

OBJECTIVES QUESTIONS 10TH REAL NUMBER

Choose the correct option.

- $\sqrt{5} - 3 - 2$ is:
A. a rational number
B. a natural number
C. equal to zero
D. an irrational number
- Let $x = \frac{7}{22 \times 53}$ be a rational number. Then x has decimal expansion which terminates:
A. after four places of decimal
B. after three places of decimal
C. after two places of decimal
D. after five places of decimal
- The decimal expansion of $\frac{63}{72 \times 175}$ is:
A. Terminating
B. Non-terminating
C. Non terminating and repeating
D. None of these
- If HCF and LCM of two numbers are 4 and 9696, then the product of the two numbers is:
A. 9696
B. 24242
C. 38784
D. 4848
- $(2 + \sqrt{3} + \sqrt{5})$ is a:
A. natural number
B. Integer number
C. Rational number
D. Irrational number
- If $\left(\frac{9}{7}\right)^3 \times \left(\frac{49}{81}\right)^{2x-6} = \left(\frac{7}{9}\right)^9$, the value of x is:
A. 12
B. 9
C. 8
D. 6
- The number .211 2111 21111 211111..... is a:
A. terminating decimal
B. non-terminating repeating decimal
C. non-terminating decimal which is non-repeating
D. None of the above
- If $(m)^n = 32$, where m and n are positive integers, then the value of $(n)^{mn}$ is:
A. 32
B. 25
C. (5)10
D. (5)25
- The number 0.57 in the $\frac{p}{q}$ form ($q \neq 0$) is:
A. $\frac{19}{35}$
B. $\frac{57}{99}$
C. $\frac{57}{95}$
D. $\frac{19}{30}$

10. 0.57 can be written as $\frac{p}{q}$, $q \neq 0$ as:
- A. $\frac{26}{45}$ B. $\frac{13}{27}$ C. $\frac{13}{29}$ D. $\frac{57}{99}$
11. Any one of the numbers a , $(a + 2)$ and $(a + 4)$ is a multiple of:
- A. 2 B. 3 C. 5 D. 7
12. If p is a prime number and p divides k^2 , then p divides:
- A. $2k^2$ B. k C. $3k$ D. None of these

13. For some integer m , every even integer is of the form

- (A) m (B) $m + 1$ (C) $2m$ (D) $2m + 1$

14. For some integer q , every odd integer is of the form

- (A) q (B) $q + 1$ (C) $2q$ (D) $2q + 1$

15. $n^2 - 1$ is divisible by 8, if n is

- (A) an integer (B) a natural number (C) an odd integer (D) an even integer

16. If the HCF of 65 and 117 is expressible in the form $65m - 117$, then the value of m is

- (A) 4 (B) 2 (C) 1 (D) 3

17. The largest number which divides 70 and 125, leaving remainders 5 and 8, respectively, is

- (A) 13 (B) 65 (C) 875 (D) 1750

18. If two positive integers a and b are written as $a = x^3y^2$ and $b = xy^3$; x, y are prime numbers, then HCF (a, b) is

- (A) xy (B) xy^2 (C) x^3y^3 (D) x^2y^2

19. If two positive integers p and q can be expressed as $p = ab^2$ and $q = a^3b$; a, b being prime numbers, then LCM (p, q) is

- (A) ab (B) a^2b^2 (C) a^3b^2 (D) a^3b^3

20. The product of a non-zero rational and an irrational number is

- (A) always irrational (B) always rational (C) rational or irrational (D) one