PREPARATORY REVISION TEST - 2021 FRS

9 - Std   **MATHS**   Time : 1.30 hrs.

Marks : 50

PART - I

I   Answer all the questions. Choose the correct answer.   8 X 1 = 8

1. If A = {8, 9, 10, 11, 12}, B = {4, 5, 7} which of the following is true?

   a) $4 \in A$ b) $11 \in B$ c) $8 \in A$ d) $12 \in B$

2. The set, P = {x / x $\in$ z, - 1 < x < 1} is a

   a) singleton set   b) power set   c) null set   d) subset

3. Which of the following is correct?

   a) $\phi \in \{a,b\}$ b) $\phi \in \{a,b\}$ c) $\{a\} \in \{a,b\}$ d) $\{a\} \subseteq \{a,b\}$

4. $0.\overline{34} + 0.3\overline{4} =$

   a) $0.6\overline{87}$ b) $0.\overline{68}$ c) $0.6\overline{8}$ d) 0.687

5. If $\dfrac{1}{7} = 0.\overline{142857}$ then the value of $\dfrac{5}{7}$ is

   a) $0.\overline{142857}$ b) $0.\overline{714285}$ c) $0.\overline{571428}$ d) 0.714285

6. The root of the polynomial equation $2x + 3 = 0$ is

   a) $\dfrac{1}{3}$ b) $-\dfrac{1}{3}$ c) $-\dfrac{3}{2}$ d) $-\dfrac{2}{3}$

7. Degree of the polynomial $(y^3 - 2)(y^3 + 1)$ is

   a) 9   b) 2   c) 3   d) 6

8. If p(a) = 0 then (x - a) is a .... of p(x).

   a) divisor   b) quotient   c) remainder   d) factor

PART - II

Answer any seven questions. Question No. 19 is compulsory.   7 X 2 = 14

9. List the set of letters of the word PARALLELOGRAM in Roster form.

10. If A = {a {a,b}} write all the subsets of A.

11. If n[P(A)] = 256, find n(A).

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12. Convert the decimal number $0.4\overline{5}$ in the form of $\frac{p}{q}$ (p,q $\in$ z and $q \neq 0$).

13. Find any two irrational numbers between 0.3010011000111 .... and 0.3020020002 ..... .

14. Write the co-efficient of x² and x for the polynomial $4+\frac{2}{5}x^2-3x$.

15. Find the value of $(243)^{2/5}$.

16. The area of a rectangle is $x^2+7x+12$. If its breadth is (x + 3), then find its length.

17. Find the GCD for $9a^2b^2c^3$, $15a^3b^2c^4$.

18. Find the roots for the polynomial equation - 7 - 4x = 0.

19. Factorise : $9x^2+12xy+4y^2$.

PART - III

Answer any four questions. Question No. 26 is compulsory.   4 X 5 = 20

20. Represent $\sqrt{9.3}$ on a number line.

21. Represent $4.\overline{73}$ upto 4 decimal places on the number line.

22. The length of a rectangle is (3x + 2) units and its breadth is (3x - 2) units. Find its area in terms of x. What will be the area if x = 20 units.

23. By remainder theorem, find the remainder when p(x) is divided by g(x) where

p(x) = x³ - 2x² - 4x - 1, g(x) = (x + 1).

24. If $\left(y-\frac{1}{y}\right)^3 = 27$, then the value of $y^3-\frac{1}{y^3}$.

25. Find the value of m, if (x - 2) is a factor of the polynomial 2x³ - 6x² + mx + 4.

26. Find the quotient and remainder when x³ + x² - 7x - 3 is divided by x - 3

PART - IV

Answer the following.   1 X 8 = 8

27. Construct the $\triangle LMN$ such that LM = 7.5Cm, MN = 5Cm and LN = 8Cm. Locate its centroid. **(OR)**

Draw $\triangle PQR$ with sides PQ = 7Cm, QR = 8Cm and PR = 5Cm and construct its orthocentre.

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SALEM

PREPARATORY REVISION TEST - 2021 [FRS]

9 - Std   **SCIENCE**

Time : 1.30 hrs.

Marks : 50

12 X 1 = 12

I   Choose the correct answer of the following.

1.   1 metric ton is equal to ....

a) 100 quintals   b) 1/100 quintals   c) 10 quintals   d) 1/10 quintals

2.   SI unit of length is ....

a) Kilogram   b) Metre   c) Second   d) Kelvin

3.   Radius of a thin wire is measured by ....

a) Vernier Caliper   b) Screw Gange

c) Beam Balance   d) Spring Balance

4.   Velocity is a .... quantity

a) Scalar   b) Fundamental quantity

c) Vector   d) Scalar or Vector

5.   The motion of a city bus in a heavy traffic road is an example for ....
     motion.

a) uniform motion   b) non - uniform motion

c) linear motion   d) circular motion

6.   Area under velocity - time graph shows ....

a) distance   b) displacement   c) speed   d) velocity

7.   Among the following .... is a mixture.

a) common salt   b) carbon di oxide   c) juice   d) pure silver

8.   When we mix a drop of ink in water we get a ....

a) Heterogeneous mixture   b) Compound

c) Homogeneous mixture   d) Suspension

9.   The Chemical formula of cane sugar is ....

a) $C_6 H_{12} O_6$ b) $C_{12}H_{22}O_{11}$ c) C_2H_5OH d) CH_4

10. Find the group having only marine members

a) Mollusca   b) Coelenterata   c) Echinodermata   d) Porifera

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11. Earth worm is an example for ....

    a) Acoelomates

                          b) Pseudo coelomates

    c) Coelomates

                          d) none of the above

12. The animal without skull is ....

    a) Acrania   b) Acephalia   c) Apteria   d) Acoelomate

II   Answer very briefly any four of the following questions.   4 X 2 = 8

1. What is the full form of SI system?

2. Distinguish distance and displacement.

3. Name the components in each of the following mixtures :

    i) Ice Cream   ii) Air

4. What is called an atom?

5. Define taxonomy.

6. What is nematocyst?

III   Answer any four of the following briefly.   4 X 4 = 16

1. Write the need of a standard unit.

2. How will you measure the least count of Vernier Caliper?

3. Compare speed and velocity.

4. Give the four types of motion.

5. Oxygen is very essential for us to live. It forms 21% of air by volume. Is it an element or compound?

6. Differentiate between flat worms and round worms.

IV   Answer any one questions from each section of the following.   2 X 7 = 14

1. Explain a method to find the thickness of a hollow tea cup. *(OR)*

   Explain different types of motion.

2. a) Write the differences between elements and compounds and give an example for each.

   b) Give any two differences between mixture and compound. *(OR)*

   Give an account of phylum arthropoda.

(SALEM)

PREPARATORY REVISION TEST - 2021 [FRS]

9-Std   SOCIAL SCIENCE

Time : 1.30 hrs.

Marks : 50

6 X 1 = 6

I   Choose the correct answer.

1. Sir Robert Bruce Foote, a geologist from England first discovered the ....
    tools at Pallavaram near Chennai.

    a) Microlithic   b) Paleolithic   c) Mesolithic   d) Neolithic

2. The Harappans did not have the knowledge of

    a) Gold and elephant   b) Horse and Iron

    c) Sheep and Silver   d) Ox and Platinum

3. Magma is found in the ....

    a) Crust   b) Mantle

    c) Core   d) None of the above

4. .... is seen in the lower course of the river.

    a) Rapids   b) Alluvial Fan

    c) Delta   d) Gorges

5. Kudavolai system was followed by ....

    a) Cheras   b) Pandyas

    c) Cholas   d) Kalabharas

6. .... is the state with highest installed solar capacity in India.

    a) Tamil Nadu   b) West Bengal

    c) Kerala   d) Andhara Pradesh

II   Fill in the blanks.

5 X 1 = 5

7. .... is known as the Middle Stone Age, as it is placed between the
    Paleolithic and Neolithic.

8. The rigid outer layer of the earth is known as ....

9. The disintegration or decomposition of rock is generally called as ....

10. .... was the first Prime Minister of independent India.

11. Ground water is an example of .... resource.

III Match the following.   5 X 1 = 5

12. Hand axe tools   -   Sima
13. Red sand dunes   -   Mohenjo - Daro
14. Mantle   -   Achulian
15. The Great Bath   -   Lower course of river
16. Distributaries   -   Teris

PART - II

IV Answer any five of the following in short.   5 X 2 = 10

17. Brief, how the age of speculation made human become conscious and knowledgeable.

18. List out the features of Megalithic Burial types.

19. Mention the layers of the interior of the earth.

20. What is Tsunami?

21. What do you mean by biological weathering?

22. Give Abraham Lincoln's definition for democracy.

23. What are the indicators of development?

V Differentiate the following. (any two)   4

24. Core and the Crust.

25. Primary waves and Secondary waves.

26. Delta and Estuary.

PART - III

VI Answer the following in detail.   3 X 5 = 15

27. The history of humans is closely related to the earth, Elucidate. *(OR)*
     Write about the hidden treasure of Indus Valley Civilisation.

28. Explain the effects of Volcanoes. *(OR)*
     Write a note on weathering, Classify and Explain. *(OR)*

29. What are the challenges to Indian democracy? Explain. *(OR)*
     Describe the policies for sustainable development.

VII On the given outline map of the world, mark the following.   5 X 1 = 5

1) The Himalayan Range   2) Pacific Ring of fire
3) Any one Hot desert   4) The Alps Range
5) Any one Delta

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