

Number system-3 test

Q1. Find the highest power of 72 in 100!

- (a) 4 (b) 20 (c) 24 (d) 32

Q2. How many natural numbers 'n' are there, such that 'n!' ends with exactly 30 zeroes?

- (a) 0 (b) 1 (c) 2 (d) 3

Q3. Solve for $x^2 - 4x + 4 = 0$, and provide the answer in factorial.

- (a) 1! (b) 2! (c) 3! (d) None of these

Q4. Find the remainder when $347^{347}/100$

- (a) 3 (b) 12 (c) 13 (d) None of these

Q5. Find a least number when divided by 17 leaves a remainder of 1, when divided by 9 leaves a remainder of two

- (a) 56 (b) 87 (c) 137 (d) None of these

Q6. A rectangular field of dimension 180m x 105m is to be paved by identical square tiles. Find the number of tiles required?

- (a) 1260 (b) 84 (c) Data inadequate (d) None of these

Q7. Find the maximum number of students among whom 182 chocolates and 247 candies can be distributed such that each student gets the same number of each.

- (a) 13 (b) 14 (c) 19 (d) 31

Q8. Find the remainder in $2^{410}/17$

- (a) 13 (b) 4 (c) 1 (d) 2

Q9. When a number is divided by 13, the remainder is 11. When the same number is divided by 17, then remainder is 9. What is the number ?

- (a) 339 (b) 349 (c) 369 (d) Data inadequate

Q10. In a division sum, the divisor is 10 times the quotient and 5 times the remainder. If the remainder is 46, what is the dividend ?

- (a) 4236 (b) 4306 (c) 4336 (d) 5336 (e) None of these

Answer key

1	C	3	B	5	C	7	A	9	B
2	A	4	D	6	B	8	B	10	D