DATA ANALYSIS AND INTERPRETATION

Directions (Qs. 1 to 5) : What approximate value will come in place of the question mark (?) in the following questions ?

1. 32.05% of 259.99 = ?
(1) 92   (2) 88   (3) 78
(4) 90   (5) 83

2. $\frac{1}{8}$ of $\frac{2}{3}$ of $\frac{3}{5}$ of 1715 = ?
(1) 80   (2) 85   (3) 90
(4) 95   (5) 75

3. 25.05 × 123.95 + 388.999 × 15.001 = ?
(1) 900   (2) 8950
(3) 8935   (4) 8975
(5) 8995

4. 561 ÷ 35.05 × 19.99 = ?
(1) 320   (2) 330
(3) 315   (4) 325
(5) 335

5. $(15.01)^2 \times \sqrt{730}$ = ?
(1) 6125   (2) 6225
(3) 6200   (4) 6075
(5) 6250

Directions (Qs. 6 to 10) : In each of these questions a number series is given. In each series only one number is wrong. Find out the wrong number.

6. 3601   3602   1803   604   154   36   12
(1) 3602   (2) 1803
(3) 604   (4) 154
(5) 36

7. 4   12   42   196   1005   6066   42511
(1) 12   (2) 42
(3) 1005   (4) 196
(5) 6066

8. 2   8   12   20   30   42   56
(1) 8   (2) 42
(3) 30   (4) 20
(5) 12

9. 32   16   24   65   210   945   5197.5
(1) 945   (2) 16
(3) 24   (4) 210
(5) 65

10. 7   13   25   49   97   194   385
(1) 13   (2) 49
(3) 97   (4) 194
(5) 25

11. Mr. X invested a certain amount in Debit and Equity Funds in the ratio of 4 : 5 respectively. At the end of one year, he earned a total dividend of 30% on his investment. After one year he reinvested the amount including dividend in the ratio of 6 : 7 in Debt and Equity Funds. If the amount reinvested in Equity Funds was Rs. 94,500, what was the original amount invested in Equity Funds ?
(1) Rs. 75,000
(2) Rs. 81,000
(3) Rs. 60,000
(4) Rs. 65,000
(5) None of these

12. Father's age is 30 years more than the son's age. Ten years hence the father's age will become three times the son's age that time. What is son's present age in years ?
(1) 8
(2) 7
(3) 5
(4) Cannot be determined
(5) None of these

13. If the length of a rectangular field is increased by 20% and the breadth is reduced by 20%, the area of the rectangle will be 192 m². What is the area of the original rectangle ?
(1) 184 m²   (2) 196 m²
(3) 204 m²   (4) 225 m²
(5) None of these

14. Product of one-third of a number and 150% of another number is what percent of the product of original number ?
(1) 80   (2) 50
(3) 75   (4) 120
(5) None of these

15. Inside a square plot a circular garden is developed which exactly fits in the square plot and the diameter of the garden is equal to the side of the square plot which is 28 metres. What is the area of the space left out in the square plot after developing the garden ?
(1) 98 m²   (2) 146 m²
(3) 84 m²   (4) 168 m²
(5) None of these

16. Amit and Sujit together can complete an assignment of data entry in 5 days. Sujit's speed is 80% of Amit's speed and the total key depressions in the assignment are 5,76,000. What is Amit's speed in key depressions per hour if they work for 8 hours a day ?
(1) 4800
(2) 6400
(3) 8000
(4) 7200
(5) None of these

17. Out of 5 girls and 3 boys, 4 children are to be randomly selected for a quiz contest. What is the probability that all are girls ?
(1) $\frac{1}{14}$
(2) $\frac{1}{7}$
(3) $\frac{5}{17}$
(4) $\frac{2}{17}$
(5) None of these

18. Profit earned by an organization is distributed among officers and clerks in the ratio of 5 : 3 respectively. If the number of officers is 45 and the number of clerks is 80 and the amount received by each officer is Rs. 25,000, what was the total amount of profit earned ?
(1) Rs. 22 lakhs
(2) Rs. 18.25 lakhs
(3) Rs. 18 lakhs
(4) Rs. 23.25 lakhs
(5) None of these

19. A shopkeeper labelled the price of his articles so as to earn a profit of 30% on the cost price. He then sold the articles by offering a discount of 10% on the labelled price. What is the actual percent profit earned in the deal ?
(1) 18%
(2) 15%
(3) 20%
(4) Cannot be determined
(5) None of these

20. Mr. Shamin's salary increases every year by 10% in June. If there is no other increase or reduction in the salary and his salary in June 2011 was Rs. 22,385, what was his salary in June 2009 ?
(1) Rs. 18,650
(2) Rs. 18,000
(3) Rs. 19,250
(4) Rs. 18,500
(5) None of these

Directions (Qs. 21 to 25) : In each of these questions, one question is given followed by data in three Statements I, II and III. You have to study the question and the data in

statements and decide the question can be answered with data in which of the Statements and mark your answer accordingly.

21. What is the rate of interest p.c.p.a. ?

Statements :

I. Difference between the compound interest and simple interest earned in two years on the amount invested is Rs. 100.

II. The amount becomes Rs. 19,500 in three years on simple interest.

III. Simple interest accrued in two years on the same amount at the same rate of interest is Rs. 3,000.

(1) Only I and II
(2) Only I and III
(3) Only II and III
(4) Only I and either II or III
(5) None of these

22. What is the speed of the train in kmph. ?

Statements :

I. The train crosses an 'x' metre long platform in 'n' seconds.

II. Length of the train is 'y' metres.

III. The train crosses a signal pole in 'm' seconds.

(1) Any two of the three
(2) Only II and III
(3) Only I and III
(4) All I, II and III
(5) Question cannot be answered even with information in all three statements.

23. How many students passed in first class ?

Statements :

I. 85% of the students who appeared in examination have passed either in first class or in second class or in pass class.

II. 750 students have passed in second class.

III. Number of students passed in pass class is 28% of those passed in second class.

(1) All I, II and III
(2) Only I and III
(3) Only II and III
(4) Question cannot be answered even with information in all three statements
(5) None of these

24. What is the amount invested in Scheme 'B' ?

Statements :

I. The amounts invested in 'A' and 'B' are in the ratio of 2 : 3 respectively.

II. Amount invested in Scheme 'A' is 40% of the total amount invested.

III. Amount invested in Scheme 'A' is Rs. 45,000.

(1) Only I and II
(2) Only I and III
(3) Only II and III
(4) All I, II and III
(5) Only III and either I or II

25. What is the cost of flooring the rectangular hall ?

Statements :

I. Length of the rectangle is 6 metres.

II. Breadth of the rectangle is two-thirds of its length.

III. Cost of flooring the area of 100 cm^2 is Rs. 45.

(1) Only I and III
(2) Only II and III
(3) All I, II and III
(4) Question cannot be answered with data in all three statements
(5) None of these

Directions (Qs. 26 to 33) : Study the following graph carefully to answer these questions.

Percent Profit Earned by Two Companies Producing Electronic Goods over the Years

$$\% \text{ Profit} = \frac{\text{Profit Earned}}{\text{Total Investment}} \times 100$$

Profit Earned = Total Income − Total Investment in the Year

26. If the profit earned in 2006 by Company B was Rs. 8,12,500 what was the total income of the Company in that year ?

(1) Rs. 12,50,000
(2) Rs. 20,62,500
(3) Rs. 16,50,000
(4) Rs. 18,25,000
(5) None of these

27. If the amount invested by the two Companies in 2005 was equal, what was the ratio between total income in 2005 of the Companies A and B respectively ?

(1) 31 : 33
(2) 33 : 31
(3) 34 : 31
(4) 14 : 11
(5) None of these

28. If the total amount invested by the two Companies in 2009 was Rs. 27 lakhs, while the amount invested by Company B was 50% of the amount invested by Company A, what was the total profit earned by the two Companies together ?

(1) Rs. 21.15 lakhs
(2) Rs. 20.70 lakhs
(3) Rs. 18.70 lakhs
(4) Rs. 20.15 lakhs
(5) None of these

29. If the incomes of Company A in 2007 and 2008 were equal and the amount invested in 2007 was Rs.12 lakhs, what was the amount invested in 2008 ?

(1) Rs. 10,87,500
(2) Rs. 10,85,700
(3) Rs. 12,45,000
(4) Rs. 12,85,000
(5) None of these

30. If the amount of profit earned by Company A in 2006 was Rs. 10.15 lakhs, what was the total investment ?

(1) Rs. 13.8 lakhs
(2) Rs. 14.9 lakhs
(3) Rs. 15.4 lakhs
(4) Rs. 14.2 lakhs
(5) None of these

31. If the amount invested by Company B in 2004 is Rs. 12 lakhs and the income of 2004 is equal to the investment in 2005, what was the amount of profit earned in 2005 by Company B ?

(1) Rs. 6.6 lakhs
(2) Rs. 18.6 lakhs
(3) Rs. 10.23 lakhs
(4) Rs. 9.6 lakhs
(5) None of these

32. If the investments of Company A in 2007 and 2008 were equal, what is the difference between profit earned in two years if the income in 2008 was Rs. 24 lakhs ?

(1) Rs. 2.25 lakhs
(2) Rs. 3.6 lakhs
(3) Rs. 1.8 lakhs
(4) Rs. 2.6 lakhs
(5) None of these

33. If each of the Companies A and B invested Rs. 25 lakhs in 2010, what was the average profit earned by the two Companies ?
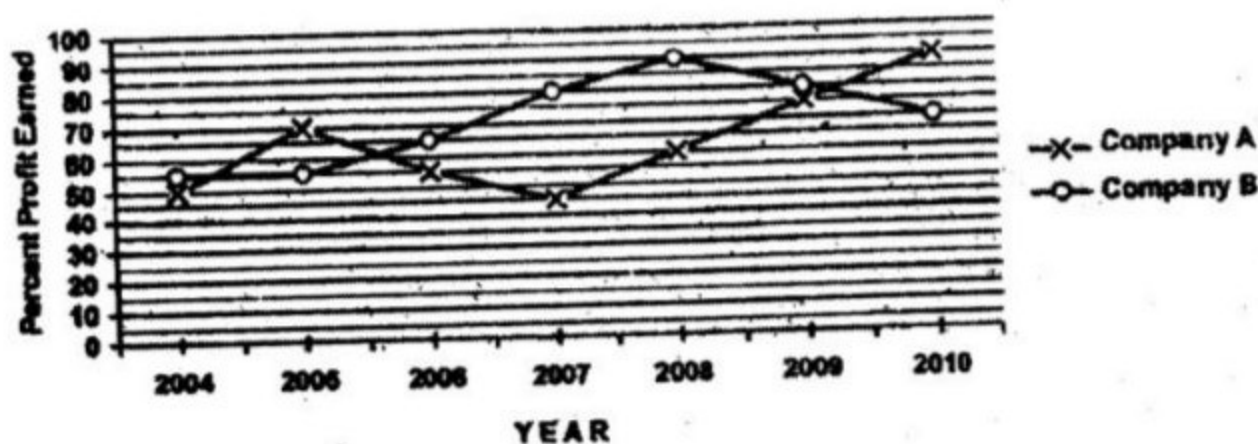
(1) Rs. 18 lakhs
(2) Rs. 22.5 lakhs
(3) Rs. 17.5 lakhs
(4) Rs. 20 lakhs
(5) None of these

Directions (Qs. 34 to 40) : Study the following table carefully and answer the questions which follow.

Number of Candidates found Eligible and the Number of Candidates Short-listed for Interviews for a recent Recruitment Process for Six Posts from Different States

Post State	I		II		III		IV		V		VI	
	E	S	E	S	E	S	E	S	E	S	E	S
A	2500	65	7200	240	5200	76	3600	200	4600	110	5400	380
B	3200	220	8500	420	8400	190	6200	320	5800	180	6200	430
C	2800	280	4500	350	7600	160	8200	440	7300	310	3700	250
D	2400	85	4800	200	2600	55	7500	350	3900	160	4800	360
E	3000	120	5600	280	3800	75	6800	280	6100	260	7800	520
F	4800	325	6400	320	4400	220	4700	180	4900	220	8800	640
G	6500	550	7000	140	6000	325	5500	220	8100	410	2700	200

E-Eligible   S-Short-listed

34. From State 'B', which post had the highest percentage of candidates short-listed ?
(1) V   (2) IV   (3) VI
(4) II   (5) None of these

35. Approximately, what is the average number of candidates found eligible from all States for Post III ?
(1) 6700   (2) 6200   (3) 4200
(4) 4500   (5) 5500

36. What is the overall percentage (rounded off to one digit after decimal) of candidates short-listed over the total number of candidates eligible from all the States together for Post I ?
(1) 9.5%   (2) 12.5%   (3) 7.2%
(4) 6.5%   (5) None of these

37. What is the ratio between total number of candidates short-listed for all the posts together from States E and G respectively ?
(1) 307 : 369   (2) 73 : 79
(3) 6 : 5   (4) 9 : 7
(5) None of these

38. Total number of candidates found eligible from all States together for Post is approximately what percent of the total number of candidates found eligible from all States together for Post VI ?
(1) 45   (2) 50   (3) 60
(4) 55   (5) 65

39. Which State had the lowest percentage of candidates short-listed over eligible for Post IV ?
(1) G   (2) F   (3) E
(4) C   (5) None of these

40. What is the ratio between total number of candidates short-fisted from all States together for posts V and VI respectively ?
(1) 6 : 7   (2) 55 : 96
(3) 165 : 278   (4) 16 : 25
(5) None of these

Directions (Qs. 41 to 45) : These questions are based on the following data. Study it carefully and answer the questions that follow.

In a school having 400 students boys and girls are in the ratio of 3 : 5 respectively. The students speak Hindi, English or both the languages. 12% of the boys speak only Hindi, 22% of the girls speak only English. 24% of the total students speak only Hindi and the number of boys speaking both the languages is six times the number of boys speaking only Hindi.

41. Total how many boys speak Hindi ?
(1) 18   (2) 126   (3) 108
(4) 26   (5) None of these

42. How many girls speak only Hindi ?
(1) 55   (2) 117   (3) 96
(4) 78   (5) None of these

43. Total how many students speak English ?
(1) 304   (2) 79   (3) 225
(4) 117   (5) None of these

44. Number of girls speaking only Hindi is what percent of the total number of students speaking only Hindi ?
(1) 38.2   (2) 71.8
(3) 31.2   (4) 78
(5) None of these

45. What is the respective ratio between the number of boys and girls speaking both the languages ?
(1) 23 : 25
(2) 12 : 25
(3) 12 : 13
(4) 25 : 13
(5) None of these

Directions (Qs. 46 to 50) : Study the information given in each of these questions and then answer the questions.

46. Area of the circle is 616 cm². What is the area of the rectangle ? ('dot' indicates centre of the circle)
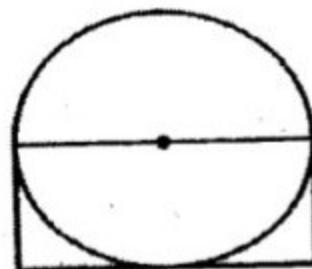
(1) 784 cm²   (2) 196 cm²
(3) 392 cm²
(4) Cannot be determined
(5) None of these

47. Population in Millions

City	Total Population	Male Population
A	12	6.5
B	15	7.2
C	17	9.0
D	19	9.9
E	22	10.8

What is the average female population in million ?
(1) 8.32   (2) 8.86   (3) 8.68
(4) 9.12   (5) None of these
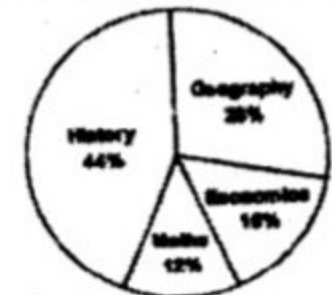
48. What is the percent rise in production in 2007 from 2006 ? (Rounded off to two digits after decimal)
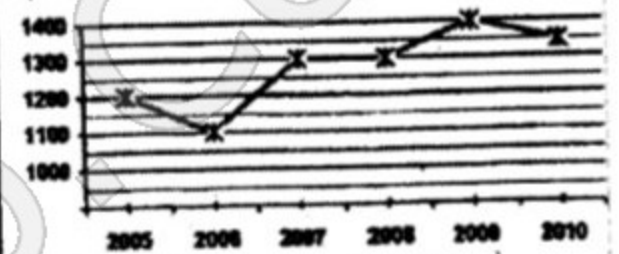
(1) 28.18   (2) 18.18
(3) 16.28   (4) 26.18
(5) None of these

49. Out of the total 550 students, how many students did not prefer Maths or Economics ?

Break-up of students having preference for each subject

(1) 462   (2) 154   (3) 196
(4) 396   (5) None of these

50.

Person	Salary in Rs. Lakhs
A	8.5
B	7.6
C	12.8
D	5.4
E	10.5

What is the difference (in Rs. lakhs) between the average salary and the lowest salary ?
(1) 4.2   (2) 2.65
(3) 3.65   (4) 4.06
(5) None of these