

## ONLINE EXAMINATIONS

### Naan Mudhalvan – Quantitative Aptitude

1. What value will replace the question mark in the equation?  
 $? - 1936248 = 1635773$   
a) 3572020    b) 3572021    c) 3572022    d) 3572023
2. Which of the following is not a prime number?  
a) 11            b) 17            c) 27            d) 29
3. What is the sum of all natural numbers from 1 to 10?  
a) 50            b) 55            c) 60            d) 65
4. Find the HCF of 108, 288 and 360.  
a) 36            b) 28            c) 42            d) 54
5. Reduce  $391/667$  to lowest terms.  
a)  $18/27$         b)  $17/27$         c)  $17/29$         d)  $18/29$
6. Convert 0.75 into vulgar fraction.  
a)  $1/4$             b)  $1/2$             c)  $3/4$             d)  $1/3$
7. Simplify  $5005 - 5000/10$ .  
a) 4505            b) 5000            c) 5005            d) 0
8. Simplify  $100 + 50 \times 2$ .  
a) 200            b) 300            c) 150            d) 100
9. Find the square root of 64009.  
a) 347            b) 363            c) 203            d) 253
10. Find the average of first 10 natural numbers.  
a) 6.5            b) 4.5            c) 3.5            d) 5.5
11. A does a work in 10 days and B does the same work in 15 days. In how many days they together will do the same work?  
a) 5 days        b) 6 days        c) 8 days        d) 9 days
12. A car moves at the speed of 80 km/hr. What is the speed of the car in metres per second?  
a) 8 m/sec        b)  $180/9$  m/sec    d)  $206/9$  m/sec    d)  $200/9$  m/sec

13. A milkman mixes 4 liters of water with 16 liters of pure milk. What is the percentage of water in the resulting mixture?
- a) 20%      b) 25%      c) 16%      d) 4%
14. The sum of two numbers is 45 and their difference is 9. Find the numbers.
- a) 24, 21      b) 20, 25      c) 27, 18      d) 38, 7
15. The difference between a number and its three-fifth is 50. What is the number?
- a) 50      b) 75      c) 100      d) 125
16. The ratio of the ages of two friends is 3:4. The difference in their ages is 6 years. Find Their ages.
- a) 12, 18      b) 10, 16      c) 18, 24      d) 10, 15
17. The present age of a father is 3 times that of his son. If the sum of their ages is 48 years, find their present ages.
- a) 10, 30      b) 12, 36      c) 11, 33      d) 9, 27
18. What is 45% of 280?
- a) 120      b) 122      c) 124      d) 126
19. Express 6% as a decimal.
- a) 0.6      b) 0.06      c) 0.006      d) 0.0006
20. A man buys an article for Rs. 250 and sells it for Rs. 268. Find his gain.
- a) 10      b) 12      c) 16      d) 18
21. Simplify the ratio 36:60.
- a) 3:5      b) 4:8      c) 2:6      d) 3:5
22. If  $A:B = 5:2$ , then what is  $B:A$ ?
- a) 5:2      b) 2:5      c) 10:4      d) 4:10
23. A can complete a work in 10 days. How much work does A do in 1 day?
- a)  $1/10$       b)  $1/2$       c)  $1/5$       d)  $2/5$
24. A is twice as efficient as B. If B can do a work in 18 days, how many days will A take to do the same work?
- a) 6 days      b) 18 days      c) 36 days      d) 9 days
25. A car travels 120 km in 2 hours. What is the speed of the car?

a) 20 km/hr   b) 60 km/hr   c) 120 km/hr   d) 80 km/hr

26. A cyclist travels at a speed of 18 km/hr. How far will the cyclist travel in 5 hours?

a) 42 km      b) 50 km      c) 90 km      d) 36 km

27. Calculate the simple interest on Rs. 5000 for 2 years at an annual interest rate of 5%.

a) Rs. 500      b) Rs. 600      c) Rs. 700      d) Rs. 800

28. Find the compound interest on Rs. 7500 at 4% per annum for 2 years.

a) Rs. 651      b) Rs. 687      c) Rs. 612      d) Rs. 638

29. Two sides of the rectangular field are 15 m and 8 m. Find the area of the field.

a) 110 m<sup>2</sup>      b) 220 m<sup>2</sup>      c) 50 m<sup>2</sup>      d) 120 m<sup>2</sup>

30. Find the volume of a cuboid 16 m long, 14 m broad and 7 m high.

a) 1875 m<sup>3</sup>      b) 2645 m<sup>3</sup>      c) 1568 m<sup>3</sup>      d) 2345 m<sup>3</sup>

31. Find the value of 5!

a) 60              b) 120              c) 180              d) 210

32. How many words can be formed by using all letters of the word "BIHAR"?

a) 120              b) 140              c) 160              d) 180

33. Evaluate 5!/3!

a) 6                  b) 12                  c) 20                  d) 25

34. In a throw of a coin, find the probability of getting a head.

a) 1/4              b) 1/3              c) 1/2              d) 1/5

35. An unbiased die is tossed. Find the probability of getting 3.

a) 1/4              b) 1/3              c) 1/5              d) 1/6

36. The angle of elevation to the top of a building from a point on the ground is 45°. If the height of the building is 20 meters, how far is the point from the building?

a) 20 meters      b) 10 meters      c) 5 meters      d) 15 meters

37. A boat can travel at 10 km/h in still water. If the speed of the stream is 2 km/h, find the boat's speed downstream and upstream.

a) 14, 6              b) 8, 9              c) 15, 10              d) 12, 8

38. Find the odd one out: 3, 5, 7, 9, 11, 13.

- a) 3                      b) 7                      c) 9                      d) 11

39. Find the odd one out: Apple, Banana, Orange, Carrot, Mango.

- a) Apple                      b) Banana                      c) Orange                      d) Carrot

40. Find the odd one out: 12, 14, 22, 24, 26, 31, 34.

- a) 12                      b) 31                      c) 34                      d) 24

The table below shows the number of books sold in 5 different genres in a bookstore in the month of April.

| Genre           | Number of Books Sold |
|-----------------|----------------------|
| Fiction         | 200                  |
| Non-Fiction     | 150                  |
| Mystery         | 120                  |
| Science Fiction | 90                   |
| Biography       | 80                   |

41. What is the total number of books sold in April?

- a) 520                      b) 640                      c) 680                      d) 720

42. Which genre had the highest sales?

- a) Fiction                      b) Non-Fiction                      c) Mystery                      d) Science Fiction

43. What percentage of the total books sold was "Non-Fiction"?

- a) 18.84%                      b) 20.34%                      c) 22.65%                      d) 23.44%

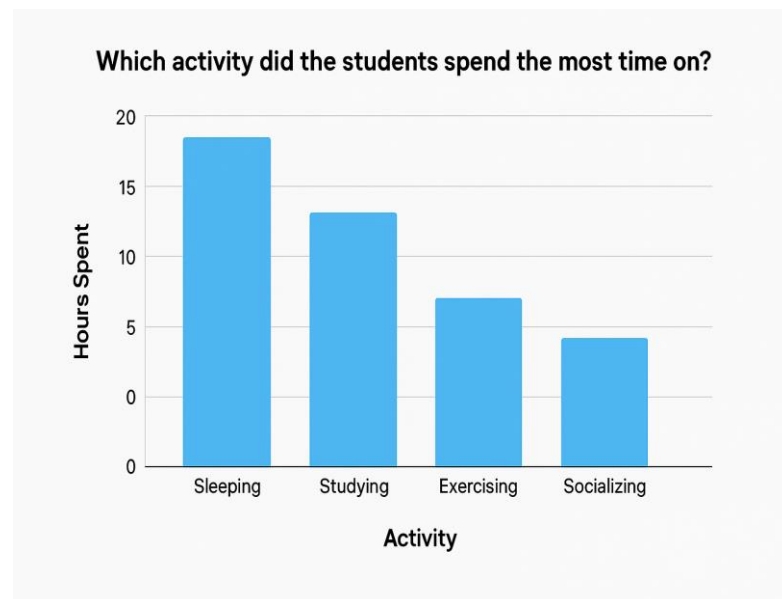
44. How many more books were sold in the "Fiction" genre than in the "Biography" genre?

- a) 120                      b) 140                      c) 80                      d) 100

45. What is the average number of books sold across all genres?

- a) 122                      b) 124                      c) 128                      d) 130

The bar graph below shows the number of hours spent on different activities during the weekend by five students.



| Activity    | Hours Spent |
|-------------|-------------|
| Sleeping    | 20          |
| Studying    | 12          |
| Exercising  | 5           |
| Socializing | 7           |
| Watching TV | 10          |

46. Which activity did the students spend the most time on?

- a) Studying   b) Sleeping   c) Exercising   d) Socializing

47. How many hours did the students spend socializing and exercising combined?

- a) 12              b) 16              c) 18              d) 24

48. What is the total number of hours spent on all activities?

- a) 48              b) 50              c) 52              d) 54

49. Which activity did the students spend the least time on?

- a) Studying   b) Socializing   c) Exercising   d) Watching TV

50. What percentage of the total weekend hours was spent sleeping?

- a) 28.36%   b) 37.04%   c) 26.45%   d) 18.21%