Class – IX   **SUBJECT – HINDI**

1. मताधिकार को प्रेरित करते हुए माता-पिता को पत्र लिखिए।
2. 'दीपोत्सव की महत्ता' पर अनुच्छेद लिखिए।
3. 'मुंशी प्रेमचंद या महादेवी वर्मा' पर संक्षिप्त जीवनी लिखिए।
4. 'छठ पर्व' का वर्णन करते हुए मित्र को पत्र लिखिए।
5. दीपोत्सव का वर्णन करते हुए दो मित्रों के बीच हुए बातचीत को संवाद के रूप में लिखिए।

Class – IX   **SUBJECT –PHYSICS**

1.Explain the Archimedes Principle? What are the applications of Archimedes principle?
2.Why do ships sail on water while iron nail sinks?
3.Describe Buoyancy? What are the factors that affect buoyancy?

Class – IX   **SUBJECT –CHEMISTRY**

1. A 0.24g sample of a compound of oxygen and boron was found by analysis to contain 0.096g of boron and 0.144g of oxygen. Calculate the percentage composition of the compound by weight.
2. What are polyatomic ions? Give examples.
3. Calculate the molar mass of the following substances.

(a) Ethyne, C_2H_2
(b) Sulphur molecule, S_8
(c) Phosphorus molecule, P_4 (Atomic mass of phosphorus =31)
(d) Hydrochloric acid, HCl
(e) Nitric acid, HNO_3

Class – IX   **SUBJECT –BIOLOGY**

1)Define genetically modified crops.How are they made? Explain the significance of genetically modified crops with suitable examples.
2) Explain the ways by which crop production can be increased.
3)Distinguish between macronutrients and micronutrients on the basis of--
a)their functions   b)the amount required by plants
4) Explain crop protection management in short.

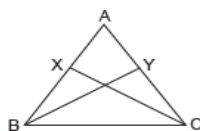**Class – IX**   **SUBJECT – IT**

1. What is Entrepreneurship?
2. Describe the advantages and disadvantages of Entrepreneurship?
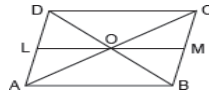3. List and Explain the characteristics of Entrepreneurs?

Class – IX   **SUBJECT –MATHS**

1. If $x=3+2\sqrt{2}$,then find whether $x+\dfrac{1}{x}$ is rational or irrational.
2. Insert3rationalnumbersbetween$\dfrac{1}{5}$ and $\dfrac{3}{5}$.
3. What is the value of polynomial x^2+8x+k, if–1 is a zero of the polynomial?
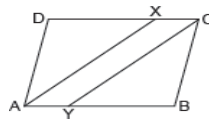4. In the figure below,ABC is a triangle in which AB =AC. X and Y are points on AB and AC

such2 that AX=AY. Prove that ΔABY≅ ΔACX.

5. In the given figure, ABCD is a parallelogram in which diagonals AC and BD intersect at O.Aline2 segment LM is drawn passing through O. Prove that LO = OM.

6. In the given figure, ABCD is a parallelogram and line segments AX and CY bisect the angles A2 and C respectively. Show that AX || CY.

7. If $p= \dfrac{\sqrt{3}-\sqrt{2}}{\sqrt{3}+\sqrt{2}}$ and $q= \dfrac{\sqrt{3}+\sqrt{2}}{\sqrt{3}-\sqrt{2}}$, then find p^2+q^2.

8. Find the value of a and b, if

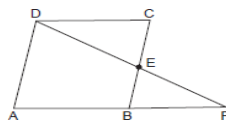$$\frac{7+\sqrt{5}}{7-\sqrt{5}} - \frac{7-\sqrt{5}}{7+\sqrt{5}} = a + \frac{7}{11}\sqrt{5}\,b$$

9. If $2x+3y=12$ and $xy=6$, find the value of $8x^3+27y^3$.

10. The polynomial p(x)=2x3+kx2−3x+5 and q(x)=x3+2x3−x+k, when divided by(x−2) leave the same remainder r_1 and r_2 respectively. Find the value of k, if $r_1-r_2=0$
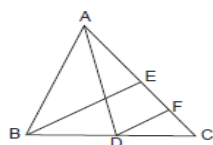
11. Plot the points P(−1,−1),Q(2,3) and R(8,11).Show that they are collinear.
12. Prove that angles opposite to equal sides of an isosceles triangle are equal.

13. ABCD is a parallelogram and E is the mid-point of side BC. DE and AB on producing meet at F.Prove that AF = 2AB.

14. In the given figure, AD and BE are medians of ABC and BE||DF. Prove that CF=$\frac{1}{4}$AC.

15. Find the value of a and b so that $x+1$ and $x-1$ are factors of $x^4+ax^3+2x^2-3x+b$.

16. If $ab+bc+ca=0$,find the value of

$$\frac{1}{a^2-bc}+\frac{1}{b^2-ca}+\frac{1}{c^2-ab}.$$

17. If $a+b+c=0$, then prove that $a^4+b^4+c^4=2(b^2c^2+c^2a^2+a^2b^2)$

18. Find the value of β, so that $x=1$ and $y=1$ is a solution of the equation $5\beta x+30\beta y=70$.

19. The angle of a triangle ABC are in the ratio 2:3:4. Find the largest angle of the triangle.

Class – IX   **SUBJECT –SOCIAL SCIENCE**

A. Prepare a portfolio on the life history of Hitler

B. Answer the following questions

1. The national assembly is an important Institute in the French Revolution the king gave it recognition after initial resistance in this context trace the formation of the national assembly.

2. The monsoon touch is Indian peninsula from Southern Tip name the two branches of Indian monsoon.

3. Write down any two factors how the Russian Revolution impacted the Global world.

4. Why is Nazism considered a calanity not for Germany but for the entire Europe?

5. Godavari is the most important river of Peninsular India trace the Godavari river from its origin to its end point in detail.

6. Give an account of the cold weather season

7. How is poverty seen by social scientists?

8. In India the value of free and fair election has always been promoted. Support the statement with facts

9. Why 82° 30' East has been selected as the standard meridian of India?

10. What are the advantages of having a healthy population?

Class – IX   **SUBJECT –ENGLISH**

Book

A1. Answer the following questions in your own words.

a) What are the two strange things the guru and his disciplefond in the kingdom of Fools?

b) Name all the people who are tried in the King's court, and give the reasons for their trial.

c) Why do the courtiers call the prince 'the Happy Prince'?

d) What does the swallow see when it flies over the city?

e) Why did the swallow not leave the prince and go to Egypt?

f) How has Prashant, a teenager, been able to help the people of his village?

g) How does Kezia begin to see her father as a human being who needs her sympathy?

h) Why does the world remember Einstein as a 'world citizen'?

I) What two 'important' and 'earth-shaking' decisions did the doctor take while he was looking into the mirror?

j) What is a legend? Why is this poem called a legend?

k) Write a short character sketch of Dr. A. P. J. Abdul Kalam.

A2. Write an article on the role of the media in our daily life in not more than 100-150 words.

A3. You visited a Science Fair in a nearby school. Record your experience in the form of a Dairy Entry in about 100-150 words.

A4. Last night you heard a noise in your room. You opened your eyes and--------------------. Write a story in about 150-200 words what happened then.