O. P. JINDAL SCHOOL, SAVITRI NAGAR

Periodic Test – I(Round -1) 2025 – 2026

Class: IX MM: 20

Subject: Mathematics Time: 1Hr

General Instructions:

1. All questions are compulsory.
2. The question paper consists of 13 questions divided in three sections A, B and C.
3. Section A contains 8 questions of 1 mark each. Section B contains 3 questions of 2 marks each. Section C contains 2 questions of 3 marks each.
4. There is no overall choice. However an internal choice has been provided. You have to attempt only one of the alternatives in all questions.
5. Use of calculator is not permitted.

Section A

Choose the correct answer:

Q1. Which one is not a rational number?

a) 3.212 b) 2.66666.... c) 1.850317.... d) $2\sqrt{121}$

Q2. Find the value of: $5\sqrt{125} \div \sqrt{25}$

a) 5 b) $\sqrt{5}$ c) 25 d) $5\sqrt{5}$

Q3. Rationalise the denominator: $\frac{1}{\sqrt{4}-\sqrt{3}}$

a) $2+\sqrt{3}$ b) $\sqrt{2}+\sqrt{3}$ c) $\sqrt{2}-\sqrt{3}$ d) $2-\sqrt{3}$

Q4. A rational number between $\sqrt{2}$ and $\sqrt{3}$ is:

a) $\frac{1}{2}(\sqrt{2}+\sqrt{3})$ b) $\frac{1}{2}(\sqrt{3}-\sqrt{2})$ c) 2.5 d) 1.5

Q5. The decimal representation of an irrational number is

a) Always terminating b) either terminating or repeating

c)either terminating or non-repeating d) neither terminating nor repeating

Q6. Find the value of $(125)^{-1/3}$.

a) -5 b) 5 c) 1/5 d) -1/5

Q7. Which of the following is a true statement?

a) Π and 22/7 are both irrationals. b) Π and 22/7 are both rationals.
c)Π is rational and 22/7 is irrational. d) Π is irrational and 22/7 is rational.

Q8. If p is a prime number then $\sqrt{p}$ is :

a) always irrational b) always rational c) can't say d) none of these

Section B

Q9. Simplify: $(\sqrt{2} + \sqrt{3})^2$

OR

Find 5 rational numbers between 1/5 and 2/5.

Q10. Represent $\sqrt{5}$ on number line

Q11. Find the value of: (i) $(27^{1/3})^4$ (ii) $(\sqrt{8})^{-3} \times (\sqrt{2})^{-3}$

Section C

Q12. Express $1.\overline{3}$ in the form of p/q.

Q13. Rationalise the denominator: $\frac{\sqrt{3}+\sqrt{2}}{\sqrt{3}-\sqrt{2}}$

OR

If $x = 3 + \sqrt{8}$ then find the value of $x + 1/x$.

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