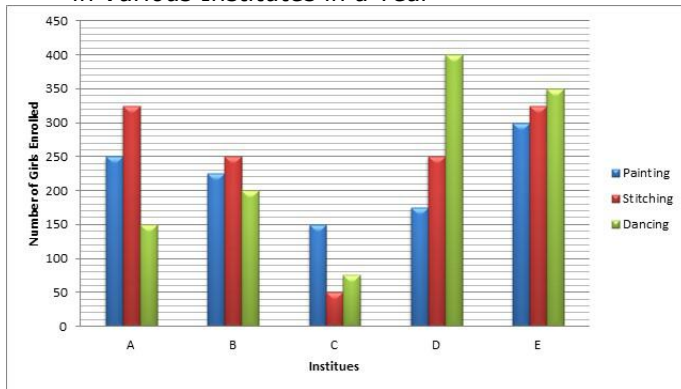


Quantitative Aptitude

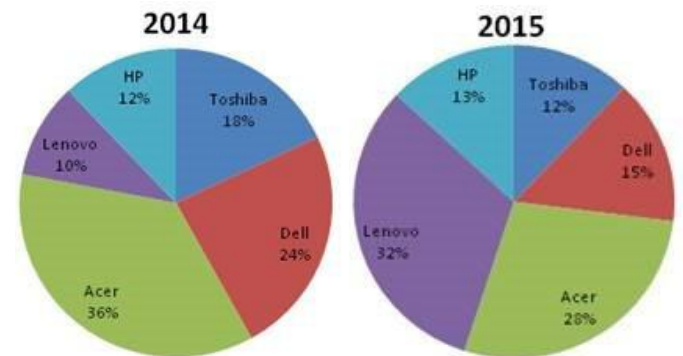
Directions (1-5): Study the graph carefully to answer the questions that follow.
Number of Girls Enrolled in Different Hobby Classes in Various Institutes in a Year



- What is the respective ratio of total number of girls enrolled in Painting in the Institutes A and C together to those enrolled in Stitching in the Institutes D and E together?
A. 5 : 4 B. 5 : 7
C. 16 : 23 D. 9 : 8
E. None of these
- Number of girls enrolled in Stitching in Institute B forms approximately what per cent of the total number of girls enrolled in Stitching in all the Institutes together?
A. 29% B. 21%
C. 33% D. 37%
E. 45%
- What is the respective ratio of total number of girls enrolled in Painting, Stitching and Dancing from all the Institutes together?
A. 44 : 48 : 47 B. 43 : 47 : 48
C. 44 : 47 : 48 D. 47 : 48 : 44
E. None of the above
- Number of girls enrolled in Dancing in Institute A forms what per cent of total number of girls enrolled in all the Hobby classes together in that Institute?
(Rounded off to two digits after decimal)
A. 23.87% B. 17.76%
C. 31.23% D. 33.97%
E. 20.69%
- What is the total number of girls enrolled in Painting from all the Institutes together?
A. 1150 B. 1200
C. 1275 D. 1175
E. None of these

Directions (6-10) : Study the following pie-chart carefully and answer the questions given below:

Percentage Sales of Different Models of Computers in Two Different Years.



- Total sales in 2014 – 12500 % increase = 12.5% (for 2015)
- The percentage decrease in the sales of Toshiba in 2015 is approximately.
A. 25% B. 32%
C. 22% D. 27.5%
E. None of these
 - What is total sales of HP brand of computers in both 2014 and 2015?
A. 3328 B. 3524
C. 3280 D. 4256
E. 2685
 - What is the ratio between the Dell sales in 2014 and those of Lenovo in 2015?
A. 3:11 B. 2:5
C. 3:7 D. 2:3
E. 3:5
 - For which brand of computers, did the sales increase the maximum in term of absolute value between the two years?
A. Lenovo B. HP
C. Acer D. Toshiba
E. None of these
 - HP's sales in 2014 is what percentage of the sales of Acer in 2015?
A. 32% B. 48%
C. 42% D. 38%
E. None of these

Direction (11-15): Following table shows the total number of students and percentage of boys among them of different branches of five engineering colleges. Answer the following question based on this table.

	Computer Science		IT		Electronics		Telecom		Civil	
	Total	% boys	Total	% boys	Total	% boys	Total	% boys	Total	% boys
A	120	70%	70	60%	110	60%	40	55%	160	60%
B	116	50%	72	50%	100	51%	60	65%	116	50%
C	140	65%	80	65%	96	50%	36	50%	120	55%
D	90	60%	65	60%	100	57%	50	56%	150	66%
E	100	57%	60	65%	116	50%	70	60%	140	65%

- What is the difference between number of boys in College A and number of female students in College B?
A. 75 B. 80
C. 85 D. 88
E. 95
- What is the average number of boys studying in Electronics stream in all five colleges?
A. 45 B. 48
C. 50 D. 52
E. 56
- The number of girls in Telecom stream of College D is what percent of its total students in Telecom stream?
A. 20% B. 42%
C. 11% D. 18%
E. 50%
- What is the ratio of number of boys of IT stream of College C to that of College D?
A. 2 : 3 B. 3 : 5
C. 4 : 3 D. 4 : 5
E. 1 : 1
- What is the ratio of number of boys of IT stream of College C to that of College D?
A. 2 : 3 B. 3 : 5
C. 4 : 3 D. 4 : 5
E. 1 : 1

Direction (16-20): What will come in place of the question mark (?) in the given number series?

- 99, 121, 143, 165, ?
A. 187 B. 192
C. 275 D. 173
E. None of these
- 35, 99, 195, 323, ?
A. 576 B. 385
C. 475 D. 483
E. None of these
- 6, 20, 42, 72, ?
A. 110 B. 102
C. 105 D. 113
E. None of these

- 2, 6, 24, 120, ?
A. 610 B. 820
C. 720 D. 725
E. None of these
- 105, 1287, 4845, 12075, ?
A. 23610 B. 24820
C. 27240 D. 24273
E. None of these

Directions (21-25): Solve the following quadratic equations to find out the values of p and q. After that, find out the relationship between p & q and mark your answer accordingly.

- I. $9p^2 - 21p + 12 = 0$
II. $18q^2 - 50q + 32 = 0$
A. $p > q$ B. $p < q$
C. $p \geq q$ D. $p \leq q$
E. $p = q$ or no relation can be established between 'p' and 'q'.
- I. $3p^2 - 8p - 60 = 0$
II. $20q^2 - 288q + 1036 = 0$
A. $p > q$ B. $p < q$
C. $p \geq q$ D. $p \leq q$
E. $p = q$ or no relation can be established between 'p' and 'q'.
- I. $5p^2 - 65p + 180 = 0$
II. $3q^2 - 90q + 483 = 0$
A. $p > q$ B. $p < q$
C. $p \geq q$ D. $p \leq q$
E. $p = q$ or no relation can be established between 'p' and 'q'.
- I. $11p^2 - 38p - 24 = 0$
II. $9q^2 - 1.5q - 7.5 = 0$
A. $p > q$ B. $p < q$
C. $p \geq q$ D. $p \leq q$
E. $p = q$ or no relation can be established between 'p' and 'q'.
- I. $18p - 10.5q = 24$
II. $27p + 1.5q = 6$
A. $p > q$ B. $p < q$
C. $p \geq q$ D. $p \leq q$
E. $p = q$ or no relation can be established between 'p' and 'q'.

26. Direction: What should come in place of the question mark (?) in the following questions?

$$13\frac{3}{4} \times 42\frac{5}{6} + ? = 53\frac{3}{4}$$

- A. $-535\frac{5}{24}$ B. $-534\frac{1}{2}$
 C. $-525\frac{3}{25}$ D. $-536\frac{5}{24}$
 E. None of these

27. **Directions:** What will come in place of question mark in the given questions?

$$2\frac{3}{5} \div 4\frac{7}{8} \times 5\frac{5}{6} = ?$$

- A. $3\frac{5}{8}$ B. $3\frac{1}{9}$
 C. $3\frac{3}{8}$ D. $4\frac{1}{6}$
 E. $1\frac{2}{9}$

28. **Direction:** What will come in place of question mark (?) in the following question?

$$?\% \text{ of } 550 - 12\% \text{ of } 150 = 125$$

- A. 54 B. 44
 C. 16 D. 36
 E. None of these

29. What should come in place of question mark (?) in the following equation?

$$4\% \text{ of } 250 \times ?\% \text{ of } 140 = 84$$

- A. 12 B. 5
 C. 6 D. 8
 E. None of these

30. What value should come in place of question mark (?) in the following questions

$$(0.027)^2 \times (0.09)^2 \div (0.3)^6 = (0.3)^?$$

- A. 3 B. 2
 C. 5 D. 6
 E. None of these

31. Mr Phanse invests an amount of ₹24,200 at the rate of 4 p.c.p.a. for 6 years to obtain a simple interest. Later he invests the principal amount as well as the amount obtained as simple interest for another 4 years at the same rate of interest. What amount of simple interest will he obtain at the end of the last 4 years?

- A. ₹4,800 B. ₹4,850.32
 C. ₹4,801.28 D. ₹4,700
 E. None of these

32. An article is sold at a profit of 20%. If it had been sold at a profit of 25%, it would have fetched Rs. 45 more. The cost price of the article is

- A. Rs. 650 B. 900
 C. 750 D. Rs. 800
 E. None of these

33. A and B can do a piece of work in 30 days while B and C can do the same work in 24 days and C and A can do it in 20 days. They all work together for 10 days, after that B and C leave, how many more days will A take to finish the remaining work?

- A. 18 B. 24
 C. 30 D. 36
 E. None of these

34. The respective ratio between the present ages of Ram, Rohan & Vinay is 3 : 4 : 5. If the average of their present ages is 28 years then what would be the sum of the ages of Ram and Rohan together after 5 years?

- A. 45 years B. 55 years
 C. 52 years D. 59 years
 E. None of these

35. Anil can row at a speed of 7 Km/hr in still water to a certain upstream point and back to the starting point in a river which flows at 3 km/hr. Find his average speed for total journey.

- A. 40/7kmph B. 75/6 kmph
 C. 3.5 kmph D. 7 kmph
 E. 4.5 kmph

36. In 80 litres mixture of milk and water, water is only 25%. The milkman added 17 litres of water to the mixture. What is the approximate percentage of water in the final mixture?

- A. $38\frac{1}{7}$ B. $44\frac{2}{7}$
 C. $40\frac{5}{7}$ D. $45\frac{3}{7}$
 E. $42\frac{6}{7}$

37. A train 150 m long is running with a speed of 20 km/hr. If a man cycling in the opposite direction of train at 5 km/hr speed. How much time taken by train to pass the man?

- A. 20 sec B. 16 sec
 C. 21.6 sec D. 22.3 sec
 E. None of these

38. A basket contains 8 red, 4 black, 3 green flowers. If three flowers are picked at random, what is the probability that at least one is green

- A. 47/91 B. 4/13
 C. 13/53 D. 57/91
 E. None of these

39. A started a business with an investment of Rs 16000. After 2 months B also became his partner and invested $\frac{5}{8}$ th of the amount invested by A. Again after 2 more months C entered into the partnership with Rs 8000. After 10 months, they had a profit of Rs 6336. Find the share of B in the profit.
- A. Rs 1760 B. Rs 1670
C. Rs 1780 D. Rs 1680
E. None of these
40. The income of A is 150% of the income of B and the income of C is 120% of the income of A. If the total income of A, B and C together is ₹ 86000, what is C's income?
- A. ₹ 30000 B. ₹ 32000
C. ₹ 20000 D. ₹ 36000
E. None of these

Reasoning Ability

41. **Directions:** In each question below are given four statements followed by four conclusions numbered 1 to 5. You have to take the given statements to be true even if they seem to be at variance with commonly known facts. Read all the conclusions and then decide which of the given conclusion definitely logically does not follow from the given statements, disregarding commonly known facts.
- Statements:**
Some money are wallets
All wallet are mobikwik
All mobikwik are paytm
No paytm is a oxigen
- Conclusions:**
1). No oxigen is a paytm
2). No oxigen is a mobikwik
3). All money being oxigen is a possibility
4). All wallet are paytm
5). All mobikwik are paytm
- A. Only 1 does not follow
B. Only 2 does not follow
C. Only 3 does not follow
D. Only 4 does not follow
E. Only 1 and 3 does not follow
42. In each question below are given two or three statements followed by two conclusions numbered I and II. You have to take the given statement to be true even if they seem to be at variance with commonly known facts. Read all the conclusion and then decide which of the given conclusion logically follows from the given statement, disregarding commonly known facts.
- Statement:**
Some red are white.
No red is a pink.
All white are black.
- Conclusion:**
I. Some black being pink is a possibility.
II. All pink being black is a possibility.

- A. Only conclusion I follows.
B. Only conclusion II follows.
C. Either conclusion I or II follows.
D. Neither conclusion I nor II follows.
E. Both conclusions I and II follow.
43. **Direction:** In each question given below three/four statements are followed by two conclusions numbered I and II. You have to take the three given statements to be true even if they seem to be at variance from the commonly known facts. Read the conclusions and decide which logically follows from the given statements disregarding commonly known facts.
- Statement:**
Some mountains are rivers.
All rivers are fountains.
No river is pond.
- Conclusion:**
I. Some fountains are definitely not ponds.
II. All ponds being fountains is a possibility.
- A. Only conclusion I follows.
B. Only conclusion II follows.
C. Either conclusion I or II follows.
D. Neither conclusion I nor II follows.
E. Both conclusions I and II follow.
44. In each of the questions below are given two or three statements followed by two conclusions numbered I, II and III. You have to take the given statements to be true even if they seem to be at variance with commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follows from the given statements, disregarding commonly known facts.
- Statements:**
All writing are Pens
No black is a pen
Some white are writing
- Conclusions:**
I. All white being pens are possibilities
II. No black is a writing
III. Some writing are not pens
- A. only I follows
B. only I and III follows
C. only I and II follows
D. only II follows
E. None of these
45. **Direction:** In each of the questions below are given some statements followed by three or more conclusions. You have to take the given statements to be true even if they seem to be at variance with commonly known facts. Read all conclusions and then decide which of the given conclusions logically follows from the given statements, disregarding commonly known facts.
- Statements:**
No green is purple
All purple are acute.
All acute are pink
All pink are red.

