

Quiz Portal (Answer)

Math Quiz (Class-10)

Time : 30 Minutes. | Total Questions : 10 | **Total Mark : 10 X 1 = 0**

Postive Mark For Every Question : 1 | Negative Mark For Every Question : 0.5

1) The decimal expansion of $22/7$ is

- A. (a) Terminating
- B. (b) Non-terminating and repeating
- C. (c) Non-terminating and Non-repeating
- D. (d) None of the above

Correct Answer : (b) Non-terminating and repeating

2) 2. For some integer n , the odd integer is represented in the form of:

- A. (a) n
- B. (b) $n + 1$
- C. (c) $2n + 1$
- D. (d) $2n$

Correct Answer : (c) $2n + 1$

Explanation: Since $2n$ represents the even numbers, hence $2n + 1$ will always represent the odd numbers. Suppose if $n = 2$, then $2n = 4$ and $2n + 1 = 5$.

3) 3. HCF of 26 and 91 is:

- A. (a) 15
- B. (b) 13
- C. (c) 19
- D. (d) 11

Correct Answer : (b) 13

Explanation: The prime factorisation of 26 and 91 is; $26 = 2 \times 13$ $91 = 7 \times 13$ Hence, $\text{HCF}(26, 91) = 13$

4) 4. Which of the following is not irrational?

- A. (a) $(3 + \sqrt{7})$
- B. (b) $(3 - \sqrt{7})$
- C. (c) $(3 + \sqrt{7})(3 - \sqrt{7})$
- D. (d) $3\sqrt{7}$

Correct Answer : (c) $(3 + \sqrt{7})(3 - \sqrt{7})$

Explanation: If we solve, $(3 + \sqrt{7})(3 - \sqrt{7})$, we get; $(3 + \sqrt{7})(3 - \sqrt{7}) = 3^2 - (\sqrt{7})^2 = 9 - 7 = 2$ [By $a^2 - b^2 = (a - b)(a + b)$]

5) 5. The addition of a rational number and an irrational number is equal to:

- A. (a) rational number
- B. (b) Irrational number
- C. (c) Both
- D. (d) None of the above

Correct Answer : (b) Irrational number

The addition of a rational number and an irrational number is equal to irrational number.

6) 6. The multiplication of two irrational numbers is:

- A. (a) irrational number
- B. (b) rational number
- C. (c) Maybe rational or irrational
- D. (d) None

Correct Answer : (c) Maybe rational or irrational

The multiplication of two irrational numbers is maybe rational or irrational.

7) 7. If set $A = \{1, 2, 3, 4, 5, \dots\}$ is given, then it represents:

- A. (a) Whole numbers
- B. (b) Rational Numbers
- C. (c) Natural numbers
- D. (d) Complex numbers

Correct Answer : (c) Natural numbers

If set $A = \{1, 2, 3, 4, 5, \dots\}$ is given, then it represents natural numbers.

8) 8. If p and q are integers and is represented in the form of p/q , then it is a:

- A. (a) Whole number
- B. (b) Rational number
- C. (c) Natural number
- D. (d) Even number

Correct Answer : (b) Rational number

If p and q are integers and is represented in the form of p/q , then it is a rational number.

9) 9. The largest number that divides 70 and 125, which leaves the remainders 5 and 8, is:

- A. (a) 65
- B. (b) 15
- C. (c) 13
- D. (d) 25

Correct Answer : (c) 13

Explanation: $70 - 5 = 65$ and $125 - 8 = 117$ HCF (65, 117) is the largest number that divides 70 and 125 and leaves remainder 5 and 8. $\text{HCF}(65, 117) = 13$

10) 10. The least number that is divisible by all the numbers from 1 to 5 is:

- A. (a) 70
- B. (b) 60
- C. (c) 80
- D. (d) 90

Correct Answer : (b) 60

Explanation: The least number will be LCM of 1, 2, 3, 4, 5. Hence, $\text{LCM}(1, 2, 3, 4, 5) = 2 \times 2 \times 3 \times 5 = 60$