MPSPN – CLASS IX
HOLIDAY HOMEWORK (Session 2026-27)

"Learn, Create and Enjoy Your Holidays!"

📌 General Instructions

✓ Do all work neatly in the respective notebooks/files.
✓ Use colours, borders, and pictures wherever required.
✓ Maintain neatness and creativity in your work.
✓ Complete the homework before school reopens.

📖 ENGLISH

Q1. Character Talk Show
Choose any character from your English textbook and imagine an interview.
Write:
* Introduction of the character
* 5 interview questions
* Creative answers
Q2. English Poster Making
Make posters on:
* Save Water/ Digital India/ Importance of Reading/ Stop Pollution

हिन्दी

@ प्रत्यय, उपसर्ग व संज्ञा प्रकरण पर आधारित कलात्मक चक्र/माइंड मैप/ चार्ट (यह कार्य A4 साइज के पृष्ठों पर या चार्ट पेपर पर करना है)

@ प्रेषित किए गए अनौपचारिक पत्रों में से कोई तीन अनौपचारिक पत्र हिंदी कॉपी में लिखना है।

संस्कृत

1.किन्हीं पाँच चित्रों को अपनी उत्तर पुस्तिका मे चिपकाकर उनका पाँच पाँच वाक्यों में संस्कृत में वर्णन कीजिए।

2. स्वर संधि को उसके भेदों व उदाहरण सहित flow chart के माध्यम से प्रस्तुत करें।

(उत्तर पुस्तिका में)

FRENCH

Dessinez ou collez une image dun monument français et écrivez 10 phrases à ce sujet.
(Draw or paste a picture of any monument in France and write 10 lines about it.)
(on A3 size sheet)

SOCIAL SCIENCE

Make a project on

1.Disaster Management (**From Roll number 1 to 20)**

under the following headings

1.Introduction 2 What is disaster 3 Types of disaster -

a). Earthquakes. b) Landslides c). Avalanches d). Glacial Lake outburst flood. (picture illustration)

4.Causes of these disaster 5. Main mitigation strategies: 6.Structural mitigation

7.Non structural mitigation measures.

2.Stone Age – The Beginning of Human Civilization (From roll number 21 to last)

Under the following headings

1.Introduction 2 Stone Age periods 3. Lifestyle of Early Humans 4. Tools and Weapons used

5.Discovery of Fire 6. Famous Cave Paintings 7. Comparison with Modern Life

SCIENCE

Do practical no. 1 in each subject (physics, chemistry and biology) in the lab manual provided by school.

Prepare Project Report on (any two following)

Laws of Motion (with real-life examples) Newton's First Law demonstration)

Friction in daily life .

Sound waves and their properties .

Work, Energy and Power in daily life

(Only for class 9A1 and 9A2)

Write and explain any five methods used for the separation of mixtures based on their homogeneous and heterogeneous nature. Include the principle, suitable examples, and neat labeled diagrams for each method. Present the project in a well-organized and creative format.

(Only for 9A3 , 9A4 and 9A5)

Create a comic story/strip

"The cell city -A living World Inside Us". (Instructions: Students will imagine a cell as a city/factory/school/kingdom where every organelle has a special role just like people and departments in real life.)

(Only for 9A6 and 9A7)

MATHS

Ch- Coordinate Geometry

1. Find the distance between the following pair of points:

(i) (-6,7) and (-1,-5) (ii) (a + b, b + c) and (a - b, c - b) (iii) (a, 0) and (0, b)

2. Find the value of 'a' when the distance between the points (3, a) and (4, 1) is $\sqrt{10}$.

3. The length of a line segment is of 10 units and the coordinates of one end-point are (2, –3). If the abscissa of the other end is 10, find the ordinate of the other end.

4. Show that the points (– 4,–1), (–2, –4), (4, 0) and (2, 3) are the vertices of a rectangle.

5. Show that the points A (1,– 2), B (3, 6), C (5, 10) and D (3, 2) are the vertices of a parallelogram.

6. Show that the points (–2, 3), (8, 3) and (6, 7) are the vertices of a right-angled triangle.

7. Prove that the points (3, 0), (6, 4) and (– 1, 3) are vertices of a right-angled isosceles triangle.

8. Prove that (2, –2), (–2, 1) and (5, 2) are the vertices of a right angled triangle. Find the area of the triangle and the length of the hypotenuse.

9. Prove that the points (2, 3), (–4, –6) and (1, 3/2) do not form a triangle.

10. The points A (2, 9), B (a, 5) and C (5, 5) are the vertices of a triangle ABC right angled at B. Find the values of a and hence the area of ΔABC.

11. If the point P (2, 2) is equidistant from the points A(-2, k) and B (-2k,-3), find k. Also, find the length of AP.

12. Find a relation between x and y such that the point (x, y) is equidistant from the points (3, 6) and (–3, 4).

13. Prove that the points (– 2, 5), (0, 1) and (2, – 3) are collinear.

14. If the point A (2, – 4) is equidistant from P (3, 8) and Q (– 10, y), find the values of y. Also find the distance PQ.

15. The three vertices of a parallelogram are (3, 4), (3, 8) and (9, 8). Find the fourth vertex.

16. Name the quadrilateral formed, if any, by the following points, and give reasons for your answers:

(i) A (2, – 2), B (7, 3), C (11, – 1), D (6, – 6) (ii) A (4, 5), B (7, 6), C (4, 3), D (1, 2)

17. Prove that the points (3, 0), (4, 5), (–1, 4) and (–2, –1), taken in order, form a rhombus. Also, find its area.
18. In the seating arrangement of desks in a classroom three students Rohini, Sandhya and Bina are seated at A (3, 1), B (6, 4) and C (8, 6). Do you think they are seated in a line?

19. Find a point on y-axis which is equidistant from the points (5, – 2) and (– 3, 2).
20. Find a point on the x-axis which is equidistant from the points (7, 6) and (–3, 4)
21. Prove that the points A (2, 3), B (–2, 2), C (–1, –2), and D (3, –1) are the vertices of a square ABCD.
22. Find the value of x such that PQ = QR where the coordinates of P, Q and R are (6,–1), (1, 3) and (x, 8) respectively.
23. Prove that abscissa of a point P which is equidistant from points with coordinates A (7, 1) and B (3, 5) is 2 more than its ordinate.
24. The centre of a circle is (2a, a – 7). Find the values of a if the circle passes through the point (11, –9) and has diameter 10 2 units.
25. Find the coordinates of the point where the diagonals of the parallelogram formed by joining the points (–2, –1), (1, 0), (4, 3) and (1, 2) meet.
26. Points (3, 1), B (5,1), C (a, b) and D(4, 3) are vertices of a parallelogram ABCD. Find the values of a and b.
27. If A (–1, 3), B (1, –1) and C (5, 1) are the vertices of a triangle ABC, find the length of the median through A.
28. Find the coordinates of the points C which divide the line segment joining A (–2, 2) and B (2, 8) into four equal parts.
29. Prove that (4, 3), (6, 4), (5, 6) and (3, 5) are the angular points of a square.
30. Find the coordinates of a point A, where AB is a diameter of the circle whose centre is (2, –3) and B is (1, 4).
31. If (a, b) is the mid-point of the line segment joining the points A (10, – 6), B (k, 4) and a – 2b = 18, find the value of k and the distance AB.
32. If a vertex of a triangle be (1, 1) and the middle points of the sides through it be (–2, 3) and (5, 2), find the other vertices.
33. If the mid-point of the line joining (3, 4) and (k, 7) is (x, y) and 2 x + 2 y + 1 = 0 find the value of k.
34. If two vertices of a parallelogram are (3, 2), (–1, 0) and the diagonals cut at (2, –5), find the other

vertices of the parallelogram.

35. If the coordinates of the mid-points of the sides of a triangle are (3, 4), (4, 6) and (5, 7), find its vertices.

36. The line joining the points (2, 1) and (5,–8) is trisected at the points P and Q. If point P lies on the line $2x – y + k = 0$. Find the value of k.

Ch- Linear Polynomials

37. Find the slope and y-intercept of the line represented by the linear equation $– 2x + 3y = 12$. Also, find the rate of change of y.

38. If the slope of the line $4x + ky = 24$ is 3, find the value of k. Also find its y-intercept.

39. A taxi service charges a fixed fare of 70 plus 25 for every kilometre travelled. Write a linear equation representing the total fare (y) for travelling x kilometres. Also, compute the fare for travelling 10 km.

40. Aarushi has inherited 30 novels from her grandfather. Each year she vows to buy two novels to grow the collection in her library. How many novels will she have in 10 years? How long will it take her to have 100 novels in her library?

41. A car depreciates by the same amount each year. Ravi purchased a car in 2015 for Rs. 68,000. In 2020 it is worth Rs.43,000. Find the linear decay model. Also, prodict how much the car will be worth 2028.

42. The graph of a linear polynomial $f(x)$ passes through the points (2,7) and (4,11).

1. Find the polynomial $f(x)$ in the form $ax+b$.
2. Find the coordinates of the points where the graph of $f(x)$ intersects the x-axis and the y-axis.
3. Calculate the value of $f(10)$.

43. Let $p(x)= ax+b$ and $q(x) = cx+d$ be two linear polynomials such that:

1. $p(1) = 4$.
2. The difference $p(x) − q(x)$ is a constant equal to 2 for all values of x.
3. The sum $p(x) +q(x)$ is equal to $4x+6$ for all real x.

Find the actual expressions for $p(x)$ and $q(x)$

INFORMATION TECHNOLOGY

Create a Portfolio as a part of your Practical Assessment as given below-

Part A : Take any one topic as given below and prepare a descriptive report on it-

A. Methods of Communication

B. Types of Verbal Communication

C. Types of Non-verbal Communication

D. Visual Communication and its examples

E. 7Cs of Communication

F. Techniques of Self Management

G. SMART method to set goals

H. Positive Thinking

I. Personal Hygiene

J. Grooming

Part B : Take any two topics given below and prepare a descriptive report on it -

A. Features of a Word Processor

B. Shortcut Keys available in Writer, Impress and Calc

C. Formatting features in Writer

D. Use of Tables and Spell Check

E. The Process of Mail Merge

Instructions:

- **Both Part A Part B Work has to be done on A4 size sheets.**
- **Make it colourful and attractive.**
- **Combine them together and attach in a stick file with front cover.**

🕮 KAUSHAL VIKAS

Make an attractive portfolio on the chapter 1 (Agriculture Practices) of Kaushal Vikas.

Guidelines are as follows

*Use A4 size sheets and a folder

*You can use colourful sheets and pens

*Page 1-Personal details of the student

*Page 2-Types of Agriculture Practices and related vocations.

Page -3 onwards

Research on the following topics

1. Find out the value chain system through the internet or interviewing stakeholders.

2. Prepare a model of rain gauge, measure the rainfall and keep a record of data collected and write it in a portfolio.(Rainfall can be measured in the month of July also during the month of rains)

3. Which vocation have you chosen and why?