossing time is correct.
16. A particle starts from rest with acceleration 2 m/s^2. After 10 s, acceleration becomes zero and the particle continues with constant velocity. Calculate total displacement in 25s.

17. A train starts from rest and accelerates uniformly at 0.5 m/s² for 30 s. It then moves with constant speed for 5 minutes and finally comes to rest in 20 s. Calculate total distance travelled.
18. A freely falling body covers one-third of the total distance in the last second of motion. Calculate the total time of fall.
19. A car moving at 20 m/s overtakes another car moving at 12 m/s. If initially the slower car is 40 m ahead, calculate the time required for overtaking
20. A police van moving on a highway with a speed of 30 km h-1 fires a bullet at a thief s car speeding away in the same direction with a speed of 192 km h-1 . If the muzzle speed of the bullet is 150 ms-1 , with what speed does the bullet hit the thief s car? (Note: Obtain that speed which is relevant for damaging the thief s car).
21. A Jet airplane traveling at the speed of 500km/hr ejects its products of combustion at the speed of 1500km/h relative to the Jetplane. What is the speed of the latter with respect to an observer on the ground?
22. A woman starts from her home at 9.00 am, walks with a speed of 5Km/hr on a straight road up to her office 2.5 km away, stays at the office up to 5.00 pm, and returns home by an auto with a speed of 25Km/hr. Choose suitable scales and plot the x-t graph of her motion.
23. A drunkard walking in a narrow lane takes 5 steps forward and 3 steps backward, followed again by 5 steps forward and 3 steps backward, and so on. Each step is 1 m long and requires 1 s. Plot the x-t graph of his motion. Determine graphically and otherwise how long the drunkard takes to fall in a pit 13 m away from the start
24. A particle has position r = 3t i + 4t j. Find velocity.
25. Two towns A and B are connected by regular bus service with a bus leaving in either direction every T minute. A man cycling with a speed of 20 km h-1 in the direction A to B notices that a bus goes past him every 18 min in the direction of his motion, and every 6 min in the opposite direction. What is the period T of the bus service and with what speed (assumed constant) do the buses ply on the road.
26. On an open ground, a motorist follows a track that turns to his by an angle of 60 degree after every 500m. Starting from a given turn,specify displacement of motorist at 3rd,6th,8th turn. Compare the magnitude of displacement with the total path covered by the motorist in each case.
27. In a harbour, wind is blowing at the speed of 72Km/hr and the flag on the mast of a boat anchored in the harbour flutters along the N-E direction. If the boat starts moving at a speed 51Km/hr of to the north, what is the direction of the flag on the mast of the boat?
28. An aircraft executes a horizontal loop of radius 1Km with a steady speed 9Km/hr of Compare its centripetal acceleration with the acceleration due to gravity.
29. A helicopter flying horizontally with a speed of 360 km/h at an altitude of 2 km, drops an object at an instant. The object hits the ground at a point O, 20 s after it is dropped. Find the displacement of 'O' from the position of helicopter where the object was released.
    (use acceleration due to gravity g = 10 m/s2 and neglect air resistance)
30. Two balls with same mass and initial velocity, are projected at different angles in such a way that maximum height reached by first ball is 8 times higher than that of the second ball. T1 and T2 are the total flying times of first and second ball, respectively, then find the ratio of T1 and T2.

Chemistry

Solve the given assignment and complete your lab manual.
Ensure your chemistry notebook is completed neatly and properly.

Prepare a project file on the topic allotted according to your roll number.
Project File Contents should include:
Cover Page
Certificate
Acknowledgement
Index
Introduction
Main Content with Pictures/Graphs
Conclusion
Bibliography
Format Use A4 size sheets or a spiral/project file.
Presentation Maintain neat handwriting and proper presentation.
Submission Submit the holiday homework positively after summer vacation.
Project file must be hand written.

Chapter 1: Some Basic Concepts of Chemistry

1. A compound contains 69.6% chromium and 30.4% oxygen by mass. Determine its empirical formula.
2. 4.4 g of a hydrocarbon on complete combustion gives 13.2 g CO_2 and 7.2 g H_2O. Determine the empirical formula of the hydrocarbon.
3. A sample of hydrated salt loses 36 g water on heating and the residue obtained weighs 64 g. Calculate the percentage of water of crystallization.
4. Calculate the molarity of a solution prepared by dissolving 24.5 g H_2SO_4 in enough water to make 2 L solution.
5. 6.023×10^{22} molecules of a gas weigh 8.8 g. Calculate the molar mass of the gas.
6. A compound contains carbon, hydrogen and oxygen only. On analysis it was found to contain 40% carbon, 6.67% hydrogen and rest oxygen. Its vapour density is 30. Determine molecular formula.
7. Calculate the number of atoms present in 11.2 L of NH_3 gas at STP.
8. 5 g NaOH is dissolved in 450 g water. Calculate molality of the solution.
9. A mixture contains 3 moles of H_2 and 5 moles of O_2. Calculate total number of molecules and total mass of mixture.
10. 2.76 g of silver carbonate on heating gives 2.16 g silver. Calculate percentage purity of silver carbonate sample.
11. The density of a 3 M NaCl solution is 1.25 g mL^{-1}. Calculate the molality of solution.
12. Determine the molecular formula of a compound whose empirical formula is CH and molar mass is 78 g mol^{-1}.
13. Calculate the number of electrons present in 2 g H_2 gas.
14. A gaseous hydrocarbon contains 85.7% carbon and 14.3% hydrogen. If its vapour density is 42, determine molecular formula.
15. Calculate the mass of oxygen required for complete combustion of 11 g propane (C_3H_8).
16. Calculate the percentage composition of nitrogen in ammonium sulphate.
17. 10 g calcium carbonate is heated strongly. Calculate mass of CO_2 produced.
18. Calculate the number of water molecules present in 18 mL water.
19. 3.01×10^{23} molecules of a gas occupy what volume at STP?
20. Calculate the molarity of commercially available concentrated HCl containing 38% HCl by mass and density 1.19 g mL^{-1}.

Chapter 2: Structure of Atom

1. Calculate the energy of one mole photons of radiation having wavelength 300 nm.
2. Calculate the wavelength associated with an electron moving with velocity 1.5×10^7 m/s.
3. Calculate the frequency and energy of radiation having wavelength 250 nm.
4. An electron is moving with velocity 2.2×10^6 m/s. Calculate its de Broglie wavelength and momentum.
5. Calculate the number of waves made by a radiation of wavelength 540 nm in 1 second.
6. Calculate the energy required to remove an electron from first Bohr orbit of hydrogen atom.
7. Find the maximum number of electrons possible in n = 4 shell, p-subshell and d-subshell.
8. Calculate the wavelength of photon emitted when electron transition occurs from n = 3 to n = 2 in hydrogen atom.
9. Calculate the energy difference between second and third Bohr orbit of hydrogen atom.
10. Calculate the frequency of radiation whose photon energy is 4.4×10^{-19} J.
11. The wavelength of a photon is 400 nm. Calculate its momentum.
12. Calculate the uncertainty in position of an electron if uncertainty in velocity is 5.7×10^5 m/s.
13. Calculate the angular frequency of radiation whose wavelength is 600 nm.
14. A photon and an electron have same wavelength. Which has greater momentum? Justify mathematically.
15. Calculate the total number of orbitals present in fourth shell.
16. Calculate the shortest wavelength present in Balmer series of hydrogen spectrum.
17. Calculate the ionization energy of hydrogen atom in kJ mol^{-1}.
18. An electron possesses kinetic energy 3.0×10^{-18} J. Calculate its wavelength.
19. Calculate the radius of second Bohr orbit of hydrogen atom.
20. Calculate the energy emitted when electron moves from n = 5 to n = 2 in hydrogen atom.

Lab manual (Evergreen practical)

1.Preparation of standard solution of oxalic acid
2.Preparation of standard solution of sodium carbonate
3.Titration of hydrochloric acid against sodium carbonate
4.Titration of sodium hydroxide against oxalic acid
5.Identification of acidic basic radicals in salt
6.Identification of acidic basic radicals in salt
7.Identification of acidic basic radicals in salt

Project file on any one topic

1.PRESENCE OF PESTICIDES IN FRUITS AND VEGETABLES
2.PREPARATION OF SOYBEAN MILK AND ITS COMPARISON WITH NATURAL MILK
3.PREPARATION OF AN ALUM FROM SCRAP ALUMINIUM
4.COMPARISON OF THE RATE OF FERMENTATION OF GIVEN SAMPLE OF WHEAT FLOUR , GRAM FLOUR AND POTATO USING YEAST

BIOLOGY

Assignment 1: Cell - The Unit of Life

Subject: Biology | Class: XI

What is cell theory? Who modified the hypothesis of Schleiden & Schwann?

Name a membraneless cell organelle, largest isolated animal cell, and longest animal cell.

What are the main components of a Prokaryotic cell? Where do you find plasmids? Give the significance of a plasmid.
In a typical prokaryotic cell, explain the structure and function of each of the following:
(i) Plasma membrane
(ii) Capsule
(iii) Mesosomes
(iv) Flagellum
(v) Pili and fimbriae
Why do we call the cell membrane dynamic, fluid, and semi-permeable?
"Fluid-mosaic model of cell membrane" was given by Singer-Nicolson. Explain the structure with a labelled diagram.
Why does the Golgi apparatus remain in close association with the E.R.?
Name the various types of vacuoles found in cells. Also mention the function of each.
With the help of a diagram, explain the structure of Mitochondria.
Classify the types of Plastids found in plant cells. Name the pigments present in chloroplasts.
What do you understand by 'Cartwheel' like structure? Draw a well-labelled diagram also.
Give a brief account of nucleosome and nuclear pore.
Why does the nucleus have an envelope around it? What are the principal roles of the nucleus?
Name the primary constriction present in every chromosome.
Identify various types of chromosomes based on the position of the centromere.

Assignment 2: Cell Cycle & Cell Division
Subject: Biology | Class: XI
Define genome & cell cycle. What are the 2 basic phases of the cell cycle?
What is karyokinesis and cytokinesis? What are the three phases of interphase? Explain.
What is the significance of the G_o stage of the cell cycle?
With the help of diagrams, describe various events of different phases of mitosis.
Why is mitosis called equational division?
How does cytokinesis in a plant cell differ from that in an animal cell?
What is the significance of mitosis?
Can there be mitosis without DNA replication in 'S' phase?
List the key features of meiosis and define meiosis. Draw stages of meiosis I & II.
Describe the following: (a) homologous chromosomes (b) synapsis (c) bivalent (d) chiasmata. Draw a diagram to illustrate your answer.
List the features of: anaphase I, metaphase I, telophase I.
What are the differences between: metaphase I & metaphase of mitosis; anaphase I & anaphase of mitosis? Give the significance of meiosis.

Assignment 3: Biological Classification (MCQs)
Subject: Biology | Class: XI
1. Osmoregulation in Paramecium is a function of:
(a) Contractile vacuole (b) Trichocysts (c) Cytopyge (d) Cytostome
2. Fungi imperfecti includes:
(a) Aspergillus and Penicillium (b) Alternaria and Trichoderma (c) Ustilago and Puccinia (d) Alternaria and Penicillium

3. Which of the following is a non-hyphal unicellular fungus?
(a) Yeast (b) Puccinia (c) Ustilago (d) Alternaria
4. Auxospores and homocysts are formed, respectively by:
(a) Several diatoms and a few cyanobacteria (b) Several cyanobacteria and several diatoms (c) Some diatoms and several cyanobacteria (d) Some cyanobacteria and many diatoms
5. HIV is classified as a retrovirus because its genetic information is carried in:
(a) DNA instead of RNA (b) DNA (c) RNA instead of DNA (d) Protein coat
6. Identify the fungal group based on these statements: Mycelium is branched/septate, asexual spores generally not formed, vegetative reproduction by fragmentation, sex organs absent but somatogamy occurs, karyogamy/meiosis in basidium to form four spores.
(a) Sac fungi (b) Bracket fungi (c) Imperfecti fungi (d) Club fungi
7. Aristotle classified plants based on morphological characters into:
(a) Trees, shrubs and herbs (b) Algae, bryophytes, pteridophytes, gymnosperms and angiosperms (c) Embryophytes and tracheophytes (d) Algae and embryophytes
8. Citrus canker is a:
(a) Viral disease (b) Bacterial disease (c) Fungal disease (d) Protozoan disease
9. Which is correct?
(a) RNA is genetic material of bacteria (b) RNA is genetic material of all virus (c) DNA is genetic material of some organism (d) Some virus has RNA as genetic material
10. African sleeping sickness is caused by:
(a) Trypanosoma (b) Leishmania (c) Latimeria (d) Plasmodium
11. Select the correct option regarding bacteria:
(a) Simple in structure but complex in behavior (b) Complex in structure but simple in behavior (c) Simple in both structure and behavior (d) Complex in both structure and behavior
12. Which of the following is a Gram negative bacterium?
(a) Escherichia coli (b) Bacillus subtilis (c) Streptomyces coelicolor (d) Amycolatopsis orientalis
13. Virus consists of:
(a) Nucleic acid (b) Protein (c) Both (A) and (B) (d) None of these
14. Parasitic and saprophytic conditions are more familiar in:
(a) Fungi (b) Bacteria (c) Algae (d) Ferns
15. Bacteriophage releases lysozyme during:
(a) Penetration phase (b) Eclipse phase (c) Absorption phase (d) Maturation phase
16. Cladonia rangiferina is a/an:
(a) Algae (b) Lichen (c) Fungus (d) Angiosperm
17. According to five kingdom classification bacteria belong to:
(a) Protista (b) Monera (c) Plantae (d) Archaea
18. Which of the following is a free living nitrogen fixing bacterium present in the soil?
(a) Nitrosomonas (b) Rhizobium (c) Azotobacter (d) Pseudomonas
19. The genetic material of rabies virus is:
(a) Double stranded RNA (b) Single stranded RNA (c) Double stranded DNA (d) Single stranded DNA
20. All of the following fungi belong to Phycomycetes, except:
(a) Rhizopus (b) Mucor (c) Albugo (d) Agaricus

NOTE: 1. Complete all assignments neatly in your notebook.

2. Complete your lab manual and make a herbarium of medicinal plants.

MATHS

SETS

1. Write down all the subsets of the set {1, 2, 3}.
2. Draw appropriate Venn diagram for each of the following:

(a) $(A \cup B)'$

(b) $A - B$

3. Write the set A = {5, 25, 125, 625} in set-builder form.
4. A survey shows that 63% of Indians like cheese whereas 76% like apples. If x% of Indians like cheese and apples, find the value of x.
5. Using Venn Diagram prove that:

$A \cap (B - C) = (A \cap B) - (A \cap C)$.

6. Using properties of sets prove that $(A \cup B)' = A' \cap B'$.

Relations & FUNCTIONS

1. Draw the graph of the Greatest Integer function.
2. Draw the graph of the Constant function $f : R \rightarrow R$, $f(x) = 2\ \forall\ x \in R$. Also find its domain and range.
3. Draw the graph of the function $|x - 2|$.
4. Find the domain and range of $f(x) = \sqrt{(x^2 + 4)}$.
5. Find the domain and range of $f(x) = (x + 1)/(x - 2)$.

COMPLEX NUMBERS

1. Find the modulus and argument (principal value) of the complex number $z = -3 + 4i$.
2. If $z_1 = 2 - i$ and $z_2 = 1 + 3i$, find:

(i) $z_1 + z_2$

(ii) $z_1 - z_2$

(iii) z_1z_2

(iv) z_1/z_2

3. If $z = (3 - 4i)/(1 + 2i)$, express z in the form a + ib.
4. Find the square roots of $-4 + 4i$.
5. If $z = a + bi$ and $z - 1/z = 2i$, find the values of a and b.
6. Solve for $z \in C$: $z^2 + 4z + 13 = 0$.
7. If $z = x + iy$ is such that $(2 + i)z = 5 - 3i$, find x and y.
8. Prove that $(1 + i)^3 = -2 + 2i$.
9. If $z = 2 + I$, find $(z^3 - 3z^2 + 2z - 2)/(z - 1)$.

Maths Lab Manual

Complete the following Activities in your Lab Manual

To verify that For two sets A and B n(A× B)= pq and the total number of relations from A to B is 2^pq, where n(A)=p and n(B)=q

To very distributive law of three given non-empty sets A,B,C that is

$A \cup (B \cap C) = (A \cup B) (A \cup C)$

To distinguish between a Relation and a Function

To interpret geometrically the meaning of i and its integral part

Informatics Practices

Learn: Chapter 1,2,3

Solve the Unsolved questions of chapter 1, 2, 3 on notebook (given in book).
Practical File : Write the following Practicals in File
Program 1: WAP to find average of three numbers.
Program 2: WAP to calculate Simple Interest and Amount by inputting Principal, Rate and Time.
Program 3: WAP to convert the time inputted in minutes into hours and remaining minutes.

APPLIED MATHS

SETS

1. Write down all the subsets of the set {1, 2, 3}.
2. Draw appropriate Venn diagram for each of the following:
(a) $(A \cup B)'$
(b) $A - B$
3. Write the set A = {5, 25, 125, 625} in set-builder form.
4. A survey shows that 63% of Indians like cheese whereas 76% like apples. If x% of Indians like cheese and apples, find the value of x.
5. Using Venn Diagram prove that:
$A \cap (B - C) = (A \cap B) - (A \cap C)$.
6. Using properties of sets prove that $(A \cup B)' = A' \cap B'$.

Relations & FUNCTIONS

1. Draw the graph of the Greatest Integer function.
2. Draw the graph of the Constant function $f : R \to R$, $f(x) = 2 \ \forall \ x \in R$. Also find its domain and range.
3. Draw the graph of the function $|x - 2|$.
4. Find the domain and range of $f(x) = \sqrt{(x^2 + 4)}$.
5. Find the domain and range of $f(x) = (x + 1)/(x - 2)$.

Applied mathematics (Binary numbers)

1. Add the following binary numbers:
(i) 110101 + 11010011
(ii) 100110 + 01011101
(iii) 1111 + 11000
(iv) 10011 + 11001
(v) 1100111 + 111001
2. Subtract the following binary numbers using subtraction rules:
(i) 11011 from 11110
(ii) 10101 from 11000
(iii) 111000 from 1101101

Maths Lab Manual

Complete the following Activities in your Lab Manual

To verify that For two sets A and B n(A× B)= pq and the total number of relations from A to B is 2^pq, where n(A)=p and n(B)=q
To very distributive law of three given non-empty sets A,B,C that is
$A \cup (B \cap C) = (A \cup B) (A \cup C)$
To distinguish between a Relation and a Function
To interpret geometrically the meaning of i and its integral part

ECONOMICS

Topic: Collection of Data & Organization of Data

Section A – Collection of Data

Q1. Define data in Economics.

Q2. What is the difference between primary data and secondary data?

Q3. Give two examples of primary data.

Q4. Name any four sources of secondary data.

Q5. Explain direct personal investigation method.

Q6. What is indirect oral investigation?

Q7. What are mailed questionnaires?

Q8. State any two advantages of primary data.

Q9. State any two disadvantages of secondary data.

Q10. Differentiate between census method and sample method.

Q11. Why is accuracy important in data collection?

Q12. Explain the meaning of a questionnaire.

Q13. Mention any four qualities of a good questionnaire.

Q14. What is sampling?

Q15. Give any two advantages of sampling method.

Q16. What are the limitations of sampling?

Q17. Explain personal interview method in easy language.

Q18. Why should data be collected carefully?

Q19. Distinguish between qualitative data and quantitative data.

Q20. What precautions should be taken while collecting data?

Section B – Organization of Data

Q21. What is organization of data?

Q22. Explain classification of data.

Q23. What is tabulation?

Q24. State any two objectives of classification.

Q25. Differentiate between chronological classification and geographical classification.

Q26. What is a frequency distribution table?

Q27. Explain class interval with example.

Q28. What is meant by inclusive series?

Q29. What is exclusive series?

Q30. Differentiate between discrete series and continuous series.

Q31. Explain tally marks with example.

Q32. What are the advantages of tabulation?

Q33. Why is organization of data necessary?

Q34. Explain raw data and arranged data.

Q35. What is statistical table? Mention its parts.

Section C – Diagrammatic Presentation Questions

Q36. Draw a simple bar diagram using the following data:

Year	Students
2022	40

2023	55
2024	70
2025	85

Q37. Draw a multiple bar diagram from the following data:

Year	Boys	Girls
2022	40	35
2023	50	45
2024	60	55

Q38. Draw a pie chart using the following data:

Expenditure	Amount
Food	40
Education	25
Transport	20
Entertainment	15

Q39. Draw a percentage bar diagram from the following data:

Family	Food	Clothing	Education
A	50	30	20
B	40	35	25

Q40. Draw a histogram using the following frequency distribution:

Marks	Frequency
0–10	5
10–20	8
20–30	12
30–40	10
40–50	5

Activity Work

Collect data according to Topic

Collect data from at least 20 students.

Organize the data in tabular form.

Prepare frequency distribution table.

Draw one suitable diagram or graph.

Write conclusion in 4–5 lines.

Project File Guidelines (35–40 Pages)

Cover Page

Acknowledgement

Certificate

Index

Introduction

Objectives

Collection of Data
Organization of Data
Diagrams & Graphs
Findings
Conclusion
Bibliography

Submission Instructions

Complete all questions neatly.
Use A4 size sheets.
Maintain proper margins and headings.
Submit homework and project file before the deadline.

BUSINESS STUDIES

- Revise all the syllabus done in the month of April and May
- Solve the assignment shared in class group.
- Make a project on wholesale Market

Guidelines for the project

Visit to a whole market : vegetables/ fruits / flowers /grains/ garments
The students are required to observe the following:
a) Sources of merchandise
b) Local market practices
c) Any linked up businesses like transporters, packagers, money lenders, agents, etc
d) Nature of the goods dealt in
e) Types of buyers and sellers
f) Mode of the goods dispersed, minimum quantity sold, types of packaging employed
g) Factors determining the price fluctuations.
h) Seasonal factors (if any) affecting the business.
i) Weekly/ monthly non-working days.
j) Strikes, if any- causes thereof.
k) Mode of payments.
l) Wastage and disposal of dead stock.
m) Nature of price fluctuations, reason thereof.
n) Warehousing facilities available\availed.
o) Any other aspect.

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

1. The total length of the project will be of 15 to 20 pages.
2. The project should be handwritten and should be presented in a neat folder
3.The project report should be developed in the following sequence:
a) Cover page should include the title of the Project, student information, school and year.
b) List of contents.
c)Acknowledgements and preface (acknowledging the institution, the places visited and the persons who have helped).
d)Introduction.
e) Topic with suitable heading.

f) Planning and activities done during the project, if any.
g) Observations and findings of the visit.
h) Conclusions (summarized suggestions or findings, future scope of study).
i)Photographs (if any).

ACCOUNTANCY

- Prepare a project file on topic source documents in which atleast any 8 source documents should be pasted and explained.
- Learn all accounting terms and all types of account
- Solve following assignment s of accounting equation and journal entries.

Assignment for Accounting equation

Arvind had the following transactions. Use Accounting Equation to show the effect on his assets liabilities and capital and balance sheet:

(i) Invested capital in the business Rs. 200000 in Cash, Goods Rs 60000
(ii) Purchased securities (shares) for Rs. 75000 in cash.
(iii) Purchased a building for Rs. 90000, giving Rs. 50000 in cash and the balance through a loan.
(iv) Sold securities costing Rs. 10000 for Rs. 15000
(v) Brought scooter for office Rs. 28000 in cash.
(vi) Loan taken from bank Rs. 5000
(vii) Paid cash Rs. 2000 for loan and Rs. 300 for interest.
(viii) Paid cash for household expenses Rs. 300
(ix) Received dividend on securities for Rs 200 in cash.
(x) Sold goods Costing Rs 30000 at a profit of 7%. Paid 25% Cash immediately.
(xi) Salary paid Rs 5000 and salary outstanding Rs 3000.
(xii) Rent paid for Arvind house Rs 3000 from business.
(xiii) Goods purchased for cash Rs 30000 and for credit Rs 20000.
(xiv) Goods lost in an accident Rs 4000.
(xv) Cash deposit into bank Rs 3000.

Assignment for Journal entries

The following balances existed in the books of 'Vikas Stores' on April 1, 2024:
Assets: Cash Rs. 14200, Cash at Bank Rs. 1100; Stock Rs. 15500; Furniture Rs. 3750 and Debtors Rs. 12000 (Amar Rs. 4600; Kamal Rs. 5800 Chander Rs. 1600).
Liabilities: Creditors Rs. 3500 (Shashi Rs. 2000; Ravi Rs. 1500); Loan from Bank Rs. 5000.
Following transactions took places during April, 2024:
April 2 Supplied goods to Amar Rs. 2000.
3 Bought goods from Satish Chand for Rs. 4000 at a trade discount of 10% and cash Discount of 5%. Paid 60% amount immediately.
5 Received cash from Amar for Rs. 6500 (discount allowed Rs. 100).
6 Received a cash from Kamal for Rs. 5600 in full settlement of his account.
13 Received commission from Ankit Rs. 300.
15 Deposited into bank Rs. 1800 for cash sales.
16 Old newspapers sold for Rs. 20
18 Old furniture sold for Rs. 800
21 Purchased a typewriter for office use Rs. 8000

25 Amount deposited into bank Rs. 600

27 Purchased goods from Mohit for Rs. 1600 and paid him by cheque.

28 Sold half of the above goods at a profit of 25% on cost to Dinesh.

29 Goods costing Rs 10000 were destroyed by fire in Godown Rs 5000

30 Salary paid to Vishwas Rs 300.

Pass journal entries for above.

Marketing

● Revise all the chapters done in the month of April and May

●Prepare a practical file by collecting print advertisements and analysing the message conveyed in marketing of goods, services people, ideas, experience, events, places, properties, organisations and information. Suggest an alternative mode of communication to the firm and create an advertisement for the same.

Guidelines for project

●Your file should contain:

Cover Page, Certificate (if school gives),Acknowledgement, Index, Objectives of the project,Introduction of topic (theory)Case study / product analysis, Observation / findings, Conclusion, Bibliography

● The project should be handwritten with minimum 15-20 pages.

हिंदी ग्रीष्मावकाश गृहकार्य

प्रिय विद्यार्थियों,

ग्रीष्मावकाश केवल विश्राम का समय नहीं, बल्कि स्वयं को नई ऊर्जा, रचनात्मकता एवं ज्ञान से समृद्ध करने का अवसर भी है। अतः दिए गए कार्यों को रुचि, स्वच्छता एवं रचनात्मकता के साथ पूर्ण कीजिए।

प्रश्न – 1

कक्षा में पढ़ाए गए 'आरोह' एवं 'वितान' पुस्तक के पाठों को पुनः पढ़ें तथा उनके प्रश्नोत्तर याद करें।

प्रश्न – 2

अभिव्यक्ति और माध्यम

निम्नलिखित प्रश्नों के उत्तर लिखिए:

1. जनसंचार के प्रमुख माध्यम कौन-कौन से हैं?
2. प्रिंट माध्यम की प्रमुख विशेषताएँ लिखिए।
3. इलेक्ट्रॉनिक माध्यम के दो लाभ लिखिए।
4. संचार प्रक्रिया से आप क्या समझते हैं?

प्रश्न – 3

निम्नलिखित विषयों पर औपचारिक पत्र लिखिए:

1. विद्यालय में पुस्तकालय की नई पुस्तकें उपलब्ध करवाने हेतु प्रधानाचार्य को पत्र।
2. अपने क्षेत्र में बढ़ती गंदगी की समस्या के समाधान हेतु नगर निगम अधिकारी को पत्र।

प्रश्न – 4

निम्नलिखित विषयों पर रचनात्मक लेख लिखिए:

1. विद्यार्थियों के जीवन में अनुशासन का महत्व
2. प्रकृति संरक्षण : हमारी जिम्मेदारी

प्रश्न – 5

निम्नलिखित विषयों में से किसी एक विषय पर भाषण तैयार कीजिए:

1. ईमानदारी का महत्व
2. भारतीय संगीत की विशेषताएँ
3. सादगी और विनम्रता का महत्व

प्रश्न – 6

कला समेकित परियोजना कार्य

निर्देश:

विद्यार्थी निम्नलिखित विषयों पर कला समेकित परियोजना कार्य तैयार करें। परियोजना आकर्षक, हस्तलिखित एवं रचनात्मक होनी चाहिए। चित्र, चार्ट, पोस्टर, कोलाज आदि का प्रयोग अवश्य करें।

रोल नंबर	विषय
1 – 7	मुंशी प्रेमचंद
8 – 14	कृष्णा सोबती
15 – 21	मीराबाई
22 – 28	कबीर के पद

सामान्य निर्देश

- सभी कार्य अलग गृहकार्य फाइल में करें।
- कार्य स्वच्छ एवं सुंदर हस्तलेख में होना चाहिए।
- चित्रों एवं रंगों का उचित प्रयोग करें।
- समय पर कार्य पूर्ण करें।

नोट :

यूनिट–2 का पाठ्यक्रम याद कीजिए।

शुभकामनाएँ!

अपना अवकाश आनंदपूर्वक बिताइए और नियमित अध्ययन करते रहिए।

HISTORY

Learn and complete Chapter 1, 2,

Frame 15 Questions from each chapter and write in fair notebook.Also write ncert solutions in seperate A4 pages.

Art integration activity-

Make 2 writing tablets of Mesopotamian civilization by using wet clay. Carve the symbols using a sharp pencil or any other material as a stylus. Leave the tablet to dry. Paint the clay tablets.

Create an informational/Travel Brochure on Roman Civilization (location, important rulers, economy, society, religion, art, architecture, other achievements).

OR

Prepare a model of Colosseum showing its architectural features by using materials like wooden board, paper, colors, markers or paints, sugar cubes, tape etc.

Prepare a family tree of Mongols on A-3 size sheet.

Note: Students can paste or draw pictures.

Project Topics (Class XI)

1. Facets of Industrialization in sixteenth–eighteenth centuries
2. Crusades: causes; rationale; events; outcomes; Holy Alliance
3. Ancient Mesopotamia
4. Greek Philosophy and City States

5. Roman Civilization contributions
6. Renaissance Spirit: art, literature, sculpture, trading community, social fabric, philosophy, political values, rational thinking, existentialism
7. South/Central American Development
8. Schools of Thought – Realism, Humanism, Romanticism
9. Genghis Khan: piecing together the past
10. Slavery Realms in ancient, medieval, and modern world
11. Aborigines History – America / Australia
12. Modernization in Asia – China / Japan / Korea

Political Science

1. Current Affairs Scrapbook

Collect and paste any two political news articles related to:
* Elections
* Parliament
* Government policies
* International relations

(Write a 4–5 line summary for each article.)

2. Project Work

* The Project can be made on any of the topics given in the syllabus or any contemporary issues. * Students can use primary sources available in city archives, Primary sources can also include newspaper cuttings, photographs, film footage and recorded written/speeches. Secondary sources may also be used after proper authentication.
* Each student will present the research work in the Project File.

2.1 Project Layout Guidelines

* The project should be neatly handwritten on A4 sheets (approx. 3,500–4,000 words) and structured as follows:

1.Cover Page: Title of the project, Student Name, Roll No., School Name, and Academic Year.
2. Certificate of Authenticity & Acknowledgement
3. Index/Table of Contents
4. Introduction & Objectives: Relevance of the chosen topic.
5. Content/Body of the Project: Detailed analysis with subheadings, historical background, current relevance, and comparative data.
6.Visual Representations: Relevant newspaper clippings, mind maps, tables, or graphs.
7. Conclusion: Student's own reflection and learnings.
8. Bibliography: Sources used (NCERT textbook, websites, books, news channels).

2.2 Suggested Topics

1. Making of the Constitution.
2. Elections in India.
3. Working of the Indian Judiciary System.
4. Social Justice: Are ethics followed in Indian Politics
5. Human Rights Act and its gratification in India.

6. Political impact on Indian Legislation.
7. Election Commission of India and Electoral Roll and its revision.
8. Any contemparory issue.

Distribution of Marks

S.No.	Components	Marks Alloted
1.	Introduction/Overview	2
2.	Variety of Contents	3
3.	Presentation	3
4.	Conclusion	1
5.	Bibliography	1
6.	Viva-Voce	5
7.	Current Affairs Scrapbook	5
	Total	**20**

PHYSICAL EDUCATION

Complete your physical education practical file. You will include:-

1. Labelled diagram of field & equipment of any one game of your choice out of these:

(Athletics, Archery, Badminton, Boxing, Chess, Judo, Shooting, Skating, Swimming, Table Tennis, Taekwondo, Tennis, Aerobics, Gymnastic, Rope-Skipping, Yoga & Unified

Basketball(CWSN Divyang)

2. List of current National Awardees (Dronacharya Award, Arjuna Award & Rajiv Gandhi Khel

Ratan Award).

3. Pictorial Presentation of any five Asanas for improving Concentration.

Painting Practical

1. Still Life (5 Sheets)
• 2 in Watercolour
• 3 in Pencil Shading
Focus: Object arrangement with background drapery, understanding form, light, and shadow.
2. Landscape (5 Sheets)
• All 5 in Watercolour /poster colour /Acrylic
Focus: Nature study from life or references, use of perspective, sky treatment, foliage, water bodies.
3. Composition (5 Sheets)
• All 5 in Watercolour /poster colour/Acrylic
Focus: Imaginative scenes from life/nature with narrative or thematic value (must include figures, ideally 3), proper colour scheme and background.
4. Folk Art (4 Sheets)
• Medium: Watercolour / Poster Colour / Acrylic

Suggested Forms: Madhubani, Warli, Gond, Pattachitra, Kalamkari, etc.
Focus: Decorative elements, stylization, vibrant colours.
5. Pattern Design (2 Sheets)
• Based on Indian Folk Motifs
Focus: Basic design elements (line, shape, repetition, rhythm), neatness and creativity.
6. Tonal Value Chart (1 Sheet)
• Gradation from white to black in pencil, showing smooth value transitions.
7. Colour Theory (1 Sheet)
• Colour wheel, primary/secondary/tertiary colours, warm/cool colours, complementary colours, tints/shades.
8. Shading Techniques (1 Sheet)
• Hatching, cross-hatching, stippling, blending, scribbling, etc.
9. Indian Painting (1 Sheet)
• A work inspired by Indian miniature/mural painting styles (e.g., Mughal, Rajasthani, Pahari, Ajanta murals).
.
Summary Table
Type Number of Sheets Medium
-Still Life 5 2 Watercolour, 3 Pencil Shading
-Landscape 5 Watercolour
-Composition 5 Watercolour
-Folk Art 4 Watercolour / Poster / Acrylic
-Pattern Design 2 Open
-Tonal Value Chart 1 Pencil
-Colour Theory 1 Poster or Watercolour
-Shading Techniques 1 Pencil
-Indian Painting 1 Traditional Style

Music

Unit 2: History of Indian Music Forms

1. ध्रुपद, खयाल और तराना का संक्षिप्त इतिहास:

ध्रुपद: भारतीय शास्त्रीय संगीत की सबसे प्राचीन शैली है। यह गंभीर और भक्ति भाव से जुड़ी होती है।

खयाल: यह ध्रुपद के बाद विकसित हुआ और इसमें कल्पना (imagination) का अधिक महत्व है।

तराना: इसमें शब्दों के स्थान पर बोल (ना, ता, दिर, आदि) का प्रयोग किया जाता है और यह तेज लय में गाया जाता है।

Unit 3: Musical Elements and Musicians

1. नाट्य शास्त्र में संगीत के तत्व:
- स्वर, लय, ताल और राग

2. प्रमुख संगीतज्ञों का योगदान:

तानसेन: अकबर के दरबार के महान गायक, हिंदुस्तानी संगीत के विकास में महत्वपूर्ण योगदान।

पंडित विष्णु नारायण भातखंडे: संगीत को व्यवस्थित रूप में प्रस्तुत किया और थाट प्रणाली दी।

पंडित विष्णु दिगंबर पलुस्कर: संगीत शिक्षा को जन-जन तक पहुंचाया।

Unit 4: Taal Section

1. ताल का वर्णन और लिपि (notation):
- ठाह, दुगुन, चौगुन

2. प्रमुख ताल:
तीनताल (16 मात्राएं)
एकताल (12 मात्राएं)
चौताल (12 मात्राएं)

3. ताल की संरचना:
- मात्रा, विभाग, सम, ताली, खाली