SD DAV PUBLIC SCHOOL, JAMTARA

Summer Vacation Assignment (2026-27)

Class: - X

SUBJECT: ENGLISH

Reading & Critical Thinking
1. Passage Analysis (Do 3)
Choose any 3 unseen passages (from book/newspaper/magazine):
For each passage:
Write a title
Identify:
Theme
Tone (e.g., optimistic, critical, humorous)
Write a summary (100 words)
Frame 5 MCQs based on the passage
2. Letter Writing (Any 2)
a. Letter to the Municipal Corporation about garbage disposal
b. Letter to your friend describing how you spent your holidays
c. Letter to the Principal requesting extra classes for weak students

3.Literature – Deep Learning
First Flight
A. Value-Based Questions (Answer any 4)
(80-100 words)
a .What does A Letter to God teach about faith and human nature?
b.How does Nelson Mandela inspire leadership qualities?
c.What lesson do you learn from Two Stories about Flying?
d.What is the message of Fire and Ice
4.Error Correction
Correct the sentences:
He don't likes playing cricket.
I am knowing the answer.
She has wrote a letter.
They was going to market.
Fill in the blanks (Modals)
You ____ obey your parents.
She ____ be at home now.
____ you help me?
We ____ not waste water.

SUBJECT: HINDI

1.पाठ 1 से 3 तक के सभी प्रश्नोत्तर निर्देश के अनुसार लिखें तथा याद करें।

2. पाठ 1से 3 तक के श्लोक , अन्वय , शद्बार्थतथा व्याकरण लिखें तथा याद करें
3. परियोजना -कार्यम्

चार्ट पेपर पर पाठ 1से 3 तक के सन्धि विच्छेद तथा समास -विग्रह खोज करके (अन्वेषण- कार्यम्) बड़े तथा रंगीन अक्षरों में लिखें।

SUBJECT: SANSKRIT

1.पाठ 1 से 3 तक के सभी प्रश्नोत्तर निर्देश के अनुसार लिखें तथा याद करें।
2. पाठ 1से 3 तक के श्लोक , अन्वय , शद्बार्थतथा व्याकरण लिखें तथा याद करें
3. परियोजना -कार्यम्

चार्ट पेपर पर पाठ 1से 3 तक के सन्धि विच्छेद तथा समास -विग्रह खोज करके (अन्वेषण- कार्यम्) बड़े तथा रंगीन अक्षरों में लिखें।

SUBJECT: MATHEMATICS

Q.1 The pair of linear equations 2X =5y+6 and 15y=6X -8 represents two lines which are
(a)Intersecting (b)Parallel (c)coincident (d)either Intersecting or Parallel

Q.2 If the pair of linear equations X-y=1, X+ ky=5 has a unique solution X=2, y=1 then the value of k is
(a)-2 (b)-3 (c)3 (d) 4

Q.3 The pair of linear equations 3X + 5y = 3 and 6X + ky = 8 do not have a solution if k
(a) = 5 (b) = 10 (c) ≠10 (d) ≠ 5

Q.4 If the system of equations
3X+y =1 and (2k-1)X +(k-1)y =2k+1 is inconsistent, then k is
(a) -1 (b) 0 (c) 1 (d) 2

Q.5 The pair of the equations x = a as well as y = b graphically shows lines that are
(a) parallel (b) intersecting at (b, a)
(c) coincident (d) intersecting at (a, b)

Q.6 Find the solutions of the pair of linear equations $5x + 10y – 50 = 0$ Q.7 ₹ 2450 were divided among 65 children. If each girl gets ₹ 50 and each boy gets ₹ 30 then find the number of girls.

Q.7. 4 chairs and 3 tables cost ₹ 2100 and 5 chairs and 2 tables cost ₹ 1750. Find the cost of one chair and one table separately.

Q.8 Find the value of k for which the equations
3X +y= 1 and (2k - 1)X + (k – 1)y = 2k+1 has no solution.

SECTION – D (4 MARKS EACH)

Q.9.Two schools P and Q decided to award prizes to their students for two games of Hockey ₹X per student and cricket ₹y per student. School P decided to award a total of ₹ 9500 for two games to 5 and 4 students respectively; while school Q decided to award ₹ 7370 for the two games to 4 and 3 students respectively.

Based on the above information answer the following questions:
i) Represent the above information algebraically (in terms of X and y)
ii) What is the prize amount for hockey?
iii) Prize amount on which game is more and by how much?
iv) What will be the total prize amount if there are 2 students each from two games?

Q.10.Graphically, the pair of equations 6X– 3y + 10 = 0 , 2X– y + 9 = 0 are represented by two lines that are :-

(a)Intersecting
(b)Parallel
(c)coincident
(d)either Intersecting or Parallel

Q.11.What is the value of p if, if the following pair of the equations
$2X + 3y–5 = 0$, $pX–6y–8 = 0$ has a unique solution.
(a) $p\neq-4$ (b) $p=-4$ (c) $p=4$ (d) $p=-1$

Q.12.The pair of the equations $X + 2y + 5 = 0$, $–3X – 6y + 1 = 0$ has
(a) unique solution (b) exactly two solutions (c) infinitely many solutions
(d) no solution

Q.13. If the lines $3X +2ky – 2 = 0$ and $2X +5y+1 = 0$ are parallel, then what is the value of k?

Q.14. The graph of $y = 4X$ is a line
(a) parallel to X -axis (b) parallel to y-axis
(c) perpendicular to y-axis (d) passing through the origin

Q.15.Solve the following pair of linear equations:
$99X + 101y = 499$
$101X + 99y = 501$

Q.16.Find the values of k for which the pair of linear equation and $X+ ky = 1$ have infinitely many solutions.

REAL NUMBERS- CASE STUDY

CASE STUDY 1.

To enhance the reading skills of grade X students, the school nominates you and two of your friends to set up a class library. There are two sections- section A and section B of grade X. There are 32 students in section A and 36 students in section B.

1. What is the minimum number of books you will acquire for the class library, so that they can be distributed equally among students of Section A or Section B?

a) 144 b) 128 c) 288 d) 272

2. What value is exhibited here?

PROJECT WORK

Do activity -1 and activity- 4 on maths lab manual copy . **CLICK ON THE LINK BELOW**
https://share.google/FA3YIdbgoerZaJTwf

SUBJECT: SCIENCE

PHYSICS

1. Define Principal focus of a concave mirror and draw the diagram.
2. Define radius of curvature. Find out the focal length with the help of radius of curvature.
3. Define real and virtual image. Give on example of each.
4. An object of height 4 cm placed at a distance of 20 cm from the mirror. The focal length of concave mirror is 15 cm. Find out the nature, position and size of the image. Show it by diagram.
5. Define Snell's Law.
6. The refractive index of glass is 1.5. What is the speed of light in glass.

CHEMISTRY

1. Why should a magnesium ribbon be cleaned before burning?
2. Why is respiration considered an exothermic reaction?
3. What is a double displacement reaction? Give an example.
4. A student left an iron nail in copper sulphate solution. After some time, a brown layer formed.

   a. Identify the reaction
   b. Write the chemical equation
   c. Name the substance deposited

5. Balance the following equations:

   a) $Al + HCl \rightarrow AlCl_3 + H_2$

   b) $Na + H_2O \rightarrow NaOH + H_2$

   c) $Fe + H_2O \rightarrow Fe_3O_4 + H_2$

   d) $Al + Fe_2O_3 \rightarrow Al_2O_3 + Fe$

   e) $Ca(OH)_2 + CO_2 \rightarrow CaCO_3 + H_2O$

6. Differentiate between **combination reaction** and **decomposition reaction** with examples.
7. Write one equation each for decomposition using:
   a) Heat
   b) Light
   c) Electricity

BIOLOGY

I. Choose the correct option1. Which of these reactions occur in photosynthesis?
a) Carbon dioxide is reduced and water is oxidized
b) Carbon dioxide and water are oxidized
c) Carbon dioxide and water are reduced
d) Water is reduced and Carbon dioxide is oxidized

2. Which of the following component of food is digested by salivary amylase?
a. Protein b. Minerals c. Carbohydrates d. Fats

3. The cellular energy reserves in autotrophs are:
a. Fatty acids b. Starch c. Protein d. Glycogen

4. Oxygen released during photosynthesis comes from
a. Glucose b. Chlorophyll c. Carbon dioxide d. Water

5. Where are proteins first digested in the digestive system of human beings?
a. Mouth b. Small intestine c. Stomach d. Large intestine

6. Enzyme lipase acts specifically on _____ and down into simpler substances.
a. Fatty acids b. Lipids c. Emulsified fats d. Fats

7. Gastric digestion takes place effectively in
a. Acidic medium b. Alkaline medium c. Neutral medium d. Highly alkaline medium

8. What is the source of oxygen produced during photosynthesis?
a. Water b. Carbon dioxide c. Starch d. Glucose

9. The function of sphincter muscle is to
a. Regulate digestive process b. Improves digestion c. Release digestive juices

d. Regulate exit of food

10. Colon belongs to which part of the alimentary canal?

a. Oesophagus b. Small intestine c. Stomac d. Large intestine

II. Answer these questions selecting the appropriate option given below.

Both A and R are true and R is the correct explanation of A.

Both A and R are true but R is not the correct explanation of A.

A is true but R is false.

A is false but R is true.

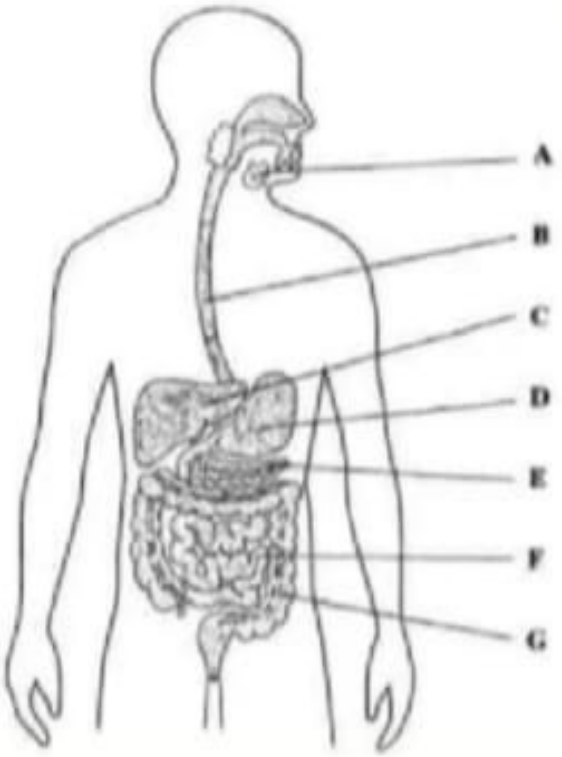
1. Assertion- Molecular movements are needed for life.

Reason – Body structures made up of these molecules need continues repair and maintenance.

2. Assertion- Carbohydrate digestion finally takes place in small intestine.

Reason – Pancreatic juice contains the enzyme lactase

III. **III.**



1. Which of these correctly represent the labels B C D and E

A. Pancreas, Oesophagus, Stomach, Liver

B. Oesophagus, Liver, Stomach, Pancreas

C. Stomach, Liver, Oesophagus, Pancreas

D. Oesophagus, Pancreas, Liver, Stomach2.

2. Villi are present in:-

A. D B. E C. F D. A

3. The enzyme that is released by label A

A. Trypsin B. Amino acids C. Amylase D. Intestinal juices

4. The movements that occur along part B to push the food forwa

A. Rotation B. Peristalsis C. Flexion D. Protrusion

5. In case of diarrhea, which major process does not take place normally in region G?

A. Absorption of food B. Absorption of water

C. Secretion of hormones D. Removal of waste material

19- What are the steps involved in holozoic nutrition?
20- Write short notes on absorption?
21- What type of nutrition is shown in amoeba? What does it diet include?
22- How is food digested in amoeba?
23- Describe the digestion of food in the small intestine?
24- What is the function of large intestine in the human digestive system?
25- What is the role played by the liver in addition to the digestion of food

I. Choose the correct option

1. Which of these reactions occur in photosynthesis?
   a) Carbon dioxide is reduced and water is oxidized
   b) Carbon dioxide and water are oxidized
   c) Carbon dioxide and water are reduced
   d) Water is reduced and Carbon dioxide is oxidized
2. Which of the following component of food is digested by salivary amylase?
   a. Protein b. Minerals c. Carbohydrates d. Fats
3. The cellular energy reserves in autotrophs are
   a. Fatty acids b. Starch c. Protein d. Glycogen
4. Oxygen released during photosynthesis comes from
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SUBJECT: SOCIAL SCIENCE

HISTORY

A.Write the following question answer in History copy.
.....
1.Guiseppe Mazini
2.Count Cavour
3.The Greek war of Independence
4.Frankfurt Parliament
5.Universal Suffrage

B.Short question Answer.
.....
1. Who was Fredrick Sorrieu?
2. What does Absolutist mean?
3. What does Nation state mean?
4. Who was Otto Von Bismarck?
5. Name the Balkan countries.

C. Long question answer.
.....
1. Explain the Napoleonic code.
2. Explain the nation building process of Germany.
3. What condition prevailed in 1848 France?
4. Explain the role of Giuseppe Mazini in the unification of Italy.
5. What was the impact of Treaty of Vienna 1815 on European people?Write any three points.

D.Project Work(draw the following figures in(History copy).
.....

1. Postage stamp of 1850 with the figure of Marianne represented the Republic of France.
2.The fallen Germania...

CIVICS

1. What is power sharing ?
2. Why Power sharing is necessary in democracy ?
3. What is horizontal distribution of power ?
4. What is vertical distribution of power?
5. What is 'Majoritarianism' ?
6. How power-sharing is implemented in Belgium?
7. What is 'Coalition Government' ?
8. What are reserved constituencies?
9. Explain the system of 'checks and balances' in democracy.
10. State the language policy of Srilanka.

PROJECT WORK:

Power Sharing as a Tool to Prevent Conflicts in Diverse Societies

Introduction

Diverse societies consist of people from different religions, languages and cultures. Power sharing helps maintain unity and reduces conflicts.

Meaning of Power Sharing

It refers to the distribution of power among different groups, institutions and levels to ensure participation.

Why Conflicts Arise

Conflicts arise due to dominance of one group, discrimination, and lack of equal opportunities.

Role of Power Sharing

It ensures equal representation, participation, respect for diversity and reduces dominance.

Forms of Power Sharing

1.Horizontal (Legislature,Executive,Judiciary) 2.Vertical (Central,State,Local)
3.SocialGroups (Minority representation)
4. Political Parties (Coalition government)

Case Study: Belgium

Power was equally shared among language groups leading to peace and stability.

Case Study: Sri Lanka

Majoritarian policies led to discrimination and civil war.

Comparison

Belgium	Sri Lanka
Power sharing	No proper sharing
Peace	Conflict
Equality	Discrimination

Conclusion

Power sharing is essential to prevent conflicts and promote unity in diverse societies.

GEOGRAPHY

1. Give two examples of renewable resources.
2. Name three states having black soil and the crop which is mainly grown in it.
3. What steps can be taken to control soil erosion in the hilly areas?
4. How are natural resources important for man? Give five points.
5. What do you understand by "sustainable economic development?"
6. What is agenda 21?
7. What type of soil is found in the river deltas of the eastern coast? Give three main features of this type of soil.
8. What are the biotic and biotic resources? Give some examples.
9. How has technical and economic development led to more consumption of resources?
10. Explain 3 stages of resource planning.
11. Whom did Gandhiji make responsible for the depletion of resources at the global level?
12. Explain soil erosion and give the steps that should be taken to control soil erosion.
13. What is Laterite soil?
14. Why has the land under forests not increased much from 1960-61?
15. State the geographical factors that are responsible for the evolution of black soil. Why is it considered the most suitable for growing cotton?
16. Write three physical and three human factors which determine the use of land.
17. Write four institutional efforts made at global level for 'resource conservation'.
18. Distinguish between the following:
    a) Potential and Developed Resources
    b) Stock and Reserves

Project work

On an outline map of India show the major soil types.

Activity.

Find out different type of forest and trees found in them

ECONOMICS

1. "Income is not the only important factor for development." Justify.
2. Why is average income not a good measure?
3. What are public facilities? Why important?
4. What is HDI? Name indicators
5. What is sustainable development?
6. What is BMI?
7. What is national development? Why difficult to define?
8. **CASE STUDY**

Different People, Different Goals

Ravi is a farmer who wants higher crop prices. Meena is a teacher who wants better school facilities. A factory owner wants cheaper labour, while workers demand higher wages.

Questions:

1. What is meant by developmental goals?

2. Why do Ravi and Meena have different goals?
3. Explain the conflict between factory owner and workers.
4. Give one example where development for one may not be development for another.

Income and Quality of Life

Country A has higher per capita income than Country B. However, Country B has better healthcare, education, and longer life expectancy.

Questions:

1. Which country is more developed and why?
2. What does this example show about income?
3. Name one index that considers such factors.
4. Mention two non-income factors of development.

PROJECT WORK ON SUSTAINABLE DEVELOPMENT

SUBJECT: AI

Q1. Write all the Questions with answer in a Practical file or Science Practical copy

(i) Write the output of the following codes given below:

(a)
```
Website = "xyz.com"
print(Website)
```

(b)
```
Website = "xyz.com"
print(Website)
Website = "abc.com"
print(Website)
```

(c)
```
a,b,c=5, 3.2, "Hello"
print(a)
print(b)
print(c)
```

(d)
```
x=y=z= "Same"
print(x)
print(y)
print(z)
```

(e)
```
a = 20 b = "Apples"
print(str(a)+ b)
```

(ii) Write the python code with output for the questions given below:

(a) To take length and breadth as input and calculate Area and Perimeter of a rectangle
(b) To take 3 sides of a triangle and calculate Area of a triangle
(c) Enter 3 subject marks and calculate average marks.
(d) Enter length, breadth and height and calculate surface area and volume of a cuboid .
(e) Enter the side of a square and calculate its area and perimeter
(f) Enter a number and calculate its square and cube.
(g) Enter distance in Kilometer and convert it to meter and cm.
(h) Enter temperature in degree Celsius and convert it into Fahrenheit.

(iii) Find the error and rewrite the code again by underlining all the corrections made.

(a)
```
A=10
```

(b)
```
a=10
B=20
C=a/b
Print (c)
```

```
B=20
C=a+b
print(C)
```

PROJECT WORK

CREATE A PORTFOLIO ON COMMUNICATION SKILLS (TAKE HELP OF YOUTUBE)
EXAMPLE: https://youtu.be/06AQ8eEPpxQ