CLASS IX HHW (DIPAWALI & CHATT)

English

Explore and write about different forms of dance and cultural celebrations of various communities in India.

Include information about their cultural significance, the communities or regions associated with them, and the folk songs traditionally sung during these celebrations.

Mention at least five different dance forms or cultural celebrations from different parts of India.

Instruction: Complete the task in your English classwork copy.

कक्षा -9 विषय- हिंदी

क) झाँसी की रानी पाठ में कविता में कहानी का प्रश्न उत्तर पूरा करें।

ख) विषयों से संवाद प्रश्न संख्या 1 से 4 पूरा करें।

ग) 'सोशल मीडिया का बढ़ता प्रभाव' पर अनुच्छेद लिखें । (100-120 शब्दों में)

घ) बाल मजदूरी एक सामाजिक अभिशाप पर पोस्टर तैयार करें।

ङ) पढ़ाए गए पाठों की पुनरावृति करें।

संस्कृतम्

1. शब्दरूपाणि लिखत-(जगत् **;** तपस् कर्मन्)

2. घातुरूपाणि लिखत-(वृध् लिख्)

3. पृष्ठ-**45** प्रदत्त चित्रम् कृते वाक्यानि रचयन्तु **?**

4. पञ्च सुभाषितानि श्लोकाः लिखन्तु **?**

5. पञ्चतन्त्रस्य एकां अन्यां कथां सचित्रम् लिखत **?**

MATHS

Multiple Choice Questions (MCQ)

Choose the correct option.

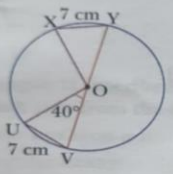
1. A circle is given with radius OA.

   If P is any point on the circle, which of these is the correct relation between OA and OP?

   (a) $OA = OP$ (b) $OA = 2OP$

   (c) $OA = \frac{1}{2}OP$ (d) $OA = \frac{1}{3}OP$

2. In the given figure, $\angle UOV = 40°$ and O is centre of the circle. What is the measure of $\angle XOY$?



   (a) 40° (b) 140°

   (c) 80° (d) 90°

3. If a chord of a circle is at a distance of 8 cm from the centre of a circle of radius 17 cm, then the length of the chord is:

   (a) 25 cm (b) 12.5 cm

   (c) 30 cm (d) 9 cm

4. The line joining the centre of a circle to the mid-point of a chord is always

   (a) parallel to the chord

   (b) perpendicular to the chord

   (c) equal to the chord .

   (d) tangent to the chord

5. How many circle(s) can be constructed that pass through all 3 vertices of $\triangle PQR$?

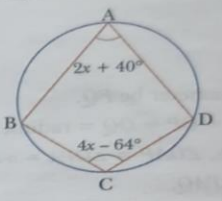
   (a) 4

   (b) 3

   (c) Infinitely many

   (d) 1

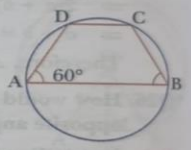
6. In the given figure, if $ABCD$ is a cyclic quadrilateral, then $x =$



   (a) 43° (b) 30°

   (c) 34° (d) 40°

7. $ABCD$ is a cyclic trapezium in which $AB \parallel DC$ and $\angle A = 60°$, then $\angle B$ is equal to:



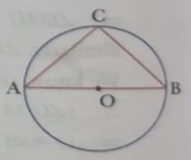
   (a) 60°

   (b) 55°

   (c) 50°

   (d) 45°

8. In figure, if AOB is a diameter of the circle and $AC = BC$, then $\angle CAB$ is equal to:



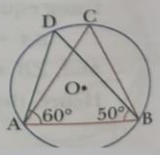
   (a) 30°

   (b) 60°

   (c) 90°

   (d) 45°

9. In figure, if $\angle DAB = 60°$ and $\angle ABD = 50°$, then $\angle ACB =$



   (a) 60°

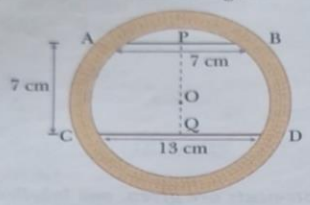
   (b) 50°

   (c) 70°

   (d) 80°

Case Based Questions (CBQ)

1. Mr. Mehta has bought a new house. Mira who is a daughter of Mr. Mehta wants to make a decorative item for her room. For this purpose, she takes her mother's old bangle and attached two sticks, one is of length 7 cm and other is of 13 cm. She places the sticks parallel to each other, 7 cm apart as shown in the figure.



   Based on the above information, answer the following questions:

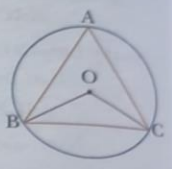
   (i) What is the distance between A and P?

   (ii) What is the distance between C and Q?

   (iii) If $OQ = x$ cm, then find x.

   (iv) Find the radius of the circle.

2. Three STD booths are placed at A, B and C as shown in the figure and these are operated by persons with disabilities. These three booths are equidistant from each other.



   Based on the above information, answer the following questions:

   (i) Find the measure of $\angle BAC$.

   (ii) If $AB = 8$ cm, find the value of $(BC + CA)$.

   (iii) Find the measure of $\angle BOC$.

   (iv) Find the sum of $\angle OBC$ and $\angle OCB$.

Science

PHYSICS *Chapter: Work, Energy, and Simple Machines*

Instructions: Answer all the following short-answer type questions neatly in your physics notebook.

1. State the physical quantity which will be affected by changing the rate of doing work.
2. State the transformation of energy taking place when (i) green plants prepare their food (ii) head of nail is hammered hard and it becomes hot .
3. An object is raised to a certain height above the ground. State two factors on which its gravitational potential energy depends.
4. Describe the energy transformations that take place when a simple pendulum swings back and forth.
5. Two girls, A and B, each weighing 40 kg, climb up a rope to a height of 8 meters. Girl A takes 20 seconds while Girl B takes 50 seconds. Who expends more power?
6. Define the term 'Mechanical Advantage' (M.A.) of a machine. Why does a machine with an M.A. greater than 1 act as a force multiplier?
7. Differentiate between a Class I lever and a Class II lever based on the positions of the fulcrum, effort, and load. Give one everyday example of each.
8. Why is a single fixed pulley preferred to lift water from a well even though its mechanical advantage is only 1?
9. How does an inclined plane make it easier to lift heavy barrels onto a truck compared to lifting them vertically upwards?
10. Explain why the efficiency of a practical, real-world machine can never be 100% (or equal to 1).

CHEMISTRY Chapter – Journey inside the atom

1. Suppose you made up your own 'atom', as Thomson described, using clay for the positive charge and small beads for the electrons spread through it. What will happen if:
   (i) the positive charge on the clay is lesser than the total negative charge of the beads?
   (ii) by mistake, the clay itself carries a bit of negative charge? Would your model still represent a neutral atom?
2. Could an orange or a lemon, which also contain seeds inside soft pulp, be a good comparison? In what ways does it match Thomson's idea and where does it fall short?
3. What do you think would happen if α-particles were replaced with negatively charged particles in Rutherford's gold foil experiment?
4. Rutherford found that a few α-particles bounced back sharply. How does this single surprising result completely rule out Thomson's 'plum pudding model' of the atom?
5. An atom has 18 neutrons and an atomic number of 17. What is its mass number?
6. An atom ^{23}A has 11 electrons. Find the number of neutrons in it.
7. Define isotopes. Give suitable example
8. Write any four applications of isotopes
9. Magnesium is essential for many biological processes, including muscle contraction. For an atom of magnesium with a mass number of 24 and atomic number 12, determine the number of (i) protons, (ii) neutrons, (iii) electrons, and also illustrate the arrangement of electrons in a magnesium atom.
10. Find the following information for the elements shown in Figure:
    i. Name of the element ii. Symbol iii. Total number of electrons
    iv. Number of valence electrons v. Valency of the element vi. Number of protons
    vii.Atomic number



a



b



c

Biology

1.How do Bryophyllum plants reproduce vegetatively?

2.What is budding? Name two organisms that reproduce asexually by budding.

3.Why do complex animals and flowering plants rely on sexual reproduction rather than asexual reproduction?

4.Differentiate between asexual and sexual reproduction ?

5.Explain how the chromosome number is restored and maintained constant in sexually reproducing organisms.

6.What happens in a flower after pollination takes place? Describe the sequence of events.

7.What is vegetative propagation? Give two examples.

Social Science

History

- Learn the whole notes of the Chapter ***State and Society up to 1000 C.E.***
- On an outline Map of India, locate the four major **ports** of India of the time of ancient period?

Geography

- Write and learn the answer of all the questions given in the Chapter ***Oceans and Life*****.**

Economics

- Write and learn the answer of all the questions given in the Chapter ***Managing your personal finances.***

INFORMATION TECHNOLOGY

1. What is an electronic spreadsheet? Give two examples of spreadsheet software.
2. Define workbook and worksheet.
3. What is the formula bar? What information is displayed in the Name Box?
4. What is cell referencing? Also write its type. Give one example of each.
5. What are the uses of sorting and filtering data?
6. Name any four commonly used spreadsheet functions and write their purposes.
7. What is a chart? Name any four types of charts available in spreadsheet software.
8. A worksheet contains marks of students in five subjects. Which function can be used to calculate each student's total marks? Which function can calculate the average?
9. You have a list of students with their house names. Explain how you would display only the students belonging to the Blue House using a filter.
10. A teacher wants to arrange students from highest to lowest marks. Which spreadsheet feature should be used? Write the steps briefly.
11. If the value in cell B2 is 250 and the formula =B2/10 is entered in C2, what will be displayed in C2?
12. A formula =SUM(B2:B6) is entered in B7. What does this formula calculate?
13. Consider the worksheet named Student marks with the following data.

Roll No.	Name	English	Maths	Science	Social Science	Computer
1	Aarav	78	85	81	74	92
2	Diya	88	91	86	82	95

3	Kabir	67	73	70	76	84
4	Meera	92	89	94	90	96
5	Rohan	75	68	79	72	88

Consider row names are from 1 to 6 and column name are from A to G in above table. Write formula to calculate the following tasks:

- Sum of marks obtained by Meera.
- Average marks in Maths.
- Highest marks in Computer.
- Lowest marks in English
- Which feature of calc should be used arrange the data in ascending order?
- We can convert this data in pictorial format using which feature of calc?

Write the correct formula for each task. Assume the data is entered in the cells mentioned.

14. Add the values from A2 to A10.
15. Find the average of values in C2 to C8.
16. Find the largest value in D2 to D15.
17. Find the smallest value in E2 to E15.
18. Count the numeric entries in B2 to B20.
19. Formula in D2 is =B2*C1. If it is copied to D3, what will the formula become? Explain why.

Must Do it.

1. Prepare practical files in all respects.
2. Prepare the notes all Completed Chapters in all respects. After opening the school submit all assignments for a check.