

NUMERICAL ABILITY

Direction (1-5): What value should come in place of the question mark (?) in the following questions?

1). 18, 8, 6, 9, 32, ?.

a) 256

b) 284

c) 251

d) 249

e) 320

2). 1, 244, 163, 190, 181, ?.

a) 188

b) 198

c) 178

d) 184

e) 191

3). 250, ?, 190, 167, 148, 131.

a) 219

b) 222

c) 221

d) 218

e) 215

4). 36, 18, 6, 3, 1, ?.

a) 0.4

b) 0.25

c) 0.2

d) 0.33

e) 0.5

5). 18, 29, 42, 53, ?.

a) 70

b) 66

- c) 72
- d) 69
- e) 80

Direction (6-15): What value should come in place of the question mark (?) in the following questions?

6). $[(36 \times 75) \div 15 - 2520 \div 120] = 3 \times ?$

- a) 72
- b) 53
- c) 66
- d) 48
- e) None of these

7). $172 \times (853 - 340) \div 19 = ? - 720$

- a) 4576
- b) 6128
- c) 5364
- d) 3780
- e) None of these

8). $(35 \% \text{ of } 75000) \div ? = (125 \% \text{ of } 300) \times 2$

- a) 60
- b) 45
- c) 35
- d) 20
- e) None of these

9). $(4/15) \text{ of } 393 + (7/12) \text{ of } 468 = ? \times 4$

- a) 107.25
- b) 94.45
- c) 82.65
- d) 78.35
- e) None of these

10). $42 \% \text{ of } 1250 + 15 \% \text{ of } ? = 1113$

- a) 3920
- b) 4160
- c) 3350
- d) 3780
- e) None of these

11). $\sqrt{8281} \div 7 + 63 = ? - 25785 \div 9$

- a) 2941
- b) 2785
- c) 2513
- d) 2147
- e) None of these

12). $28\% \text{ of } 3540 + 267\% \text{ of } 4500 + 24\% \text{ of } 5060 = ?$

- a) 14220. 6
- b) 13450. 8
- c) 11780. 4
- d) 15670. 5
- e) None of these

13). $(6390 \div 15) + (7182 \div 19) + (10224 \div 8) = ? - 24\% \text{ of } 750$

- a) 2534
- b) 2262
- c) 2876
- d) 3148
- e) None of these

14). $(4/7) \text{ of } ? - (5/7) \text{ of } (91/40) \text{ of } 3656 = 26\% \text{ of } 1850$

- a) 17852. 6
- b) 11238. 5
- c) 15724. 8
- d) 13421. 7
- e) None of these

15). $(1256 \div 4) \times (138 \div 3) = 810 \div 3 + ?$

a) 27895

b) 35621

c) 22782

d) 14174

e) None of these

Directions (16-20): In each questions, two equations numbered I and II have been given. You have to solve both the equations and mark the appropriate option.

(a) if $x > y$ (b) if $x \geq y$ (c) if $x < y$ (d) if $x \leq y$ (e) if $x = y$ or no relationship can be established.

16).

I. $x^2 + 6x + 9 = 0$

II. y^2

$-y - 20 = 0$

17).

I. x^2

$-10x + 24 = 0$

II. $2y^2$

$-3y - 35 = 0$

18).

I. $X^2 - 7X = -12$

II. $Y = \sqrt{16}$

19).

I. $4x^2$

$-9x - 34 = 0$

II. $y^2 + 20y + 51 = 0$

20).

I. $x^2 + 361 = 442$

II. $y + \sqrt{289} = \sqrt{676}$

Directions (21-25): Each question contains Quantity I and Quantity II. Read the contents clearly and answer your questions accordingly.

- a) Quantity I > Quantity II
- b) Quantity I \geq Quantity II
- c) Quantity II > Quantity I
- d) Quantity II \geq Quantity I
- e) Quantity I = Quantity II or Relation cannot be established

21). Quantity I: The SI on a certain sum of money for 3 years at 5 % per annum is Rs. 4800. Then the principle is?

Quantity II: The CI on a certain sum of money for 2 years at 6 % per annum is Rs. 3708. Then the principle is?

22). Quantity I: 3 years ago, the ratio of age of A and B is 3: 4. After 2 years, the sum of their ages is 45. Then find the present age of A?

Quantity II: 5 years ago, the ratio of age of P and Q is 3: 4. P's age after 6 years is equal to the present age of Q. Then find the present age of P?

23). Quantity I: If the length of a rectangle is increased by 20% while the breadth of the rectangle is decreased by 10% then find percentage change in area of the rectangle?

Quantity II: If the breadth of a triangle is increased by 30 % while the height of a triangle is decreased by 20 %, then find the percentage change in area of the triangle?

24). Quantity I: Raji can swim at 6 km/hr in still water. The river flows at 3 km/hr and it takes 8 hours more upstream than downstream for the same distance. How far is the place?

Quantity II: A man can row 25 km/hr in still water and the river is running at 15 km/hr. If the man takes 2 hr to row to a place and back, how far is the place?

25). Quantity I: There are three numbers in the ratio 5: 6: 10. The sum of the largest and the smallest numbers is 126 more than the other number. Find the largest number?

Quantity II: 12 % of first number is equal to 25 % of second number. The difference of these two numbers is 78. Then find the largest number?

26). Four years ago, the ratio between the age of Ram and Shyam was 4:9 respectively. Sita is 5 years older than Ram. Sita is 5 years younger than Shyam. What is Sita's present age?

- a) 17 years
- b) 20 years
- c) 23 years
- d) 24 years

e) 25 years

27). Rakesh Gangwal and Rahul Bhatia invested in a business in the ratio 10:13. What is the total profit, if Rahul Bhatia's profit share is Rs.832 and 8% of the total profit goes to charity?

a) Rs.1400

b) Rs.1500

c) Rs.1600

d) Rs.1700

e) Rs.1800

28). The length of train A is 320 metres and that of train B is 415 metres. Train A travelling at a speed of 55 kmph crosses train B travelling in opposite direction in 21 seconds. What is the speed of train B?

a) 62 kmph

b) 53 kmph

c) 80 kmph

d) 71 kmph

e) 75 kmph

29). A man rows to a place 40 km distance and come back in 9 hours. He finds that he can row 5 km with the stream in the same time as 4 km against the stream. The rate of the stream is?

a) 1 km/hr

b) 1.5 km/hr

c) 2 km/hr

d) 2.5 km/hr

e) None of these

30). The area of rectangle is 1.5 times of the area of the square. Length of rectangle is 3 times its breadth. If side of square is 15m. What is the perimeter of the rectangle?

a) 31.8 m

b) 42.4 m

c) 75.6 m

d) 84.8 m

e) 78.8 m