



Delhi Public School Haldwani

Name:.....

Class: IX Sec:

Summer Holiday Assignment

Subject: History

Answer the following question:

1. Who was Robespierre? Why is his reign referred to as “The Reign of terror”?
2. Explain triangular slave trade carried on during 18th and 19th century?
3. Give three main features of the French Constitution of 1791.
4. What was the significance of the “Tennis court oath”?
5. What were the reasons for miseries in France when king Louis xvi ascended the throne?

Note: Prepare the chapter well for the test.

All the work given is to be done in classwork notebook.

Subject: Economics

1. What do you understand by “Green Revolution”? Give its advantages and disadvantages.
2. Read chapter “The story of village Palampur” ,frame 10 short answer questions and also write their answers.

Note: All the work given is to be done in class work notebook.

Subject: Political Science

I. Answer the following questions in detail in your class notebook.

1. What is democracy?
2. What are the characteristic features of democracy which differentiate it from other forms of government?
3. What are the problems faced by the citizens of non-democratic countries?
4. “End of colonialism led to the expansion of democracy”. Explain.
5. Analyse United Nations Organisation as a democratic institution.
6. Do you think the countries are moving towards a “World Democracy”? Elaborate.
7. Write a short note on the G4 Nations.
8. Trace the expansion of democracies in the world.

9. Discuss the debates related to the United Nations Security Council with emphasis on India.
10. “Democracy is not an end in itself”. Analyse the statement.
11. Define- a. Colonialism
b. Veto
c. Communist State
d. Universal Adult Franchise
12. Invasion by USA in Iraq during the reign of Saddam Hussain was a breach of democratic principles. Discuss.

Subject: English

1. Be an Orator!

Choose any personality who has inspired you from the field of politics, sports, literature, social work, films and performing arts or freedom fighters. Compose an inspiring speech putting yourself in their shoes. Memorise the speech and be ready to present it in the first week of the school reopening.

Points to remember:

- Keep the time limit to 2 minutes.
- Some props can be used to bring out the personality you have chosen to present.

2. Creative Writing

a. Capture the Indian Premier League (IPL) Fever !



Delhi Public School Haldwani

Name:.....

Subject: Math

Class: IX Sec:.....

Summer Holiday Assignment

[Please attempt the following mathematics assignment in math practice notebook]

- Find a rational number between $\frac{-2}{3}$ and $\frac{1}{4}$.
- Find three rational numbers between -2 and 5.
- Express $\frac{2157}{625}$ in the decimal form.
- Show that $1.272727 = 1.\overline{27}$ can be expressed in the form $\frac{p}{q}$, where p and q are integers and $q \neq 0$.
- Convert the following decimal number in the form $\frac{p}{q}$.
 - $5.\overline{2}$
 - $23.\overline{43}$
- Express the following decimals in the form $\frac{p}{q}$.
 - $0.12\overline{3}$
 - $0.0035\overline{2}$
- Represent $\sqrt{9.3}$ on the number line.
- Simplify each of the following, removing radical signs and negative indices wherever they occur:
 - $(\sqrt{4})^{-3}$
 - $(\sqrt{5})^{-3} (\sqrt{2})^{-3}$
 - $\frac{1}{\sqrt[3]{4^{-5}}}$
 - $(25)^{\frac{-1}{3}}$
 - $(\sqrt[3]{8})^{\frac{-1}{2}}$
 - $(\sqrt{4})^{-7} (\sqrt{2})^{-5}$
- Simplify:
 - $\frac{(25)^{\frac{3}{2}} \times (243)^{\frac{3}{5}}}{(16)^{\frac{5}{4}} \times (8)^{\frac{4}{3}}}$
 - $\frac{16 \times 2^{n+1} - 4 \times 2^n}{16 \times 2^{n+2} - 2 \times 2^{n+2}}$
- Simplify : $(\frac{81}{16})^{\frac{-3}{4}} \times [(\frac{81}{16})^{\frac{-3}{4}} \div (\frac{81}{16})^{\frac{-3}{4}}]$

11. Show that :

$$(i) \frac{x^{a(b-c)}}{x^{b(a-c)}} \div \left(\frac{x^b}{x^a}\right)^c = 1 \quad (ii) \frac{(x^{a+b})^2 (x^{b+c})^2 (x^{c+a})^2}{(x^a x^b x^c)^4} = 1$$

12. Simplify:

$$(i) (5 - \sqrt{5})(5 - \sqrt{5}) \quad (ii) (3 + 2\sqrt{2})(3 - 2\sqrt{2})$$

13. Rationalize the denominator of $\frac{5}{\sqrt{3} - \sqrt{5}}$.

14. Rationalize the denominator of $\frac{1}{7 + 3\sqrt{2}}$.

15. If both a and b are rational numbers, find the values of a and b in each of the following equalities:

$$(i) \frac{\sqrt{3} - 1}{\sqrt{3} + 1} = a + b\sqrt{3}$$

$$(iv) \frac{5 + \sqrt{3}}{7 - 4\sqrt{3}} = 47a + \sqrt{3}b$$

$$(ii) \frac{3 + \sqrt{7}}{3 - \sqrt{7}} = a + b\sqrt{7}$$

$$(v) \frac{\sqrt{5} + \sqrt{3}}{\sqrt{5} - \sqrt{3}} = a + b\sqrt{15}$$

$$(iii) \frac{5 + 2\sqrt{3}}{7 + 4\sqrt{3}} = a + b\sqrt{3}$$

$$(vi) \frac{\sqrt{2} + \sqrt{3}}{3\sqrt{2} - 2\sqrt{3}} = a - b\sqrt{6}$$

16. Simplify each of the following:

$$(i) \frac{3}{5 - \sqrt{3}} + \frac{2}{5 + \sqrt{3}}$$

$$(iii) \frac{\sqrt{5} - 2}{\sqrt{5} + 2} - \frac{\sqrt{5} + 2}{\sqrt{5} - 2}$$

$$(ii) \frac{4 + \sqrt{5}}{4 - \sqrt{5}} + \frac{4 - \sqrt{5}}{4 + \sqrt{5}}$$

17. Prove that: $\frac{1}{3-\sqrt{8}} - \frac{1}{\sqrt{8}-\sqrt{7}} + \frac{1}{\sqrt{7}-\sqrt{6}} + \frac{1}{\sqrt{6}-\sqrt{5}} + \frac{1}{\sqrt{5}-2} = 5$

18. If $x=3 - 2\sqrt{2}$, find $x^2 + \frac{1}{x^2}$.

19. If $a= \frac{2 - \sqrt{5}}{2 + \sqrt{5}}$ and $b= \frac{2 - \sqrt{5}}{2 + \sqrt{5}}$, find $a^2 - b^2$.



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Summer Holiday Assignment

Subject: Physics

I. Read the following questions carefully and answer them in A4 size ruled sheets:

Q1: An object has moved through a distance. Can it have zero displacement? If yes, support your answer with an example.

Q2: Define following terms:

- a) Average velocity. b) Average speed. C) Instantaneous velocity. D) Retardation

Q3: During an experiment a signal from a spaceship reached the ground station in five minutes. What was the distance of the spaceship from the ground station? The signal travels at the speed of light. (Speed of light = 3×10^8 m/s).

Q4: Differentiate between–

- a) Distance and displacement
b) Speed and velocity.
c) Acceleration and retardation.

Q5: Derive equations of motion

- a) $V = u + at$
b) $S = ut + \frac{1}{2}at^2$
c) $V^2 = u^2 + 2as$. Symbols have their usual meaning.

Subject: Biology

I. Read the following questions carefully and answer them in A4 size ruled sheets:

LESSON 15: IMPROVEMENT IN FOOD RESOURCES

1. What is animal husbandry?
2. Define domestication.
3. What do we get from cereals, pulses, fruits, and vegetables?
4. What are the different ways of crop improvement?
5. List the major sources of food. What are the common practices we perform to obtain the food?
6. List some important traits of improved crops.

7. Why is excess use of fertilizers detrimental for environment?
8. What is hybridization?
9. Name the programmes executed in India to increase food production?
10. What are the two nutrients/elements that plants take from air?
11. From where do plants acquire the nutrients that you stated above?
12. What is the full-form of IARI?
13. List all the macro and micro nutrients.
14. What is the difference between fertilizer and manure?
15. Give examples of commonly used irrigation systems in our country
16. What is Vermi-compost and what is its use?
17. What is organic farming?
18. Write about the following:
 - i.NPK
 - ii.Lodging
19. Explain the concept of mixed cropping.
20. How do biotic and abiotic factors affect crop production?
21. What are the desirable agronomic characteristics for crop improvements?
22. Write common examples of pesticides and fumigants.
23. What are the different Cropping patterns and their benefits?
24. What management practices are common in dairy and poultry farming?
25. What are the differences between broilers and layers and in their management?
26. What is apiculture? List the important species of bees.
27. Name two indigenous and two exotic breeds of poultry
28. Name the bee species known as Indian bee.

LESSON 5: THE FUNDAMENTAL UNIT OF LIFE

1. Why are lysosomes called “Suicidal bags”?
2. Do you agree that “A cell is a building unit of an organism”? If yes why?
3. Why does the skin of your fingers shrink when you wash clothes for a long time?
4. Why is endocytosis found in animals only?
5. Name any cell organelle which is non-membranous.

6. When a person takes concentrated salt solution he starts vomiting. What can be the possible reason behind it?
7. How is a bacterial cell different from onion peel cell?
8. Why are chloroplasts called the kitchen of the cell?
9. What are chromosomes?
10. What advantages does the selective permeability of plasma membrane provide to the cell?
11. Give two important characters of prokaryotic cells.
12. What is diffusion?
13. What is the significance of diffusion?
14. Name the scientists who presented cell theory.
15. What is the difference between diffusion and osmosis?
16. Why is plasma membrane called semi permeable membrane?
17. Cell size may vary from micrometre to metre. Support this statement with the help of examples.
18. What are the functions of cell wall?
19. Why is the cell called the fundamental unit of life?
20. The third postulate of cell theory states that "All cells come originate from pre-existing cells". Elaborate.

II. Make 3D model of a plant or animal cell using waste material , use of thermocol sheet should be avoided.

हिंदी

- 1- अलंकार को स्पष्ट करते हुए उनके विभिन्न भेदों के पाँच-पाँच उदाहरणों को विस्तारपूर्वक चित्रात्मक शैली में वर्णन कर दस पृष्ठों की एक परियोजना (project) तैयार कीजिए ।
- 2- हिंदी साहित्य में कौन-कौन से पुरस्कार दिए जाते हैं और क्यों ? साहित्यकारों के नाम व पुरस्कारों की चर्चा करते हुए चित्रात्मक शैली में पाँच पृष्ठों की एक परियोजना (project) तैयार कीजिए ।