

H.D. SR. SEC. PUBLIC SCHOOL, KHERI (MEHAM)

Class – 9 (A+B) Holiday Homework

हिंदी:-

- पत्र लेखन-सांत्वना-पत्र, निमंत्रण-पत्र, बधाई-पत्र, धन्यवाद-पत्र, शिकायत-पत्र ।
- अनुच्छेद लेखन-वसंत का सौंदर्य, परिश्रम का महत्त्व, परोपकार, विद्यार्थी और अनुशासन, सदाचार।
- क्षितिज गद्य खंड-पाठ-1 से 2 तक के प्रश्न-उत्तर (L)
- क्षितिज काव्य खंड कविता 1से 2 तक के प्रश्न-उत्तर और व्याख्या (L)
- कृतिका पाठ 1 के प्रश्न-उत्तर (L)
- व्याकरण-उपसर्ग-प्रत्यय (L)
- चार्ट-अलंकार और समास ।
- बालश्रम की समस्या और कोरोना महामारी के कारण और निवारण विषय पर 60 से 80 शब्दों में लेख लिखिए।

English:-

1. Find out answers of given questions after reading the comprehension on page 350 to 354 in new book and on page 322 to 326 in old book of grammar.
2. "If you work hard and know where you're going you'll get there". Says Evelyn Glennie. You have now read about two musicians, Evelyn Glennie and Ustad Bismillah Khan. Do you think that they both worked hard? Where did they want to go?
Answer these questions in two paragraphs one on each of the two musicians.
3. Fill exercise of subject verb agreement given on page 224 in old book and on page 243 in new book.
4. Find out meaning of given words.
Scatter, Weaklings, Crumbling, Winnows, Steadfast, Stuttered, Yawned, Snoring, Terrifying, Gravely, Stuffed, Sewed, Pacing, Damned, Clung, Hose, Nightmare, Stirred, Sighed, Butcher
5. (i) Today you were not well and did not go to school. Write a diary entry of how you spent the day.
(ii) You have been selected for the lead role in a play to be staged on your school's Annual Day function. Write a diary entry expressing your joy on being selected and the preparations you have made for such an important event in your life.
6. Revise Unit Test syllabus ↓
Beehive : Lesson 2 (The sound of music) Part 1 & 2
Poem : Wind
Moments : Lesson 2 (The adventures of Toto)
Grammar : Subject, Verb, Agreement

Note: Do given work in separate notebook.

Social Science:-

Geography

Write and learn NCERT questions of chapter 1 and 2

Learn the syllabus that has been completed

Complete your FNB

Make a Mind Map of each chapter that has been completed

Write 10 current national news related to geography
Write 10 current international news related to geography
Make model according to the roll numbers
Roll No (1-5). Rock cycle
Roll No (6-10). Volcano
Roll No (11-15). Earthquake
Roll No (16-20). Solar system
Roll No (21-25). 3D map of India location with physical features

Economics :

Draw the scrap book which represent the village Palampur (in a creative manner)

History :

Prepare 20 objective (1 mark) question each from these chapters:

French Revolution

What is Democracy; Why Democracy?

Constitutional Design

Make a beautiful project on:-

Topic :- Chapter 1 (History – “Political Symbols”)

Evolution and the significance of the political symbols associated with the French revolution

Explain the need for symbols during the French Revolution along with picture.

Impact of their symbols on common people

Draw an Table map of France from the chapter French Revolution

Science:-

- Do 20 numerical related to Ch – 8, 3 in your holidays homework notebook.
- Make a chart on given topics: Plant cell and Animal cell, Plantae Kingdom, Animalia Kingdom, Types of muscles, Modern periodic table, table of ions (Ch–3), distillation etc.
- Write the different methods of separating the components of a mixture.
- Write table 3.6 Names and symbols of some ions.
- Write 15 formulae of simple compounds.
- Learn Ch – 1, 2 & 3

Computer:-

❖ Write the Questions / Answer in Fair Notebook:

○ Part – A

▪ Unit – 3 (Session 4, 6 and 7)

❖ Assignment:

○ Part – A

▪ Unit – 1 (Session 1)

▪ Unit – 2 (Session 1, 2, 3)

▪ Unit – 3 (Session 1)

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STD 9 Maths Home work Assignment

Time : 40 Minute

Total Marks : 75

* Choose the right answer from the given options. [1 Marks Each]

[29]

1. The product of two irrational number is:

- a. always irrational.
- b. always rational.
- c. always an integer.
- d. sometimes rational and sometimes irrational.

2. π is:

- a. a rational number.
- b. an integer.
- c. an irrational number.
- d. a whole number.

3. The decimal expansion of $\sqrt{2}$ is:

- a. finite decimal.
- b. 1.4121
- c. nonterminating recurring.
- d. nonterminating, nonrecurring.

4. Which of the following is the value of $(\sqrt{11} - \sqrt{7})(\sqrt{11} + \sqrt{7})$?

- a. -4
- b. 4
- c. $\sqrt{11}$
- d. $\sqrt{7}$

5. There is a number x such that x^2 is irrational but x^4 is rational. Then, x can be:

- a. $\sqrt{5}$
- b. $\sqrt{2}$
- c. $\sqrt[3]{2}$
- d. $\sqrt[4]{2}$

6. How many digits are there in the repeating block of digits in the decimal expansion of $\frac{17}{7}$?

- a. 16
- b. 6
- c. 26
- d. 7

7. Between any two rational numbers there:

- a. is no rational number.
- b. is exactly one rational numbers.
- c. are infinitely many rational numbers.

d. is no irrational number.

8. The rationalisation factor of $\frac{1}{(2\sqrt{3}-\sqrt{5})}$ is:
- $\sqrt{5} - 2\sqrt{3}$
 - $\sqrt{3} + 2\sqrt{5}$
 - $(\sqrt{3} + \sqrt{5})$
 - $\sqrt{12} + \sqrt{5}$
9. An irrational number between $\frac{1}{7}$ and $\frac{2}{7}$ is:
- $\frac{1}{2} \left(\frac{1}{7} + \frac{2}{7} \right)$
 - $\left(\frac{1}{7} \times \frac{2}{7} \right)$
 - $\sqrt{\frac{1}{7} \times \frac{2}{7}}$
 - None of these.
10. Which of the following is an irrational number?
- 3.14
 - 3.141414...
 - 3.14444
 - 3.141141114...
11. When $p(x) = 4x^3 - 12x^2 + 11x - 5$ is divided by $(2x - 1)$, the remainder is:
- 0
 - 5
 - 2
 - 2
12. If $(x + 5)$ is a factor of $x^3 - 20x + 5k$ then $k = ?$
- 5
 - 5
 - 3
 - 3
13. If $(x^{100} + 2x^{99} + k)$ is divisible by $(x + 1)$ then the value of k is:
- 1
 - 2
 - 2
 - 3
14. If $(x + 1)$ is a factor of the polynomial $(2x^2 + kx)$ then $k = ?$
- 4
 - 3
 - 2
 - 2
15. If $(x^{51} + 51)$ is divided by $(x + 1)$ then the remainder is:
- 0
 - 1
 - 49

d. 50

16. Degree of the zero polynomial is:

- a. 1
- b. 0
- c. Not defined.
- d. Non of these.

17. Zero of the zero polynomial is:

- a. 0
- b. 1
- c. Every real number.
- d. Not defined.

18. If $(x + 2)$ and $(x - 1)$ are factors of the polynomial $p(x) = x^3 + 10x^2 + mx + n$ then:

- a. $m = 5, n = -3$
- b. $m = 7, n = -18$
- c. $m = 17, n = -8$
- d. $m = 23, n = -19$

19. For what value of k is the polynomial $p(x) = 2x^3 - kx^2 + 3x + 10$ exactly divisible by $(x + 2)$?

- a. $-\frac{1}{3}$
- b. $\frac{1}{3}$
- c. 3
- d. -3

20. When $p(x) = x^3 - ax^2 + x$ is divided by $(x - a)$, the remainder is:

- a. 0
- b. a
- c. 2a
- d. 3a

21. If $p(x) = 5x - 4x^2 + 3$ then $p(-1) = ?$

- a. 2
- b. -2
- c. 6
- d. -6

22. A linear equation in two variables x and y is of the form $ax + by + c = 0$, where:

- a. $a \neq 0, b \neq 0$
- b. $a \neq 0, b = 0$
- c. $a = 0, b \neq 0$
- d. $a = 0, c = 0$

23. If $(2, 0)$ is a solution of the linear equation $2x + 3y = k$ then the value of k is:

- a. 6
- b. 5
- c. 2
- d. 4

24. The graph of $y + 2 = 0$ is a line:

- a. Making an intercept -2 on the x-axis.
- b. Making an intercept -2 on the y-axis.
- c. Parallel to the x-axis at a distance of 2 units below the x-axis.
- d. Parallel to the y-axis at a distance of 2 units to the left of y-axis.

25. The graph of $x = 4$ is a line:

- a. Making an intercept 4 on the x-axis.
- b. Making an intercept 4 on the y-axis.
- c. Parallel to the x-axis at a distance of 4 units from the origin.
- d. Parallel to the y-axis at a distance of 4 units from the origin.

26. If the point (3, 4) lies on the graph of $3y = ax + 7$ then the value of a is:

- a. $\frac{2}{5}$
- b. $\frac{5}{3}$
- c. $\frac{3}{5}$
- d. $\frac{2}{7}$

27. The linear equation $3x - 5y = 15$ has:

- a. A unique solution.
- b. Two solutions.
- c. Infinitely many solutions.
- d. No solution.

28. How many linear equation can be satisfied by $x = 2$ and $y = 3$?

- a. Only one.
- b. Only two.
- c. Only three.
- d. Infinitely many.

29. The graph of $y = 5$ is a line:

- a. Making an intercept 5 on the x-axis.
- b. Making an intercept 5 on the y-axis.
- c. Parallel to the x-axis at a distance of 5 units from the origin.
- d. Parallel to the y-axis at a distance of 5 units from the origin.

*** Questions with calculation. [3 Marks Each]**

[42]

30. Evaluate:

$$\left(\frac{64}{125}\right)^{-\frac{2}{3}} + \left(\frac{256}{625}\right)^{-\frac{1}{4}} + \left(\frac{3}{7}\right)^0$$

31. Write the following in ascending order of magnitude.

$$\sqrt[6]{6}, \sqrt[3]{7}, \sqrt[4]{8}.$$

32. Simplify:

$$\frac{2\sqrt{30}}{\sqrt{6}} - \frac{3\sqrt{140}}{\sqrt{28}} + \frac{\sqrt{55}}{\sqrt{99}}$$

33. Simplify by rationalising the denominator:

$$\frac{2\sqrt{6}-\sqrt{5}}{3\sqrt{5}-2\sqrt{6}}$$

34. If x is a positive real number and exponents are rational numbers, simplify

$$\left(\frac{x^b}{x^c}\right)^{b+c-a} \times \left(\frac{x^c}{x^a}\right)^{c+a-b} \times \left(\frac{x^a}{x^b}\right)^{a+b-c}.$$

35. Evaluate:

$$\frac{(25)^{\frac{5}{2}} \times (729)^{\frac{1}{3}}}{(125)^{\frac{2}{3}} \times (27)^{\frac{2}{3}} \times 8^{\frac{4}{3}}}$$

36. Evaluate:

$$\left[5\left(8^{\frac{1}{3}} + 27^{\frac{1}{3}}\right)^3\right]^{\frac{1}{4}}$$

37. Using the remainder theorem, find the remainder, when $p(x)$ is divided by $g(x)$, where,
 $p(x) = x^3 - 6x^2 + 9x + 3$, $g(x) = x - 1$.

38. Using the remainder theorem, find the remainder, when $p(x)$ is divided by $g(x)$, where,
 $p(x) = 2x^3 + x^2 - 15x - 12$, $g(x) = x + 2$.

39. Find the product.

$$(3x - 5y + 4)(9x^2 + 25y^2 + 15xy - 20y + 12x + 16)$$

40. If $a + b + c = 9$ and $a^2 + b^2 + c^2 = 35$, find the value of $(a^3 + b^3 + c^3 - 3abc)$.

41. Factorise:

$$\text{Prove that } \frac{0.85 \times 0.85 \times 0.85 + 0.15 \times 0.15 \times 0.15}{0.85 \times 0.85 - 0.85 \times 0.15 + 0.15 \times 0.15} = 1$$

42. Factorise:

$$4x^4 + 7x^2 - 2$$

43. Factorise:

$$x^2 - 2x + \frac{7}{16}$$

*** Questions with calculation. [4 Marks Each]**

[4]

44. Draw the graph of the equation $x + 2y - 3 = 0$

From your graph, find the value of y when,

i. $x = 5$

ii. $x = -5$.

Also prepare ch 1,2,3,4 from MTG Book