SD DAV PUBLIC SCHOOL, JAMTARA

Summer Vacation Assignment (2026-27)

Class: - XII commerce

SUBJECT: ENGLISH

Reading Portion

1. Download five reading passages and do them in the copy

2. Read the English newspaper, collect the new words and use them in your own sentences.

Literature Portion

Q1. "I've plenty of time. I'll learn it tomorrow. And now you see where we've come out."
What does M. Hamel mean to convey through these lines? (40-50 words)

Q2. We miss a thing when we are in fear of losing it. Substantiate this statement with two examples from 'The Last Lesson', how the people in the story suddenly realised how precious their language was to them. [40-50 Words]

Q3. What was the 'thunderclap' the narrator received as Hamel began the lesson? [40-50 Words]

Q4. Explain the inference that can be drawn from the line : "Will they make them sing in German, even the pigeons?"

Q5. It is said that the 'Face is a mirror of one's emotions.' Why did the poet 'smile and smile'? [40-50 Words]

Q7. Write a paragraph focusing on how the poems 'Keeping quiet' and 'My Mother at Sixty-six' illuminate different facets of human introspection and the significance of quiet reflection in understanding oneself.

Q8. Explain : 'late winter's moon'

Q9. Charlie's desperate attempt to find the third level reflects his frustration with the modern world. What aspects of the modern world have led to Charlie's frustration?

Writing Skill

1. **You are Asma/Ashish, the head girl/boy of XYZ international school. Your school is going to publish the annual magazine next month. Write a notice for the notice board of your school inviting students to submit write-ups.**

2. You are Sanjay / Sanajana, of class 12, the President of the Drama club at St John's School, Amritsar. Prepare a notice in 50 words inviting entries for various roles for an upcoming inter-school drama competition.

Project: Make a pictorial flow chart on the chapter "Lost Spring" hunting for the biography of the writer, justification of title, character sketch of the protagonists, theme and message of the chapter, cause of child labour, ways to eliminate the child labour and conclusion.(it should be in the file)

SUBJECT: ACCT.

Solve the following questions-

1. Under which schedule of the companies act the balance sheet has been framed?

2. Write down the major heading and sub headings of the following items

Loose tools, plant and machinery, share for forfeiture, calls in advance, call in arrears

Bills payable, cash in hand, debtors, bank balance, debentures, Bond.

3. What do you mean by trend analysis?

4. What do you mean by the solvency ratio explain different type of ratios.

5. The current assets of a firm is 250000 and current liabilities are 150000 find out the current ratio and quick ratio if the inventory is 10000.

6. The current ratio of a firm is 2:1. Find out whether the following transaction will increase, decrease, or no change the ratio:

i) purchase of goods on credit

ii) converted the shares into debentures

iii) sale of goods at par

iv) paid to trade payable

7. What you mean by the proprietory ratio? Write down its formula and explain its relevance.

8. The net profit after interest and tax is 1000000. There are 6% debentures of 100000.

The tax rate is 20% find out the interest coverage ratio.

9. The total assets of a firm are 5 lakh rupees and the total debs are rs 2 lakh rupees find out total asset to debt ratio.

10. What you mean by comparative statement? Explain its relevance with proper format.

SUBJECT: BST

Project on principles of management given by Henry feyol and Frederick winslow traier

Following the core contents and prepare a detailed statements of case studies.

SUBJECT: Applied Maths

Differentiation

1. Find $\frac{dy}{dx}$ from the following

   i. $x^3+y^3=3axy$ ii. $e^{xy}-axy=a$

   iii. $3x^3-5x^2y+2xy^2+4y^3=0$ iv. $x^{1/3}+y^{1/3}=a^{2/3}$ v. $x=y\log(xy)$

2. Find $\frac{dy}{dx}$ from the following parametric equations

   i. $x=at\ ,\ y=\frac{a}{t}$ ii. $x=t\cdot\log t\ ,\ y=\frac{\log t}{t}$

   iii. $x=\frac{a(1-t^2)}{1+t^2}\ ,\ y=\frac{2bt}{1+t^2}$

3. Find $\frac{dy}{dx}$ from the following equations

   i. $x^y=y^x$ ii. $x^y=e^{x-y}$

   iii. $(x-y)e^{x/(x-y)}=7$ iv. $y=x^{\log x}$

4. Find $\frac{d^2y}{dx^2}$ from the following

   (i) $y=x\log x$ (ii) $y=x^2e^x$

   (iii) $y=\log(\log x)$ (iv) $y=3e^{2x}+2e^{3x}$

5. If $x\sqrt{1+y}+y\sqrt{1+x}=0$, show that $(1+x^2)\frac{dy}{dx}+1=0$.

6. If $y^{1/m}+y^{-1/m}=2x$ then prove that $(x^2-1)y_1^2=m^2y^2$.

7. If $y=\log\left(x+\sqrt{a^2+x^2}\right)$, show that $(a^2+x^2)y_2+xy_1=0$.

8. If $y=\left(x+\sqrt{x^2+1}\right)^p$, prove that $(x^2+1)y_2+xy_1-p^2y=0$.

Matrices

1. Complete the following table.

Order of the matrix

A	B	A±B	AB
2 × 2	2 × 2		
2 × 3	3 × 2		
3 × 4	4 × 1		
3 × 3	3 × 3		
2 × 3		2 × 3	
	3 × 2		1 × 2
2 × 3		2 × 3	
1 × 3	3 × 2		

2. For $A=\begin{bmatrix} 6 & -5 \\ -7 & 4 \end{bmatrix}$, $B=\begin{bmatrix} 1 & -3 \\ -2 & 4 \end{bmatrix}$ and $C=\begin{bmatrix} -2 & 1 \\ 3 & -1 \end{bmatrix}$, show that
   i. Commutative property does not hold true for multiplication of matrices A and B i.e. $AB \neq BA$
   ii. Associative property holds true for multiplication of three matrices, i.e. $A(BC)=(AB)C$

3. Consider $A=\begin{bmatrix} 1 & 3 & 4 \\ -2 & 1 & 2 \\ 3 & -2 & 1 \end{bmatrix}$ verify the A.I = I.A=A, where I is the identity matrix of order 3×3

4. If $A=\begin{bmatrix} 1 & -3 \\ -2 & 4 \end{bmatrix}$ and $B=\begin{bmatrix} 2 & -4 \\ -1 & 3 \end{bmatrix}$ then show that
   i. $(A+B)'=(A)'+(B)'$
   ii. $(AB)' = (B)'(A)'$

5. Do as directed
   i) For $A=\begin{bmatrix} 6 & -5 \\ -7 & 4 \end{bmatrix}$, find $A^2 - 6A$
   ii) Evaluate $\begin{bmatrix} 2 & 1 & 3 \end{bmatrix}\begin{bmatrix} -1 & 0 & -1 \\ -1 & 1 & 0 \\ 0 & 1 & 1 \end{bmatrix}\begin{bmatrix} 1 \\ 0 \\ -1 \end{bmatrix}$
   iii) Find a matrix A such that $\begin{bmatrix} 1 & 2 & -1 \\ 0 & 4 & 9 \end{bmatrix} = \begin{bmatrix} 9 & -1 & 4 \\ -2 & 1 & 3 \end{bmatrix} - A$
   iv) If the matrix $X=\begin{bmatrix} -1 & 5 \\ 0 & 13 \end{bmatrix}$ is equal to the matrix $Y=\begin{bmatrix} p-q & 2p+r \\ 2p-q & 3r+s \end{bmatrix}$ then find value of p, q, r and s.
   v) Let $P=\begin{bmatrix} 2 & -1 \\ 3 & 1 \end{bmatrix}$ and $Q=\begin{bmatrix} 1 & 4 \\ 7 & 2 \end{bmatrix}$ then calculate 3P-2Q.

6. If $A=\begin{bmatrix} 8 & 0 \\ 4 & -2 \\ 3 & 6 \end{bmatrix}$ and $B=\begin{bmatrix} 2 & -2 \\ 4 & 2 \\ -5 & 1 \end{bmatrix}$, then find a matrix C, such that $3A - 2B + 4C = 0$

7. Given $A=\begin{bmatrix}1 & -1 & 0\\ 2 & 3 & 4\\ 0 & 1 & 2\end{bmatrix}$, $B=\begin{bmatrix}2 & 2 & -4\\ -4 & 2 & -4\\ 2 & -1 & 5\end{bmatrix}$, find:

   i. 2A – 3B
   ii. AB
   iii. BA
   iv. AB - BA

8. For $A=\begin{bmatrix}1 & 2 & 3\\ 3 & -2 & 1\\ 4 & 2 & 1\end{bmatrix}$ show that $A^3 - 23A - 40\ I = O$, where I is an identity matrix of order 3, and O is zero matrix

9. Two booksellers A and B sell the textbook of Mathematics and Applied Mathematics. In the month of march, bookseller A sold 250 books of Mathematics and 400 books of Applied Mathematics whereas bookseller B sold 230 books of Mathematics and 425 books of Applied Mathematics. In the month of April, bookseller A sold 550 books of Mathematics and 300 books of Applied Mathematics and bookseller B sold 270 books of Mathematics and 450 books of Applied Mathematics.
   Represent the given information into matrix form and find the total sale for both the booksellers in the month of March and April, using matrix algebra.

10. Cost of a pen and a notebook are Rs.12 and Rs. 27 respectively. On a given day, shopkeeper P sells 5 pens and 7 notebooks, whereas shopkeeper Q sells 6 pens and 4 notebooks on a particular day. Find the income of both the shopkeepers, using matrix algebra

1. Mr. X and Mr. Y have net worth of ₹ 1.93 crores INR and -0.22 crores INR. Represent the above information in the form of inequality.
2. Two players: Player A and Player B are playing a game by rolling a dice. They decided that the player who will get the higher total will be the winner. In total they rolled the dice three times and the observations were recorded as follows:

PLAYER A	2	5	1
PLAYER B	1	4	6

Answer the following questions on the basis of the information given above:

a) Who is winner of the game.

b) Represent the above information as numerical inequality.

3. Solve: $4x - 2 < 8$, when $x \in Z$
4. Show that the numbers 16 and 4, satisfy the numerical inequality AM $\geq$ GM.
5. Solve the following inequality:

(i) $(-2 \text{ z } -6) < 10$

(ii) $2a < a - 4 \leq 3a + 8$

(iii) $\frac{(y-1)}{3} + 4 < \frac{(y-5)}{5} - 2$

6. Prove that the following inequality holds true:

$$\sqrt{5} + \sqrt{3} > \sqrt{6} + \sqrt{2}$$

7. Satyarth and Swarit are brothers, Satyarth owns a house which is worth ₹ 3 crores and Swarit owns a farmhouse which is worth ₹ 2.75 crores. But Satyarth has a debt of ₹ 55 lakhs, if they both sell their properties then which of the following statement(s) holds true to represent the above data mathematically:

a) Satyarth's net worth is more than Swarit's net worth.

b) Swarit's net worth is more than Satyarth's net worth.

c) $2.55 < 2.75$

8. Insert the appropriate sign of inequality:

$\sqrt{3}(\sqrt{50} - \sqrt{32})$ _____ $3\sqrt{54} + 2\sqrt{24}$

9. If a and b are positive integers and $\frac{a-b}{6.25} = \frac{8}{2.5}$

(i) $b > a$

(ii) $b < a$

(iii) $b = a$

(iv) $b \geq a$

10. If $p > q$ and $r < 0$, then which of the following is true?

(i) $pr < qr$

(ii) $p - r < q - r$

(iii) $p + r < q + r$

(iv) None of these

SUBJECT: ECO

1. Define **National Income**.
2. What is **GDP at market price (GDPmp)**?
3. Define **Net National Product (NNP)**.
4. What is meant by **depreciation**?

5. Define **factor income**.
6. What is the difference between **stock and flow**?
7. What is **intermediate consumption**?
8. Define **final goods**.
9. Differentiate between **GDP at market price and GDP at factor cost**.
10. Explain the **income method** of calculating national income.
11. Explain the **expenditure method**.
12. What precautions should be taken while calculating national income?
13. Distinguish between **nominal GDP and real GDP**.
14. What are the **components of final expenditure**?
15. Explain the problem of **double counting**.
16. Explain the **value added method** with steps.
17. Calculate national income from given data (numerical-based question).
18. Explain the **circular flow of income** in a two-sector economy.
19. Describe the **limitations of GDP as a measure of welfare**.
20. Explain the difference between **domestic income and national income** with formula.

PROJECT WORK

1. Contemporary Employment situation in India.

OR

2. Organic farming.

SUBJECT: IP

1. " Prepare a practical file of highlighted part in PDF sent in the group
2. Write the notes of Networking sent in the group in your cw copy

SUBJECT: PHY. EDU.

Case Study Question

1.**Clubs.**	**Matches**	**Won.**	**Drawn.**	**Lost**	**Points**
ATK Mohun Bagan.	20	10.	7.	3.	37
Bengaluru FC	20.	8	5.	7	29
Chennaiyin FC	20	. 5	5	10.	20
FC Goa.	20	4	7	9	19
Hyderabad FC.	20	11	5	4	38
Jamshedpur FC	20	13	4	3	43
Kerala Blasters FC.	20	9	7	4	34
Mumbai City FC.	20	9	4	7	31
NorthEast UFC	20	3	5	12	14
Odisha FC	20	6	5	9	23
SC East Bengal	20	1	8	11	11

a. Based on the table given above place the teams according to their ranking

b. List down two advantages of this kind of tournament

c. Write down the formula for calculating points

2. XYZ School is conducting an invitation tournament in which 25 teams have sent their entries. Matches have to be conducted on a knockout basis.

a. How many total matches will be played?

b. How many matches will be played in the first round of the tournament?

c. How many rounds will be played?

d. Which team will get 4th bye of the tournament?

Art Integration

1. Prepare a report on the Annual Sports Day of your school for publishing in a National daily.

2. Your School is hosting CBSE Regional Sports Meet. Plan and present a Folk Dance for the Opening Ceremony.