AVB PUBLIC SCHOOL

SUMMER BREAK ASSIGNMENT

(2023-2024)

CLASS XI

English

Assignment

Do the following question in A 4 size sheets.

I. Read the following extract carefully and answer the questions that follow :

Some twenty—thirty—years later
She'd laugh at the snapshot. "See Betty
And Dolly," she'd say, "and look how they
Dressed us for the beach."
Questions:

    (a) Who would laugh at the snapshot after twenty—thirty years later?

    (b) How did mother remember her past?

    (c) Who were Betty and Dolly?

    (d) Identify the type of Poetic device used in these lines?

II Answer the following questions in 30 to 40 words.

Q1 Why did the grandmother feed dogs and birds in the village and then in the city? What did the habit tell about her nature?

Q2 .What conflicting thoughts passed through the narrator's mind on seeing Mourad on a beautiful White Horse early one morning?

III Answer the following questions in 120 to 150 words.

Q1. Happy moments are short-lived but provide a lifetime memory. They provide a cushion to bear the difficulties which the future has in store for you. Comment in the light of the Poem 'A Photograph' by Shirley Toulson.

Q2.Listening to the conscience helps one to do the right thing. Give your own view with reference to the chapter 'The Summer Of The Beautiful White Horse'.

IV Writing Skills

Q1. Research on Khushwant singh's life and works. Find out about the role of Khushwant singh's father in building Delhi.

Q2. Watch at least 1 English film .You may look at the following list for ideas and write review on it. a. Gandhi.

    b. The Sound of Music

    c. Life of Pi

    d. Interstellar

v Creative Corner

Q1. Write about an incident in the form of poetry that made you nostalgic about your childhood days.

Q2. Prepare a thought-provoking poster on the topic 'Stop Child Abuse'. Use catchy slogans and visuals.

Project Work

English Project Art Integrated Learning

Prepare a project within a word limit of 800-1000 Words according to your roll numbers on the themes given below.

Roll Numbers	Themes
1,13,25,37	Increasing Trend of Old Age Home in India (A Portrait of a Lady)
2,14,26,38	Generation Gap is An Evident Gulf (A Portrait of a Lady)
3,15,27,39	Transient Nature of Human Life (A Photograph)
4,16,28,40	Stages of life (A Photograph)

5,17,29,41	Adventure is The zest of Life (We're not Afraid to Die…it We Can All Be Together)
6,18,30,42	Traditions, Rituals and Funerary Practices must be Respected (Discovering Tut: The Saga Continues)
7,19,31,43	Scientific Intervention is Necessary to Unearth Buried Mysteries (Discovering Tut: The Saga Continues)
8,20,32,44	Knowledge about the past is useful to complete our knowledge we live in. (Discovering Tut: The Saga Continues)
9,21,33,45	Reality is what is directly experienced through the senses (The Adventure)
10,22,34,46	Transience of Natural Beauty (The Laburnum Top)
11,23,35,47	Ill effects of war on human beings (The Address)
12,24,36,48	Adolescence is losing innocence (The Childhood)

FOLLOW THE GIVEN GUIDELINES :

a. Interview-Based research:

Choose a topic according to your roll number and do the research and read the available literature.

- The student can conduct interviews with a few neighbours on the topic.
- Student will frame questions based on the preliminary research/background.
- The student will then write an essay/ write up / report etc. up to 1000 words on his/her research and submit it.
- The project will end with a presentation and subsequently a viva will be conducted.

b. Listen to podcasts/ interviews/radio or TV documentary on a topic and prepare a report countering or agreeing with the speaker in 800 - 1000 words.
    The project will end with a presentation and subsequently a viva will be conducted

c. One act play:
This will be a project which will be done as a team. Write a script in 800-1000 words which will involve planning, preparation and presentation. To write a script do a meaningful research, have healthy discussion with other members of the team and pen down the ideas in the form of a script which will lead you in successful production of the play. The project will end with a presentation and subsequently a viva.

The Project-Portfolio must include the following:
● Cover page, with title of project, school details/details of student.

● Statement of purpose/objectives/goals

● Certificate of completion under the guidance of the teacher.

- Action plan for the completion of assigned tasks.

- Materials such as scripts for the role play, questionnaires for interview, written assignments, essays, survey-reports and other material evidence of learning progress and academic accomplishment.

- The 800-1000 words essay/Script/Report.

- Student/group reflections.

- If possible, Photographs that capture the positive learning experiences.

- List of resources/bibliography.

PHYSICS (042)

Q1 Name three physical quantities having same dimensional formulae.

Q2 Pressure is defined as momentum per unit volume. Is it true? Explain using dimensional analysis.

Q3 Find the dimensions of Planck's constant. If its value in cgs system is 6.62 $\times 10^{-27}$ erg-sec, What will be its value on mks system ?

Q4 If the unit of force, energy and velocity are 20N, 200J and 5m/s, find the units of mass, length and time.

Q5 Check the dimensional consistency of the following equations.

(i) $W = 1/2 mv^2 - 1/2 mu^2$ (ii) $v = u + at$. Where symbols have their usual meaning.

Q6 What are the dimensions of a and b in the relation $F = at + bx$, where F is force and x is distance?

Q7 (i) Subtract 2.5×10^4 from 3.9×10^5 with due regard to significant figures.

(ii) Differentiate between accuracy and preciseness. Mention atleast three points in support of your answer.

Q8 Solve the following and express the result to appropriate number of significant figures.

$X = 4.69 + 0.0537 - 0.6872/1.9$

Q9 Answer the following

(i) Poor accuracy involves errors that can often be corrected, Do you agree?
(ii) A lack of precision is due to limitation of measuring instrument. Is it true?

Q10 Of the following, which measurement is most accurate and which one is most precise?

(i) 5.00mm (ii) 5.oocm (iii) 5.om (iv) 50.00m

Note : Everyone has to complete an art integrated project as discussed in the class

CHEMISTRY (043)

Q1.Determine the empirical formulas for compounds with the following percent compositions:

(a) 15.8% carbon and 84.2% sulfur
(b) 40.0% carbon, 6.7% hydrogen, and 53.3% oxygen

Q2.Calculate the mass percent of different elements present in sodium sulphate (Na_2SO_4).

Q3.Calculate the amount of carbon dioxide that could be produced when
(i) 1 mole of carbon is burnt in air.
(ii) 1 mole of carbon is burnt in 16 g of dioxygen.
(iii) 2 moles of carbon are burnt in 16 g of dioxygen.

Q4.Calculate the concentration of nitric acid in moles per litre in a sample which has a density 1.41 g mL-1 and the mass percent of nitric acid in it is being 69%.

Q5.In the reaction, A + B2——> AB2, identify the limiting reagent, if any, in the following mixtures
(i) 300 atoms of A + 200 molecules ofB
(ii) 2 mol A + 3 mol B
(iii) 100 atoms of A + 100 molecules ofB
(iv) 5 mol A + 2.5 mol B
(v) 2.5 mol A + 5 mol B

Q6.Dinitrogen and dihydrogen react with each other to produce ammonia according to the following chemical equation:(i) N2 (g) + 3H2(g) ——> 2NH3 (g)
(ii) Will any of the two reactants remain unreacted?
(iii) If yes, which one and what would be its mass?

Q7.Volume of a solution changes with change in temperature, then, will the molality of the solution be affected by temperature? Give reason for your answer.

Q8.Assertion (A): The empirical mass of ethene is half of its molecular mass. Reason (R): The empirical formula represents the simplest whole number ratio of various atoms present in a compound.
(a) Both A and R are true and R is the correct explanation of A.
(b) A is true but R is false
(c) A is false but R is true
(d) Both A and R are false.

Q9.Assertion (A): One atomic mass unit is defined as one-twelfth of the mass of one carbon-12 atom. Reason (R): Carbon-12 isotope is the most abundant isotope of carbon and has been chosen as standard.(a) Both A and R are the true and R is the correct explanation of A.
(b) Both A and R are true but R is not the correct explanation of A.
(c) A is true but R is false.

(d) Both A and R are false.

Q10.Calcium carbonate reacts with aqueous HC1 to give CaCl2 and C02 according to the reaction given below:

CaC03(s) + 2HCl(aq) → CaCl2(aq) + C02(g) + H2O(l)

What mass of CaCl2 will be formed when 250 mL of 0.76 M HC1 reacts with 1000 g of CaC03? Name the limiting reagent. Calculate the number of moles of CaCl2 formed in the reaction.

Q11. ART INTEGRATED PROJECT TOPICS:
a.) Chemistry in every day life
b.) Preparation of toilet soap
c.) Acidity in tea
d.) Impact of various kinds of fabrics
e.) Analysis of honey
f.) Rusting of iron
g.) Effect of heat on vitamin c in tomatoes
h.) Catalytic decomposition

BIOLOGY (044)

Q.1. Multiple Choice type questions:

1. Choose the correct option:

	CHROMOSOME		POSITION OF CENTROMERE
(A)	Metacentric	(i)	At the tip
(B)	Acrocentric	(ii)	Slightly away from the middle
(C)	Telocentric	(iii)	At the middle
(D)	Submetacentric	(iv)	Almost near the tip

(a) (A)-(i), (B)-(ii), (C)-(iii), D-(iv)   (c) (A)-(iii), (B)-(iv), (C)-(i), D-(ii)
(b) (A)-(iv), (B)-(iii), (C)-(ii), D-(i)   (d) (A)-(ii), (B)-(i), (C)-(iv), D-(iii)

2. Cilia and flagella both:
   (a) Have 9+2 arrangement of microtubules
   (b) Are protective structure of cells
   (c) Are only present in protozoa animals
   (d) Are outgrowth structures of cytoplasm

3. Which of the following cell organelles is present in the highest number in secretory cells?
   (a) Mitochondria   (c) Golgi Complex
   (b) Endoplasmic reticulum   (d) Lysosomes

4. The stage during which separation of the paired homologous chromosomes begin in:
   (a) Pachytene   (c) Diplotene
   (b) Diakinesis   (d) Zygotene

Q.2. Answer the following questions:

(i) Give reasons for the following:

(a) Golgi apparatus remains in close association with the endoplasmic reticulum.

(b) At a number of places the nuclear envelope is interrupted by minute pores.

(c) Chloroplast and mitochondria are called as semi-autonomous cell organelles.

(d) Some cells exit G1 phase to enter an inactive stage called quiescent stage.

(ii) Write the functions of the following:

   (a) Cytoskeleton   (c) Contractile Vacuole
   (b) Kinetochores   (d) Pili

(iii) Name the stage of cell cycle at which one of the following events occur:

   (a) Crossing over between homologous chromosomes
   (b) Chromosomes are moved to spindle equator
   (c) Formation of synaptonemal complex
   (d) Terminalisation of chiasmata

(iv) How do cytokinesis in plant cells differ from that in animal cells.

(v) Are the different types of plastids interchangeable? If yes, give examples where they are getting converted from one type to another.

(vi) Draw the cartwheel structure of the centriole.

Computer Science(083)

Note: Do all the questions in assignment notebook.

Q1   **Convert the following numbers. Show all your rough work**

(i)   Convert the Binary number 101011 to its Decimal equivalent.

(ii)   Convert $(11011.101)_2$ to decimal.

(iii)   Convert $(105.15)_{10}$ to binary

(iv)   Convert $(23.25)_8$ to decimal

(v)   Convert $(1E.8C)_{16}$ to decimal

(vi)   Convert $(11100.1010)_2$ to hexadecimal equivalent.

(vii)   Convert the Hexadecimal number $(10AF)_{16}$ to its Binary equivalent.

(viii) Convert the Hexadecimal number $(A42)_{16}$ to its Octal equivalent.

(ix)   Convert the Octal number $(762)_8$ to its hexadecimal equivalent

(x)   Convert the $(43)_{10}$ to is Binary number

Q2   **Define following gates and draw logic circuit diagram**

(a)   OR Gate

(b)   AND Gate

(c)   NOT Gate

(d)   NAND Gate

(e)   NOR Gate

Q3   **Prove by Boolean Algebra rules X (X + Y) = X**

Q4. Prove by Truth Table

(a)   X +X' Y = X + Y

(b)   AB +AC + ABC= AB+AC

Q5   **Construct a logic diagram for expression**

(a)   A. B + C

(b)   A. B + B.C

(c)   B. (A +C)

Q6   **Programming Section**

(a)   Write a program to calculate compound simple interest after taking the principle, rate and time.

(b)   Write a program to check the given year is leap year or not.

(c)   Write a program to take two numbers and check that the first number is fully divisible by second number or not.

(d)   Write a program to take the temperatures of all 7 days of the week and displays the average temperature of that week.

Q7   **ART INTEGRATION PROJECT**

Prepare a PowerPoint Presentation or Video Making   on "Use of Python Language in App Development".

Information Technology (802)

Note: Do all the questions in assignment notebook.

Q1 Hira wants to store values in a table but the command below is giving errors. Write correct MYSQL command for creating table.

CREATE employee (name VARCHAR, id INTEGER)

Q2 **Write complete MYSQL syntax for the following statements:**

(i) To create a database '' School"
(ii) To display all the tables, present in the data base "School"
(iii) To remove the data base "School"

Q3 **COMPETENCY BASED QUESTIONS**

(i) Ravi received a mail from IRS department on clicking "Click –Here", he was taken to a site designed to imitate an official looking website, such as IRS.gov. He uploaded some important information on it.
 Identify the cybercrime being discussed in the above scenario.
        i) Plagiarism   ii) Spam   iii) Cyber Theft   iv) Phishing

(b) An organization is planning to connect its new office in Delhi, which is more than 1250 km current location.
 Which type of network will be formed?
        i) LAN   ii) MAN   iii) WAN   iv) Internet

(c) =A3 is an example of
        i) Absolute address   ii) Relative address
        iii) Mixed address   iv) None of these

Q4 **Short Questions:**

(a) Which command is used to remove the data from table.

(b) Write query to add column DOB of datatype date in student table.

(c) Write query to remove the primary key constraint from Roll from student table

Q5 **Consider the given table EXAM and write SQL queries for the following:**

Table: EXAM

No.	Name	Stipend	Subject	Average	Division
1	Babita	400	English	15	FIRST
2	Silky	680	Maths	24	FIRST
3	Jyoti	500	Accounts	35	FIRST
4	Archana	200	IP	20	SECOND
5	Sugandha	400	History	10	THIRD
6	Suparna	550	Geo	5	THIRD
7	Ankit	400	History	10	THIRD

A) To list the names of those students, who have obtained Division as FIRST.
B) To display records listing NAME, SUBJECT for stipend between 400 to 800.
C) Remove the column division
D) To create a database by the name SCHOOL.

Q6 **ART INTEGRATION PROJECT**
Prepare a PowerPoint Presentation or Video Making   on "Use of RDBMS in Software Development " .

PHYSICAL EDUCATION

Note- Do all the questions in assignment notebook.

SHORT ANSWER TYPE

Q1. What is the fit India programme?
Q2. Mention the rules of ancient Olympic.
Q3. Write down the opening and closing ceremony of modern Olympic games.

LONG ANSWER TYPE

Q4. Features of Khelo India programme.
Q5. Explain the principle of olympism
Q6. What is the difference between IOA & IOC.

ART INTEGRATION PROJECT

Q7. Draw a map of career options in Physical Education On chart paper.

PRACTICAL FILE WORK

 Practical-1: Fitness tests administration. (SAI Khelo India Test)
 Practical-2: Anyone one IOA recognized Sport/Game of choice. Labelled diagram of Field & Equipment. Also mention its Rules, Terminologies & Skills.

Economics (030)

➤ **Do all the questions in an assignment notebook.**

  1) Multiple Choice Questions (MCQ)

    a) When the Percentage change in Quantity demanded is less than percentage change in price, elasticity of demand is :

      a. Less than unity

      b. More than unity

      c. Equal to unity

      d. None of the above

   b) The statistical study begins with collection of data and ends with:

      a. Organization of Data

      b. Analysis of Data

      c. Interpretation of Data

      d. Presentation of Data

  c) The survey which helps in pre-testing the questionnaire is called_____.

  d) NSSO provides periodic estimates of-:

      a. Literacy and utilization of educational services

      b. Employment and Unemployment

      c. Manufacturing and service sector enterprises

      d. All of these

  2) Distinguish between increase in demand and increase in quantity demanded of a commodity.

  3) When price of a good is Rs.13 per unit ,the consumer buys 11 units of that good. When price rises to Rs 15 per unit , the consumer continues to buy 11 units. Calculate price Elasticity of Demand.

  4) Explain the effect of the following on Price Elasticity of Demand of a commodity:

      a. Number of substitutes

      b. Nature of commodity

  5) When price of a good is Rs.7 Per Unit a consumer buys 12 units .When Price falls to Rs.6 per unit , he spends Rs.72 on the good .Calculate Price Elasticity of Demand by using Percentage method.

  6) Write any four methods of collecting primary data .Explain any one method along with its two merits and demerits.

  7) "Statistics are figure, but all figures are not statistics". Justify the statement.

➤ **Prepare an art integration project on any one of the following topics as discussed in class-:**

    a. Demonetization

    b. Collection of Data

    c. Government Budget

    d. Goods and Services Tax (GST)

    e. Demand and Elasticity of Demand

BUSINESS STUDIES (054)

Q1. Answer the following questions:

1) Which of the following cannot be classified as an auxiliary to trade?
   (A)   Mining (B) Insurance (C) Warehousing (D) Transport.

2) **Assertion (A):** Business represents exchange of Goods and Services.
   Reason (R): Risk and Uncertainties are always there with any form of business.
   (A) Both A and R are true. R is the correct explanation of A
   (B) Both A and R are true, but R is not the correct explanation of A
   (C) A is correct, but R is incorrect
   (D) A is incorrect, but R is correct

3) Classify the following into business, profession and employment.
   i.   Hari sells mobile phones on behalf of his employer.
   ii.   It requires minimum academic qualifications.
   iii. A hawker sells toys for children outside a function.
   iv.   Manish is the advocate of High Court.

Q2. Why does business need multiple objectives? Explain any five such objectives.

Q3. State the important privileges available to a private company.

Q4. Explain the difference between Industry, Trade and Commerce.

Q5. In which form of a trade organisation is a trade agreement made by one owner binding of the others? Give reasons to support your answer.

Q6. Ranbaxy Associates is a reputed partnership firm located at New Delhi. Firm provides different professional services related to legal matters to its clients. As per the annual report of the firm, there is a partner enjoying a specific portion of profit but no information about the partner is available on record. State the type of partner with undisclosed personal information mentioned in the above case.

Q7. Mrs. Bindu started a voluntary association of 10 peoples, who are also consumers. She collected the capital by selling shares to members and opened a retail shop so that they can eliminate middlemen and get the goods at low price.

(a) State the type of organisation mentioned in above case.

(b) State different features of the type of organisation identified in part (a).

Q8. Farhan, a young man, wants to provide employment to the local people of his village. He decided to do the wholesale business of mobile phones made by the latest technique. But so many questions began to crop up in his mind: how will the goods be brought from distant places, how will the finance be arranged, and how will the information on his modern business be conveyed to the people? He consulted a business expert, Mr. Balram who gave him information on the auxiliaries to trade, which could solve his problem. Farhan understood what the expert told him. He employed 50 workers and started his business.
(a) Which economic activity is Farhan going to do ?
(b) On which part of business was the information given to Farhan by the business expert ?
(c) Explain the auxiliaries to trade which may solve the problem of Farhan , as suggested by the business expert.

SUBJECT - ACCOUNTANCY (055)

* LEARN AND WRITE ALL THE QUESTIONS IN ASSIGNMENT NOTE BOOK.

Q 1 a) Which of the following is not a business transaction?

      a. Bought furniture of ₹ 10,000 for business

      b. Paid for salaries of employees ₹ 5,000

      c. Paid son's fees from her personal bank account ₹ 20,000

      d. Paid son's fees from the business ₹ 2,000

 b) Which qualitative characteristic of accounting information is reflected when accounting information is clearly presented?

      a. Understandability b. Relevance c. Compatibility d. Reliability

 c) M/s S Ltd. has invested Rs. 10,000 in the shares of Reliance industries Ltd. Current market value of these shares is Rs. 10,500. Accountant of S Ltd. wants to show Rs. 10,500 as value of investment in the books of accounts, which accounting convention restricts him from doing so?

      (A) Full Disclosure (B) Consistency (C) Conservatism (D) Materiality

 d) As per income Tax Act, accounting period is

      (A) From 1st Jan to 31stDec   (B) From 1st April 1 to 31st March

      (C) From 1st July to 30th June   (D) From Diwali to Diwali

Q 2   Distinguish between :

Debtors and Creditors

Profit and Gain.

Q 3   Define different external and internal users of accounting information?

Q 4   Explain each of the following accounting terms with the help of an appropriate example:

      a) Fixed assets b) Revenue c) Expenses d) Short-term liability e) Capital

Q 5   Enumerate the following concepts of Accounting:

      (A) Business Entity Concept   (B) Matching Concept

      (C) Accounting Period Concept   (D) Historical cost concept

Q 6   State Double Entry Book Keeping system of Accounting. Define any five advantages of this system of Accounting.

Q 7   Give three examples of each of the following:

- Fictitious Assets b) Intangible Assets c) Capital Expenditure

Q 8   "Capital is the liability for the business." Explain this statement with the Principle applied.

:

Prepare an Art integrated project from the following topics:

* Carrer in Commerce

* Different Accounting Terms

* Advantages of Accounting

* Different accounting Concepts

MATHEMATICS (041)

❖ <u>**Write down all the questions in your respective notebooks:**</u>

Q1. Multiple choice questions (MCQs):

(A) Let A = {1, 2, 3, 4 ....10} and B = {2, 4, 6, 8, 10}. The value of A – B is equal to
1) {2, 4, 6, 8, 10}
2) {1, 5, 7, 8, 9}
3) {1, 3, 5, 7, 9}
4) None

(B) Which of the following is NOT the Function?

1) R = {(2,1), (3,1), (4,1), (5,1)}
2) R = {(1,5), (1, 6)}
3) R = {(2,4), (1,5), (2,7)}
4) R= {(2,2), (3, 3), (1, 1), (-1,1), (2, 4)}

(C) Which of the following are null sets?

1) Set of even natural numbers divisible by 2.
2) Set of even prime numbers.
3) Set of lines parallel to x – axis.
4) {X: X is a natural no, 5< x < 6}.

(D) Let A = { 1 , 2, {3, 4}, 5} . Which of the following statements are incorrect and why?

1) {3, 4} ϵ A
2) {{3 , 4}} ϵ A
3) {1,2,5} $\subset$ A

Q2. How many numbers of subsets are there if the set B = {1, 2, 4}? Write down the subsets.

Q3. Let A = { 1, 2 , 4, 5} , B = {2 , 3, 5, 6} and C = { 4 , 5 , 6 , 7}. Verify the following:

  I.   A∪ (B ∩ C) = (A∪ B) ∩ (A ∪ C)
  II.   A∪ (B − C) = (A∪ B) − (A ∪ C)

Q4. If f(x) = x2 – 3x + 4, then find the value of x satisfying the equation f(x) = f(2x+1).

Q5. If f(x) = 1/ 1 – x, show that f[f{f(x)}] = x.

Q6. Find the domain and range of the following functions:

  I.   F(x) = $\sqrt{25 - x^2}$
  II.   F(x) = |x - 1|

Q7. Let f(x) = 2x + 5 and g(x) = x² + x. Describe

  I.   f + g
  II.   fg
  III.   f-g
  IV.   f/g

Find the domain in each case.

Q8. Make an Art Integrated project on the following:

- **sets**
- **relation**
- **function**
- **introduction of trigonometric function.**