

Quantitative Aptitude

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

1. 185% of 400 + 35% of 240 = ?% of 1648
(A) 85 (B) 75
(C) 125 (D) 50
(E) None of these

- (A) 58 (B) 56
(C) 52 (D) 63
(E) 61
10. 69-008% of 699-998 + 32-99% of 399-999 = ?
(A) 615 (B) 645
(C) 675 (D) 715
(E) 725

Directions—(Q. 11-15) What will come in place of the question-mark (?) in each of the following series ?

11. 17 52 158 477 ? 4310
(A) 1433 (B) 1432
(C) 1435 (D) 1434
(E) None of these
12. 3 22 ? 673 2696 8093
(A) 133 (B) 155
(C) 156 (D) 134
(E) None of these
13. 6 13 38 ? 532 2675
(A) 129 (B) 123
(C) 172 (D) 164
(E) None of these
14. 286 142 ? 34 16 7
(A) 66 (B) 72
(C) 64 (D) 74
(E) None of these
15. 17 9 ? 16-5 35 90
(A) 5 (B) 15
(C) 10 (D) 20
(E) None of these

16. Prakash, Sunil and Anil started a business jointly investing Rs. 11 lakh, Rs. 16-5 lakh and Rs. 8-25 lakh respectively. The profit earned by them in the business at the end of 3 years was Rs. 19-5 lakh. What will be the 50% of Anil's share in the profit ?
(A) Rs. 4-5 lakh
(B) Rs. 2-25 lakh
(C) Rs. 2-5 lakh
(D) Rs. 3-75 lakh
(E) None of these

17. Mr. Giridhar spends 50% of his monthly income on household items and out of the remaining he spends 50% on transport, 25% on entertainment, 10% on sports and remaining amount of Rs. 900 is saved. What is Mr. Giridhar's monthly income ?

- (A) Rs. 6,000
(B) Rs. 12,000
(C) Rs. 9,000
(D) Cannot be determined
(E) None of these

18. Out of 5 men and 3 women, a committee of 3 members is to be formed so that it has 1 woman and 2 men. In how many different ways can it be done ?
(A) 20 (B) 10
(C) 23 (D) 30
(E) None of these

19. Cost of fencing a circular plot at the rate of Rs. 15 per metre is Rs. 3,300. What will be the cost of flooring the plot at the rate of Rs. 100 per square metre ?
(A) Rs. 3,85,000
(B) Rs. 2,20,000
(C) Rs. 3,50,000
(D) Cannot be determined
(E) None of these

20. 8 men and 4 women together can complete a piece of work in 6 days. Work done by a man in one day is double the work done by a woman in one day. If 8 men and 4 women started working and after 2 days, 4 men left and 4 new women joined. In how many more days will the work be completed ?
(A) 5 days (B) 8 days
(C) 6 days (D) 4 days
(E) 9 days

21. Naresh purchased a TV set for Rs. 11,250 after getting discount of 10% on the labelled price. He

- spent Rs. 150 on transport and Rs. 800 on installation. At what price should it be sold so that the profit earned would have been 15% if no discount was offered ?
- (A) Rs. 12937-50
(B) Rs. 14,030
(C) Rs. 13,450
(D) Rs. 15467-50
(E) None of these
22. Mr. Duggal invested Rs. 20,000 with rate of interest @ 20 p.c.p.a. The interest was compounded half yearly for first one year and in the next year it was compounded yearly. What will be the total interest earned at the end of two years ?
- (A) Rs. 8,800 (B) Rs. 9,040
(C) Rs. 8,040 (D) Rs. 9,800
(E) None of these
23. If the positions of the digits of a two digit number are interchanged, the number obtained is smaller than the original number by 27. If the digits of the number are in the ratio of 1 : 2, what is the original number ?
- (A) 36
(B) 63
(C) 48
(D) Cannot be determined
(E) None of these
24. In how many different ways can the letters of the word DESIGN be arranged so that the vowels are at the two ends ?
- (A) 48 (B) 72
(C) 36 (D) 24
(E) None of these
25. If the numerator of a fraction is increased by 20% and the denominator is increased by 25%, the fraction obtained is $\frac{2}{3}$. What was the original fraction ?
- (A) $\frac{5}{6}$
(B) $\frac{1}{2}$
(C) $\frac{1}{3}$
(D) Cannot be determined
(E) None of these

Directions—(Q. 26 to 30) In each of these questions, a question is given followed by information in three statements. You have to find out the

data in which statement(s) is sufficient to answer the question and mark your answer accordingly.

26. What is the average age of the six members A, B, C, D, E and F in the family ?
- Total age of D and E is 14 years
 - Average age of A, B, C and F is 50 years
 - Average age of A, B, D and E is 40 years
- (A) Only 1 and 2
(B) Only 1 and 3
(C) Only 2 and 3
(D) All 1,2 and 3
(E) None of these
27. What is the area of the right angled triangle ?
- Base of the triangle is X cm.
 - Height of the triangle is Y cm.
 - Hypotenuse of the triangle is Z cm.
- (A) Only 1 and 2
(B) Only 2
(C) Only 2 and 3
(D) Any two of three
(E) None of these
28. In how many days will B alone complete the work ?
- A and B together can complete the work in 8 days.
 - B and C together can complete the work in 10 days.
 - A and C together can complete the work in 12 days.
- (A) Only 1 and 2
(B) Only 2 and 3

- (C) All 1,2 and 3
(D) Question cannot be answered even with the information in all the three statements
(E) None of these

29. What is the rate of interest p.c.p.a.
- An amount doubles itself at simple interest in 10 years.
 - Difference between the compound interest and simple interest on an amount of Rs. 15,000 in two years is Rs. 150.
 - The compound interest accrued in 8 years is more than the amount (principal).
- (A) Only 1
(B) Only 2
(C) Only 2 and 3
(D) Only 1 and 3
(E) Only either 1 or 2
30. What are the marks scored by Abhijit in English ?
- Marks scored by Abhijit in Maths are more than his marks in Science by 20.
 - Total marks scored by Abhijit in Maths, Science and English are 198.
 - Marks scored by Abhijit in Science are more than his marks in English by 12.
- (A) Any two of the three
(B) Only 2 and 3
(C) All 1,2 and 3
(D) Question cannot be answered even with the information in all the three statements
(E) None of these

Directions—(Q. 31-35) Study the following table carefully to answer these questions :

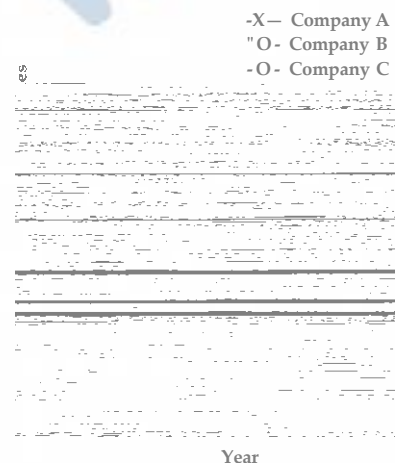
Table giving Number of Candidates Appeared in the Examination and Percentage of Students Passed from Various Institutes Over the Years

Year	Institute											
	A		B		C		D		E		F	
	App.	% Pass	App.	% Pass	App.	% Pass	App.	% Pass	App.	% Pass	App.	% Pass
2001	450	60	540	40	300	65	640	50	600	45	680	60
2002	520	50	430	70	350	60	620	40	580	70	560	70
2003	430	60	490	70	380	50	580	50	680	70	700	66
2004	400	65	600	75	450	70	600	75	720	60	780	70
2005	480	50	570	50	400	75	700	65	700	48	560	50
2006	550	40	450	60	500	68	750	60	450	50	650	60
2007	500	58	470	60	470	60	720	70	560	60	720	50

31. What is the ratio between the number of students passed from institute F in 2003 and the number of students passed from institute B in 2005 respectively ?
 (A) 95 : 154 (B) 154 : 95
 (C) 94 : 155 (D) 155 : 94
 (E) None of these
32. What is the ratio between the average number of students appeared from institute A for all the years and that from institute D respectively ?
 (A) 463 : 353 (B) 353 : 463
 (C) 461 : 333 (D) 333 : 461
 (E) None of these
33. What is the total number of students passed from all institutes together in year 2006 ?
 (A) 1895 (B) 1985
 (C) 1295 (D) 1465
 (E) None of these
34. What is the overall percentage of students passed from all institutes together in 2004 ? (rounded off to nearest integer)
 (A) 68 (B) 70
 (C) 69 (D) 71
 (E) None of these
35. **Approximately**, what is the overall percentage of students passed from institute C for all the years ?
 (A) 60 (B) 70
 (C) 75 (D) 55
 (E) 65
36. What is the per cent increase in exports of company C from 2004 to 2008 ?
 (A) 50 (B) 33-33
 (C) 150 (D) 133-33
 (E) None of these
37. Total exports of company A for all the years are **approximately** what per cent of the total exports of company B for all the years ?
 (A) 75 (B) 128
 (C) 139 (D) 68
 (E) 72
38. Per cent rise in exports from the previous year was the maximum during which year for company 'B' ?
 (A) 2005
 (B) 2004
 (C) 2006
 (D) 2008
 (E) None of these
39. What are the average exports of company B for all the years ? (in thousand tonnes rounded off to two digits after decimal)
 (A) 766-67
 (B) 667-14
 (C) 657-14
 (D) 756-57
 (E) None of these
40. What is the ratio between total exports of the three companies in 2003 and 2006 respectively ?
 (A) 41 : 29 (B) 51 : 29
 (C) 29 : 51 (D) 29 : 41
 (E) None of these
41. What are the average marks obtained by all the students in Science out of 150 ?
 (A) 75 (B) 112-50
 (C) 108-50 (D) 78
 (E) None of these
42. What are the average marks obtained by all students in Geography ?
 (A) 54-25
 (B) 54-75
 (C) 73
 (D) 71
 (E) None of these
43. What is the ratio between total marks obtained by D in Maths, Science and English together and the total marks obtained by F in these subjects together respectively ?
 (A) 209 : 215
 (B) 215 : 209
 (C) 206 : 223
 (D) 223 : 206
 (E) None of these
44. Marks obtained by C in Science are **approximately** what per cent of his total marks obtained in all the six subjects together ?
 (A) 22 (B) 16
 (C) 20 (D) 18
 (E) 28
45. What are the total marks obtained by 'B' in all the subjects together ?
 (A) 336 (B) 223
 (C) 446 (D) 273
 (E) None of these

Directions—(Q. 36-40) Study the following graph carefully to answer these questions :

Quantity of Wheat (in Thousand tonnes) Exported by Three Countries over the Years



Directions—(Q. 41-45) Study the following table carefully to answer these questions:

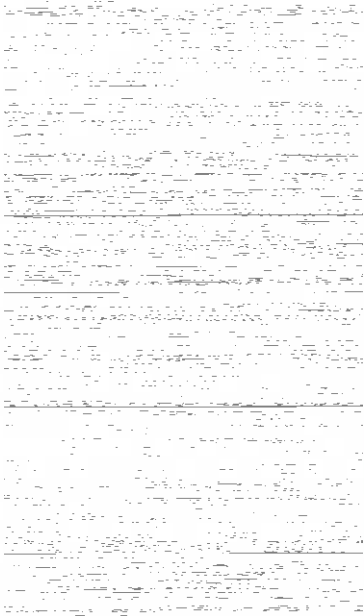
Percentage of Marks Obtained by Six Students in Six Subjects

Student	Subject					
	History	Geography	Maths	Science	English	Hindi
	Max. Marks					
	75	75	100	150	50	60
Percentage						
A	82	66	59	76	62	65
B	76	72	65	84	74	75
C	56	78	71	66	86	70
D	64	80	68	72	66	80
E	48	68	83	88	56	60
F	60	74	79	64	80	85

Directions—(Q. 46-50) Study the information in the following pie charts to answer these questions :

Details of 1500 Employees Working in an Organisation in Various Scales

Breakup of 1500 Employees Across the scales



50. What is the total number of female employees working in Scales III and IV together ?
- (A) 219 (B) 157
- (C) 162 (D) 285
- (E) None of these
46. Number of male employees working in Scale VI are what per cent of the total number of employees in that scale ?
- (Rounded off to nearest integer)
- (A) 35 (B) 46
- (C) 44 (D) 34
- (E) None of these
47. What is the ratio between female employees in Scale VI and male employees in Scale I respectively ?
- (A) 32 : 23 (B) 22 : 33
- (C) 12 : 23 (D) 23 : 12
- (E) None of these
48. What is the ratio between male and female employees respectively working in Scale V ?
- (A) 7 : 8 (B) 2 : 1
- (C) 8 : 7 (D) 1 : 2
- (E) None of these
49. How many females are working in Scale II ?
- (A) 144 (B) 81
- (C) 96 (D) 138
- (E) None of these



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