

**Test : Quantitative Aptitude**

**Time : 45 mins**

**Qs. 1-5.** *In each of the following number series only one number is wrong.*

*Find out that wrong number.*

1. 3 5 11 29 87 314

(1) 87 (2) 11 (3) 29 (4) 314 (5) None of these

2. 12 13 20 48 112 237

(1) 13 (2) 237 (3) 20 (4) 48 (5) None of these

3. 8.1 9.2 17.3 26.5 43.8 71.5 114.1

(1) 17.3 (2) 26.5 (3) 43.8 (4) 9.2 (5) None of these

4. 10 16 48 320 4864 154628

(1) 154628 (2) 4864 (3) 320 (4) 16 (5) None of these

5. 48 24 72 34 108 54

(1) 54 (2) 34 (3) 72 (4) 108 (5) None of these

**Qs. 6-10.** *What should come in place of the question mark (?) in the following equations?*

6.  $15 : 66 :: 185 : ?$

(1) 824 (2) 644 (3) 604 (4) 814 (5) None of these

7.  $6412 \div 415 = 64?$

(1) 9 (2) 3 (3) 12 (4) 7 (5) None of these

8.  $14\% \text{ of } 80 + ?\% \text{ of } 90 = 31.9?$

(1) 16 (2) 23 (3) 18 (4) 26 (5) None of these

9.  $\text{sq. root of } 97344 = ?$

(1) 302 (2) 322

(3) 292 (4) 342

(5) None of these

10. In a class the number of boys are more than the number of girls by 16% of the total strength. What is the respective ratio of the number of boys to the number of girls in the class?

(1) 27 : 22 (2) 29 : 21 (3) 29 : 25 (4) Cannot be determined (5) None of these

**Qs. 11-15.** What approximate value should come in place of the question mark (?) in the following equations.

11.  $872.905 \div 9.013 \div 1.898 = ?$

(1) 194 (2) 50 (3) 102 (4) 55 (5) 72

12.  $65 \times 95 - 243 = ??32$

(1) 51 (2) 35 (3) 53 (4) 38 (5) 59

13.  $0.493 \times 1.864 \times 3.554 = ?$

(1) 3.5 (2) 6.5 (3) 4.8 (4) 5.2 (5) 6.9

14.  $3.2 \div 1.6 \times 0.175 \div 0.01 = ?$

(1) 35 (2) 40 (3) 16 (4) 26 (5) 18

15.  $948.991 - 621.052 + ? = 723.486$

(1) 305 (2) 416 (3) 396 (4) 348 (5) 443

**Qs. 16-25.** Answer the questions given below based on the following data.

A total of 250 students of a class play different games viz., Football, Hockey, Chess, Badminton, Table Tennis and Tennis. The ratio of girls to boys in the class of 250 is 13 : 12 respectively. 50% of the girls play Table Tennis and Badminton only. 20% of the boys play Football, Hockey and Tennis only. 15% of the boys play Tennis and Chess only. The ratio of number of girls to boys playing Tennis and Chess only is 2 : 3 respectively. 30% of the girls play Hockey and Chess only. 10% of the girls play Chess, Badminton and Table Tennis only. The remaining girls play only Football. Boys playing Table Tennis and Badminton only is 20% of the girls playing the same. 40% of the boys play only Football. The remaining boys play only Chess.

16. What is the total number of students playing Football?

(1) 72 (2) 64 (3) 68 (4) 73 (5) None of these

17. How many students play Tennis?

(1) 35 (2) 48 (3) 50 (4) 59 (5) None of these

18. How many girls do not play Chess?

(1) 66 (2) 62 (3) 58 (4) 55 (5) None of these

19. What is the ratio of number of girls playing Hockey to the number of boys playing Hockey respectively?

(1) 5 : 16 (2) 13 : 8 (3) 8 : 13 (4) 16 : 5

(5) None of these

20. What is the total number of students playing Badminton?

(1) 84 (2) 88 (3) 91 (4) 78 (5) None of these

21. The difference between the amount of compound interest and simple interest accrued on an amount of Rs 26,000 at the end of 3 years is Rs 2994.134. What is the rate of interest p.c.p.a.?

(1) 22 (2) 17 (3) 19 (4) Cannot be determined

(5) None of these

22. On a shelf there are 4 books on Economics, 3 books on Management and 4 books on Statistics. In how many different ways can the books be arranged so that the books on Economics are kept together?

(1) 967680 (2) 120960 (3) 5040 (4) 40320

(5) None of these

23. 6 women and 6 men together can complete a piece of work in 6 days. In how many days can 15 men alone complete the piece of work if 9 women alone can complete the work in 10 days?

(1) 6 (2) 5 (3) 7.2 (4) Cannot be determined

(5) None of these

24. Ravi borrowed some money at the rate of 4 p.c.p.a. for the first three years, at the rate of 8 p.c.p.a. for the next two years and at the rate of 9 p.c.p.a. for the period beyond 5 years. If he pays a total simple interest of Rs 19550 at the end of 7 years, how much money did he borrow?  
 (1) Rs 39,500 (2) Rs 42,500 (3) Rs 41,900 (4) Rs 43,000  
 (5) None of these

25. What is the area of a circle whose radius is equal to the side of a square whose perimeter is 112 metres?  
 (1) 176 sq m (2) 2504 sq m (3) 284 sq m (4) 1956 sq m  
 (5) None of these

**Qs. 26-30. Study the following information to answer the given questions:**

**Percentage of different types of employees in an organisation**

Total no. of employees - 7000

Steno - 10%

Assistant – 15%

Supervisor - 17%

Clerk I - 19%

Clerk II - 20%

Officer I - 8%

Officer II - 11%

**And Out of these per cent of**

S.no	Post	Direct Recruits	Promotees
1	Steno	30	70
2	Assistant	40	60
3	Supervisor	50	50
4	Clerk I	90	10
5	Clerk II	30	70
6	Officer I	90	10
7	Officer II	70	30

26. What is the difference in Direct Recruits and Promotee Assistants?

(1) 210 (2) 280 (3) 180 (4) 110 (5) None of these

27. The Promotee Clerk-I is approximately what per cent of that of Direct Recruit Clerk-I?

(1) 10 (2) 9 (3) 11 (4) 10.50 (5) 9.75

28. How many employees are supervisors?

(1) 1050 (2) 1019 (3) 1190 (4) 1290

(5) None of these

29. How many total Direct Recruits among all types of employees are there?

(1) 4000 (2) 3885 (3) 3000 (4) 3115 (5) None of these

30. Which type of employees has maximum number of Direct Recruits?

(1) Clerk I and Officer I (2) Officer I (3) Clerk I (4) Clerk II

(5) None of these

**Qns. 31-35.** Study the table carefully to answer the following questions.

**Number of units (in millions) manufactured by six companies and percentage of units sold over the years**

	1999	1999	2000	2000	2001	2001	2002	2002	2003	2003	2004	2004
Co.	M	%	M	%	M	%	M	%	M	%	M	%
A	18	92	20	85	22	79	30	78	28	79	23	94
B	28	86	12	86	16	68	24	80	25	90	28	68
C	16	75	16	93	24	84	26	82	26	80	30	82
D	12	78	14	90	24	82	20	84	27	75	32	77
E	14	90	18	80	16	91	22	96	18	75	30	76
F	13	88	17	91	20	86	26	92	19	84	25	85

M—Number of units manufactured in millions

%—Percentage of units sold

31. What is the number of units sold by Company

D in the year 2003?

(1) 2025000 (2) 202500000 (3) 20250000 (4) 202500

(5) None of these

32. Which Company has sold the maximum number of units in the year 2001?

(1) E (2) F (3) D (4) C (5) None of these

33. What is the **approximate** percentage increase in the number of units sold by Company F in the year 2000 from the previous year?

(1) 7 (2) 35 (3) 42 (4) 24 (5) 3

34. Which Company has manufactured the least number of units over all the years together?

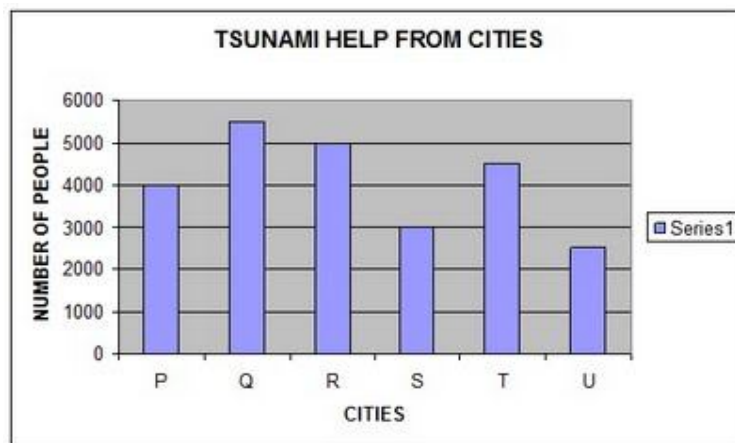
(1) E (2) B (3) F (4) D (5) None of these

35. What is the number of units **not** sold by Company B in the years 1999, 2002 and 2004 together?

(1) 176800000 (2) 1768000 (3) 176800 (4) 17680000  
(5) None of these

**Qs. 36-40.** Study the graph carefully to answer the following questions.

**NUMBER OF PEOPLE CONTRIBUTING TOWARDS HELPING TSUNAMI VICTIMS FROM DIFFERENT CITIES**



**SERIES 1 – NUMBER OF PEOPLE.**

36. How many more people from City S would have made the ratio 11 : 9 between the number of people contributing from Cities S and T respectively?

(1) 1500 (2) 2000 (3) 5500  
(4) 3500 (5) None of these

37. Number of people contributing from Cities Q and U together form what per cent of the total number of people contributing from all the given cities?

(1) 30 (2) 36 (3) 32 (4) 38 (5) None of these

38. Number of people contributing from how many cities from less than 18% of the total number of people contributing from all cities together?

(1) 3 (2) 4 (3) 2 (4) 1 (5) None of these

39. **Approximately** by what per cent number of people contributing from City T are more in comparison to the people contributing from City S?

(1) 38 (2) 18 (3) 22 (4) 29 (5) 34

40. What is the respective ratio between number of people contributing from City P to those from City R?

(1) 5 : 4 (2) 4 : 7 (3) 7 : 4

(4) 5 : 9 (5) None of these

**Qs. 41-45.** Study the table carefully to answer the following questions

### ILLNESS REPORTED IN A STATE

----- -- TYPES OF ILLNESS-----

YEAR ` DEATHS TERMINAL MAJOR MINOR

1998 120200 62500 44000 46200

1999 108000 34500 36300 43700

2000 100000 55000 42700 55500

2001 98400 48900 45000 49400

2002 102200 39900 52600 40000

2003 110600 60000 50400 35000

41. In which of the following years the total number of illnesses reported was highest?

(1) 2000 (2) 1998 (3) 2003 (4) 2001 (5) None of these

42. What is the **approximate** percentage reduction in deaths in 1999 from the previous year?

(1) 5 (2) 17 (3) 6 (4) 10 (5) 15

43. In which of the following pairs of years the percentage of deaths amongst total number of illnesses reported in that year is less than 70 per cent?

- (1) 2002 and 2003
- (2) 1999 and 2001
- (3) 2000 and 2001
- (4) 2001 and 2003
- (5) None of these

44. What is the respective ratio between major illnesses in the year 2002 to those in the year 2003?

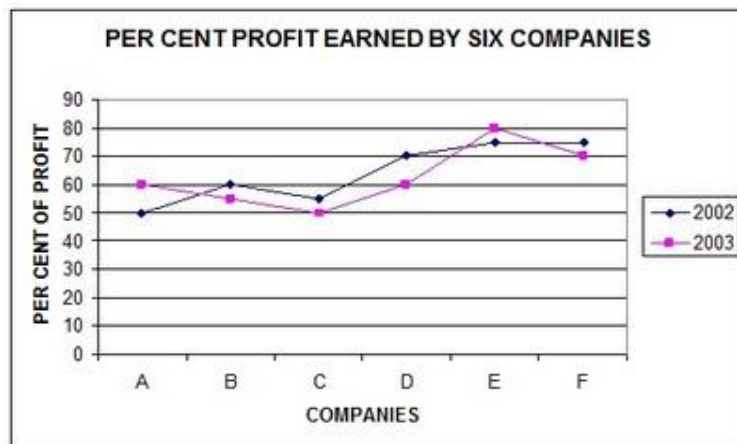
- (1) 252 : 113
- (2) 263 : 117
- (3) 252 : 263
- (4) 117 : 263
- (5) None of these

45. Between which of the following pairs of years is the respective ratio between the number of terminal illnesses 25 : 24 ?

- (1) 2003 and 2000
- (2) 1998 and 2003
- (3) 2000 and 1999
- (4) 2002 and 1999
- (5) None of these

**Qs. 46-50.** Study the graph carefully to answer the following questions.

**PER CENT PROFIT EARNED BY SIX COMPANIES  
DURING 2002 AND 2003**



Profit = Income – Expenditure



Income – Expenditure

$$\% \text{ Profit} = \frac{\text{Income} - \text{Expenditure}}{\text{Expenditure}} \times 100$$

46. If the income of Company A in the year 2003 was Rs 45 lakhs, what was its expenditure in that year?

- (1) Rs 27.621 lakhs
- (2) Rs 23.145 lakhs
- (3) Rs 29.246 lakhs
- (4) Rs 22.455 lakhs
- (5) None of these

47. If the expenditure incurred by Company C in the year 2002 was Rs 38 lakhs, what was its income in that year?

- (1) Rs 62.6 lakhs
- (2) Rs 60.7 lakhs
- (3) Rs 58.9 lakhs
- (4) Rs 56.4 lakhs
- (5) None of these

48. If the total expenditure of Companies B and C together in the year 2003 was Rs 56 lakhs, what was the total income of these two companies in that year?

- (1) Rs 87 lakhs (2) Rs 72 lakhs (3) Rs 75 lakhs (4) Cannot be determined
- (5) None of these

49. Income of Company D in the year 2002 was Rs 42.5 lakhs. What was the amount of profit earned?

- (1) Rs 23.6 lakhs (2) Rs 17.5 lakhs
- (3) Rs 18.9 lakhs (4) Rs 22.5 lakhs
- (5) None of these

50. If the expenditures of Company E in the years 2002 and 2003 are equal, what was the ratio of its incomes in the years 2002 and 2003 respectively?

- (1) 35 : 36 (2) 15 : 16
- (3) 41 : 46 (4) Cannot be determined

(5) None of these

ANSWERS ---

1. (4) 2. (3) 3. (5) 4. (1) 5. (2) 6. (4) 7. (4) 8. (2) 9. (5) 10. (2)

11. (2) 12. (5) 13. (1) 14. (1) 15. (3) 16. (5) 17. (5) 18. (1) 19. (2) 20. (4)

21. (5) 22. (1) 23. (5) 24. (2) 25. (5) 26. (1) 27. (3) 28. (3) 29. (5) 30. (3)

31. (3) 32. (4) 33. (2) 34. (1) 35. (4) 36. (2) 37. (3) 38. (1) 39. (4) 40. (5)

41. (2) 42. (4) 43. (3) 44. (5) 45. (2) 46. (5) 47. (3) 48. (4) 49. (2) 50. (1)