PRACTICE TEST PAPER NO. 8
Mathematical Ability

Q. 1-5. What will come in place of the question mark(?) in the following questions?

1. $25 + 125 \times 2 = ?$
   - (1) 375
   - (2) 30
   - (3) 6250
   - (4) 152
   - (5) None of these

2. 150% of 15 + 75% of 75 = ?
   - (1) 78.75
   - (2) 75.75
   - (3) 281.25
   - (4) 135
   - (5) None of these

3. $\left(((2)^4)^{\frac{1}{2}} \right)^? = 256$
   - (1) 8
   - (2) 6
   - (3) 4
   - (4) 1
   - (5) None of these

4. $4\sqrt{10,000} = (100)^?$
   - (1) $\dfrac{1}{2}$
   - (2) 2
   - (3) $\dfrac{1}{4}$
   - (4) $\dfrac{1}{8}$
   - (5) None of these

5. $-20 \times 40 \times \dfrac{1}{5} \div \dfrac{30}{25} = ?$
   - (1) $-\dfrac{20}{3}$
   - (2) $\dfrac{400}{3}$
   - (3) $-\dfrac{400}{9}$
   - (4) -192
   - (5) None of these

Q. 6-10. What will come in place of the question mark (?) in the following series?

6. 12   22   69   272   1365   ?

(1) 8196   (2) 8184
(3) 8195   (4) 6830
(5) None of these

7.   1   ?   27   64   125
     (1) 14   (2) 4
     (3) 9   (4) 8
     (5) None of these

8.   104   153   189   214   ?
     (1) 239   (2) 225
     (3) 264   (4) 235
     (5) None of these

9.   15   17   32   49   81   130   ?
     (1) 179   (2) 211
     (3) 194   (4) 226
     (5) None of these

10. 15   17   21   29   45   77   ?
     (1) 109   (2) 125
     (3) 141   (4) 173
     (5) None of these

Q.11-15. From the following different committees are to be made as per the requirement given in each question.
In how many different ways can it be done?
10 men and 8 women out of which 5 men are teachers. 3 men doctors and 2 are businessmen. Among the women, 3 are teachers, 2 doctors, 2 researchers and 1 social worker.

11. A Committee of 5 in which 3 men and 2 women are there.
     (1) 3360   (2) 8568
     (3) 4284   (4) 1680
     (5) None of these

12. A Committee of 4 in which at least 2 women are there.
     (1) 1260   (2) 1820
     (3) 3060   (4) 1890
     (5) None of these

13. A Committee of 5 in which 2 men teachers, 2 women teachers and 1 doctor are there.
     (1) 75   (2) 150
     (3) 214   (4) 20
     (5) None of these

14. A Committee of 7.
    (1) 31824
    (2) 1200
    (3) 9600
    (4) 15912
    (5) None of these

15. A Committee of 3 in which there is no teacher and no doctor.
    (1) 100
    (2) 120
    (3) 10
    (4) 12
    (5) None of these

16-20. Study the following graph to answer the given questions.

PER CENT RISE IN PRODUCTION OVER THE YEARS

16. For how many years is the per cent rise more than 100?
    (1) One
    (2) Two
    (3) Five
    (4) Three
    (5) None of these

17. What is the average of the per cent rise over the given years?
    (1) 110
    (2) 105
    (3) 100.5
    (4) 92.5
    (5) None of these

18. For how many years is the per cent rise lower than the average of the per cent rise over the given years?
    (1) Two
    (2) One
    (3) Five
    (4) Three
    (5) None of these

19. For which of the given years is the per cent rise (from the previous year) in the per cent rise the least? (Years 2001 and 2003 not to be considered)
    (1) 2000
    (2) 2004
    (3) 2006
    (4) Cannot be determined
    (5) None of these

20. If the production in 1998 was 10,000 units how much is the production in 2002?
    (1) 35,280 units
    (2) 64,680 units
    (3) 46,200 units
    (4) Cannot be determined
    (5) None of these

Q. 21-25. Study the following table to answer the given questions.

NUMBER OF BOOKS OF DIFFERENT PRICES BOUGHT IN DIFFERENT MONTHS

Month Price	January	March	May	July	September	November
More than Rs. 5,000/-	50	106	2	30	25	75
Rs. 4,000-Rs. 5,000	105	1000	40	105	400	375
Rs. 3,000-Rs. 3,999	70	100	80	115	200	240
Rs. 2,000-Rs. 2,999	300	500	100	216	135	300
Rs. 1,000-Rs. 1,999	140	370	200	225	175	470
Rs. 500-Rs. 999	200	700	15	400	75	530
Less than Rs 500	65	135	111	188	25	65

21. In which month was maximum number of books bought?
    (1) March   (2) November
    (3) July   (4) September
    (5) None of these

22. For which price range was maximum number of books bought for the given months together?
    (1) Rs. 500-Rs 999   (2) Rs 2,000- Rs 2,999
    (3) Rs 1,000- Rs 1,999   (4) Rs 3,000- Rs 3,999
    (5) None of these

23. The books of price range Rs 1,000- Rs 1,999 bought in January is what per cent of that of May?
    (1) 30   (2) 70
    (3) 142.86   (4) 60
    (5) None of these

24. How much is the difference in the number of books bought in September and November?
    (1) 244   (2) 776
    (3) 1020   (4) 1310
    (5) None of these

25. What is the respective ratio of books of Rs. 4,000- Rs 5,000 bought in January to that of March?
    (1) 1 :10   (2) 15 : 100
    (3) 930 : 2911   (4) 21 : 200
    (5) None of these

Answers

1. (5)	6. (2)	11. (1)	16. (5)	21. (1)
2. (1)	7. (4)	12. (4)	17. (4)	22. (5)
3. (3)	8. (5)	13. (2)	18. (4)	23. (2)
4. (1)	9. (2)	14. (1)	19. (3)	24. (3)
5. (5)	10. (3)	15. (3)	20. (2)	25. (4)