

## Numerical Ability/Data Interpretation

**Directions (Q. 41–45)** What should come in place of question mark (?) in the following questions ?

41.  $(49)^3 + (7)^2 = ?$

- (1) 2401  
(3) 343  
(5) None of these

(2) 49

(4) [www.educationobserver.com/forum](http://www.educationobserver.com/forum)

42.  $28.217 - 14.241 + 6.873 - 2.434 = ?$

- (1) 9.419  
(3) 16.275  
(5) None of these

(2) 18.545

(4) 4.669

43.  $712 + 92 \times 0.50 - 83 = ?$

- (1) 685  
(3) 635  
(5) None of these

(2) 625

(4) 675

44.  $416 \times 38 \times 0.4 = ?$

- (1) 6424.2  
(3) 6601.2  
(5) None of these

(2) 6323.2

(4) 6182.2

45. ?% of 555 + 28% of 444 = 202.02

- (1) 18  
(3) 14  
(5) None of these

(2) 12

(4) 16

**Directions (Q. 46–50)** What should come in place of the question mark (?) in the following number series ?

46. 3 52 88 113 129 ?

- (1) 128  
(4) 145

(2) 142

(3) 133

(5) None of these

47. 2 3 8 ? 112 565

- (1) 36  
(4) 45

(2) 14

(3) 27

(5) None of these

48. 6 4 8 23 ? 385.25

- (1) 84.5  
(3) 78.5  
(5) None of these

(2) 73

(4) 82

49. 8 64 216 512 ? 1728

- (1) 729  
(3) 684  
(5) None of these

(2) 1331

(4) 1000

50. 5 11 32 108 444 ?

- (1) 1780  
(3) 1784  
(5) None of these

(2) 2230

(4) 2225

51. An urn contains 3 red and 4 green marbles. If three marbles are picked at random, what is the probability that two are green and one is red ?

(1)  $\frac{3}{7}$

(2)  $\frac{18}{35}$

(3)  $\frac{5}{14}$

(4)  $\frac{4}{21}$

(5) None of these

52. The simple interest accrued on an amount of ₹ 27500 at the end of three years is ₹ 10230. What would be the approximate compound interest accrued on the same amount at the same rate in the same period ?

(1) ₹ 11550

(2) ₹ 12620

(3) ₹ 10950

(4) ₹ 11900

(5) ₹ 13500

53. In how many different ways can the letters of the word 'CASUAL' be arranged ?

(1) 36

(2) 720

(3) 240

(4) 360

(5) None of these

54. If the numerator of a fraction is increased by 400% and the denominator is increased by 500%. The resultant fraction is  $\frac{20}{27}$ . What was the original fraction ?

- (1)  $\frac{9}{8}$  (2)  $\frac{11}{12}$   
 (3)  $\frac{3}{4}$  (4) Cannot be determined  
 (5) None of these

55. The ages of Melwyn and Louis are in the ratio of 7 : 10 respectively. After 6 years the ratio of their ages will be 17 : 23. What is the difference in their ages ?

- (1) 8 yr (2) 4 yr  
 (3) 12 yr (4) 10 yr  
 (5) None of these

**Directions (Q. 56–60)** What **approximate** value should come in place of the question mark (?) in the following questions ? (Note : You are not expected to calculate the exact value)

56.  $8537.986 - 2416.005 - 221.996 = ?$

- (1) 6500 (2) 5900  
 (3) 4300 (4) 3900  
 (5) 5050

57.  $1019.999 + 60.007 = ?$

- (1) 11 (2) 23  
 (3) 17 (4) 27  
 (5) 13

58.  $111111 + 1111 + 11 = ?$

- (1) 1180 (2) 15  
 (3) 1100 (4) 9  
 (5) 2

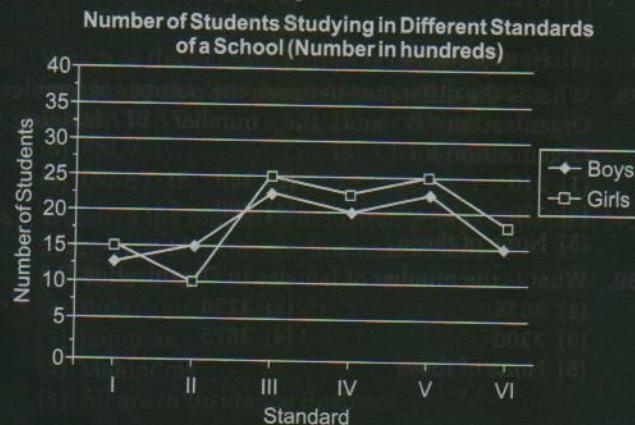
59.  $\sqrt[3]{5000} = ?$

- (1) 15 (2) 9  
 (3) 29 (4) 32  
 (5) 17

60.  $16.001 \times 30.999 \times 8.998 = ?$

- (1) 4400 (2) 4800  
 (3) 4100 (4) 3900  
 (5) 5000

**Directions (Q. 61–65)** Study the following graph carefully to answer the questions.



61. What is the **approximate** average number of girls studying in all the Standards together ?

- (1) 1193 (2) 1917  
 (3) 1534 (4) 2246  
 (5) 2048

62. The number of boys studying in Standard VI is what per cent of the total number of boys studying in all the Standards together ? (rounded off to two digits after decimal)

- (1) 13.95 (2) 16.21 (3) 10.45  
 (4) 13.22 (5) None of these

63. The number of girls studying in Standard V is what per cent of the total number of students studying in all the Standards together ? (rounded off to the nearest integer)

- (1) 21 (2) 8 (3) 11  
 (4) 19 (5) 15

64. What is the respective ratio of the number of boys studying in Standard IV to the number of girls studying in Standard I ?

- (1) 11 : 12 (2) 7 : 5  
 (3) 3 : 4 (4) 8 : 3  
 (5) None of these

65. What is the respective ratio of the total number of students studying in Standard III to the total number of students studying in Standard IV ?

- (1) 14 : 13 (2) 13 : 14  
 (3) 17 : 19 (4) 19 : 17  
 (5) None of these

**Directions (Q. 66–70)** Study the following table carefully to answer the questions that follow.

**Number of Items Produced (P) and Sold (S) (in thousands) by Five Different Companies over the Years**

Year	Companies									
	A		B		C		D		E	
	P	S	P	S	P	S	P	S	P	S
2002	12.5	11	9	6.1	7.5	4.4	16.5	12.3	15.8	13
2003	15	11	11	9.7	15	9.6	13.5	10.5	14	11.1
2004	10.2	8	13	10.4	18	13.9	12	9	14.2	12.2
2005	9	7.5	14	9	10.4	7	10.7	8	13.6	11.4
2006	14	11.3	15.5	12.1	12	11	9.9	5.4	10.6	7
2007	13.4	10	16	13	17	13.2	11.2	8.2	9.8	5
2008	16	14	16.2	14	10	6.1	11	10	8.9	4.9

66. The number of items sold by Company C in the year 2003 is what per cent of the number of Items produced by it in that year ?

- (1) 56 (2) 64 (3) 72  
 (4) 79 (5) None of these

67. What is the overall percentage of Items sold by Company E over those produced by it in all the years together (rounded off to two digits after decimal) ?

- (1) 75.12 (2) 80.36  
 (3) 74.34 (4) 83.95  
 (5) None of these

68. What is the respective ratio of the total number of Items produced to those sold by all Companies together in the year 2007 ?  
 (1) 387 : 221 (2) 398 : 209  
 (3) 209 : 398 (4) 221 : 387  
 (5) None of these
69. Which of the following Companies has sold the minimum percentage of Items in the year 2005 ?  
 (1) A (2) B  
 (3) C (4) D  
 (5) E
70. What is the total number of Items sold by Company B for all the years together ?  
 (1) 74300 (2) 83250  
 (3) 68900 (4) 71500  
 (5) None of these

**Directions (Q. 71-75)** Study the table carefully to answer the questions that follow.

**Percentage Breakup of Total Number of 48000 Accidents due to Various Vehicles and the Ratio of Deaths to Injuries**

Vehicles	Percentage of accidents	Ratio of * deaths to injuries
TRUCKS	18	5 : 7
BUSES	21	7 : 8
CARS	15	3 : 5
AUTOS	13	4 : 6
MOTORCYCLES	23	1 : 2
CYCLES	10	7 : 9

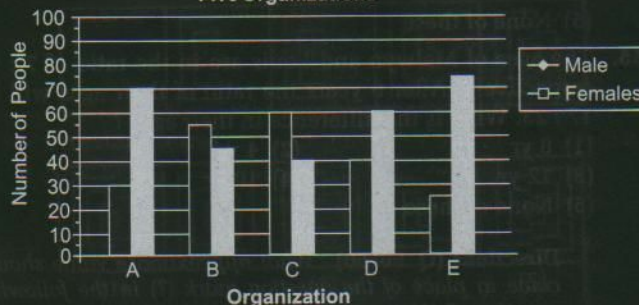
\*Deaths and injuries are mutually exclusive.

71. What is the number of Injuries due to Cycle accidents?  
 (1) 1800 (2) 2100  
 (3) 2450 (4) 1950  
 (5) None of these
72. The number of Deaths due to Car accidents is what per cent of the total number of accidents due to Cars ?  
 (1) 20 (2) 41.5 (3) 28  
 (4) 37.5 (5) None of these
73. The number of Injuries due to Bus accidents is **approximately** what per cent of the total accidents due to all the vehicles together ?  
 (1) 11 (2) 7  
 (3) 19 (4) 3  
 (5) 21
74. What is the total number of Deaths due to Autos and Motorcycles together ?  
 (1) 6858 (2) 5942  
 (3) 6176 (4) 7784  
 (5) None of these
75. What is the respective ratio of number of Deaths due to Truck accidents to the total number of accidents due to all the vehicles together ?

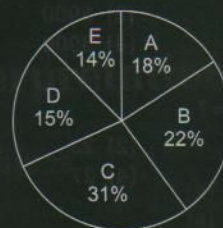
- (1) 3 : 1400 (2) 3 : 40  
 (3) 1 : 9600 (4) 2 : 23  
 (5) None of these

**Directions (Q. 76-80)** Study the following graph and pie-chart carefully to answer the questions that follow.

**Percentage Breakup of Males and Females in the Five Organizations**



**Percentage Breakup of Employees in Five Different Organizations [Total Number (N) = 35000]**



76. Total number of employees in Organization C is **approximately** what per cent of total number of employees in Organization D ?  
 (1) 147 (2) 279  
 (3) 312 (4) 207  
 (5) 183
77. What is the total number of males in all the Organizations together ?  
 (1) 13350 (2) 14700  
 (3) 15960 (4) 16280  
 (5) None of these
78. What is the total number of males in Organization A and C together ?  
 (1) 6125 (2) 8400  
 (3) 8025 (4) 7400  
 (5) None of these
79. What is the difference between the number of females in Organization B and the number of females in Organization E ?  
 (1) 210 (2) 350  
 (3) 170 (4) 300  
 (5) None of these
80. What is the number of females in Organization D ?  
 (1) 3855 (2) 3250  
 (3) 3300 (4) 3675  
 (5) None of these