



KINETICS

We Nurture The Future

IIT-JEE | Medical | Foundations

16. Playing with Numbers

Question 1.

Which of the following is divisible by 12?

- (a) 284382
- (b) 624876
- (c) 926248
- (d) 746174

Answer: (b) 624876

Question 2.

By which of the following number 168 is divisible?

- (a) 5
- (b) 10
- (c) 9
- (d) 2

Answer: (d) 2

Question 3.

Write in the usual form: $100 \times 7 + 10 \times 1 + 8$

- (a) 871
- (b) 718
- (c) 178
- (d) 781

Answer: (b) 718

Question 4.

Write in the usual form: $10 \times 5 + 6$

- (a) 65
- (b) 54
- (c) 56
- (d) 25

Answer: (c) 56

Question 5.

When is a number always divisible by 90?

- (a) If it is divisible by both 2 and 45.
- (b) If it is not divisible by both 5 and 18.
- (c) If it is not divisible by both 9 and 10.
- (d) If it is divisible by 3 and 20.

Answer: (a) If it is divisible by both 2 and 45.

Question 6.

What value should be given to " * " so that the number $653 * 47$ is divisible by 11?

- (a) 1
- (b) 6
- (c) 2
- (d) 9

Answer: (a) 1

Question 7.

By which of the following number 9042 is not divisible? 2, 3, 6, and 9

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

Answer: (c) 9

Question 8.

Write in generalised form: 25

- (a) $10 \times 5 + 2$
- (b) $10 \times 5 + 3$
- (c) $10 \times 2 + 5$
- (d) $10 \times 3 + 5$

Answer: (c) $10 \times 2 + 5$

Question 9.

Which of the given numbers is composite?

- (a) 137
- (b) 147
- (c) 157
- (d) 167

Answer: (b) 147

Question 10.

The generalised form of the number 33 is

- (a) $10 \times 3 + 3$
- (b) 10×3
- (c) $3 + 3$
- (d) $3 \times 3 + 3$

Answer: (a) $10 \times 3 + 3$

Question 11.

If a number is divisible by 9, it is also divisible by which number?

- (a) 3
- (b) 6

- (c) 2
- (d) 4

Answer: (a) 3

Question 12.

$32 + m$ is a prime number. What is the least value of 'm'?

- (a) 3
- (b) 5
- (c) 6
- (d) 4

Answer: (b) 5

Question 13.

Which of the following is not prime?

- (a) 107
- (b) 127
- (c) 153
- (d) 197

Answer: (c) 153

Question 14.

Identify the missing digit in the number 234,4_6, if the number is divisible by 4.

- (a) 2
- (b) 6
- (c) 4
- (d) 5

Answer: (d) 5

Question 15.

By which of the following numbers is 477 not divisible?

- (a) 3
- (b) 7
- (c) 53
- (d) 9

Answer: (b) 7

Question 16.

N is a 5-digit number divisible by 5. If N is bigger than 10000 and smaller than 10010, what is the value of N?

- (a) 10000
- (b) 10010
- (c) 10005
- (d) 10001

Answer: (c) 10005

Question 17.

Write in generalised form: 85

- (a) $10 \times 5 + 8$
- (b) $10 \times 8 + 5$
- (c) $10 \times 5 + 3$
- (d) $10 \times 3 + 5$

Answer: (b) $10 \times 8 + 5$

Question 18.

Which of these numbers is divisible by 6?

- (a) 5782
- (b) 2666
- (c) 6053
- (d) 8964

Answer: (d) 8964

Question 19.

If the division $N \div 5$ leaves a remainder of 0, what might be the one's digit of N?

- (a) 5
- (b) Either 5 or 0
- (c) 2
- (d) 7

Answer: (b) Either 5 or 0

Question 20.

Which of the following statements is false?

- (a) If a number is divisible by 8, it must be divisible by 4.
- (b) If a number is divisible by both 9 and 10, it is divisible by 90.
- (c) The sum of two consecutive odd numbers is always divisible by 4.
- (d) If a number is not divisible by both 3 and 4, it is divisible by 12.

Answer: (d) If a number is not divisible by both 3 and 4, it is divisible by 12.