CAREER POWER™
AN IIT/IIM ALUMNI COMPANY

SECTION WISE QUANTITATIVE APTITUDE SET FOR LIC AAO

NUMERICAL ABILITY

31. 16 men can do 50% of a piece of work in 10 days. 10 women can do 75% of the same work in 15 days. Then in how many days can 80% of the same work be done by 8 men and 5 women?
1) 20 days 2) 24 days 3) 15 days
4) 16 days 5) None of these

32. 25% of the employees of department A and 16% of the employees of department B took part in a function. Participants from department A were 500 in number but 252 employees of department B did not take part in the function. Find the total no. of employees in A and B.
1)2200 2)2300 3)2000
4)2500 5) None of these

33. A square sheet of paper is converted into a cylinder by rolling it along its length. What is the ratio of the base radius of cylinder to the side of the square?
1)$7\sqrt{2}$:22 7 2)7:22 3)7:44
4)22 : 7 5) None of these

34. A passenger train covers the distance between stations X and Y 50 minutes faster than a goods train. Find this distance if the average speed of the passenger train is 60 kmph and that of goods train 20 kmph.
1)20km 2) 24 km 3)45km 4)40km 5) None of these

35. In a certain locality 55% are females. Of these 32% are illiterate. If male literacy is 64% find the ratio of illiterate males to literate women.
1) 9 : 8 2) 81 : 88 3) 81 : 187
4) 88 : 81 5) None of these

36. Total age of Ram and Shyam is 15 years more than that of Shyam and Mohan. While the average age of Ram, Shyam and Mohan is equal to that of Ram and Shyam. Then what is the difference between the ages of Ram and Shyam?
1)15 2)30 3)10
4)20 5) None of these

37. A park is in the form of a rectangle 120m × 100m. At the centre of the park there is a circular lawn. The area of the park, excluding the lawn, is 8700m^2. Find the radius of the circular lawn.
1)32.40m 2)44.4m 3)22.4m
4)28.40m 5)35m

38. A 200-m-long train crosses a pole in 10 seconds. Another train travelling at the same speed crosses a 300-m-long platform in 20 seconds. Find the time taken by the second train to cross the first train, if the first train is stationary.
1) 20 seconds 2) 15 seconds 3) 10 seconds
4) 30 seconds 5) 25 seconds

39. An article is marked 40% over its cost price. Two successive discounts of $14\frac{2}{7}$% and 10% are allowed on the marked price of the article. Find the profit/loss per cent after selling at discount.
1) 71% loss 2) 8% profit 3) 20% profit
4)30% profit 5) 40% loss.

40. A man travels 25% part of the Journey at the speed of 50 km/hr, next 60 % part of the journey at the speed of 40 km/hr. and rest part of the journey at the speed of 20 km/hr. Find average speed of the men during whole journey ?
1) 34 (4/11) km/hr 2) 37 (4/11) km/hr
3) 36 (4/11) km/hr 4) 80 km/hr
5) None of these

Directions (Q. 41-45): In each of these questions two equations are given. You have to solve these equations and give answer.
1) if$x<y$ 2) if$x>y$ 3) if$x=y$ 4) if $x \geq y$ 5) if $x \leq y$

41. I. $3x^2 + 13x + 14 = 0$ II. $3y^2 + 11y + 10 = 0$

42. I. $49x^2 - 84x + 36 = 0$ II. $25y^2 - 30y + 9 = 0$

43. I. $3x + 4y = 49$ II. $5x + 8y = 91$

44. I. $x + \frac{1}{x} = \frac{17}{4}$ II. $4y^2 + 4 + 17y = 0$

45. I. $x^2 - 9x + 18 = 0$ II. $2y^2 - 5y = 3$

Directions (46-50): Each of the questions below consists of a question and two statements numbered I and II given below it. You have to decide whether the data provided in the statements are sufficient to answer the question. Read the question and both the statements and give answer

1) if the data in statement I alone are sufficient to answer the question, while the data in statement II alone are not sufficient to answer the question.

2) if the data in statement II alone are sufficient to answer the question, while the data in statement I alone are not sufficient to answer the question.

3) if the data either in statement I alone or in statement II alone are sufficient to answer the question.

4) if the data even in both the statements I and II together are not sufficient to answer the question.

5) if the data in both the statements I and II together are necessary to answer the question.

46. A train running at a certain speed crosses a platform in 20 secs. What is the speed of the train?

I. Length of the train is 132 m.

II. The train crosses a man who is on the platform in 11 seconds.

47. The weights of A, B and C are in the ratio of 8 : 7 : 5. A's weight is 60% more than C's. Find the weight of B.

I. Total weight ofA, B and C is 100 kg.

II. Difference between A's and C's weight is 15 kg.

48. A shopkeeper sells some articles, taking profit of 20% on the cost price. Find the amount of profit.

I. Cost price of the article is Rs. 1200.

II. Selling price of the article is Rs. 240 more than the cost price.

49. A 180-m-long plot of rectangular land is to be fenced. Find the cost of fencing per square metre.

I. Breadth of the rectangular plot is 30 m.

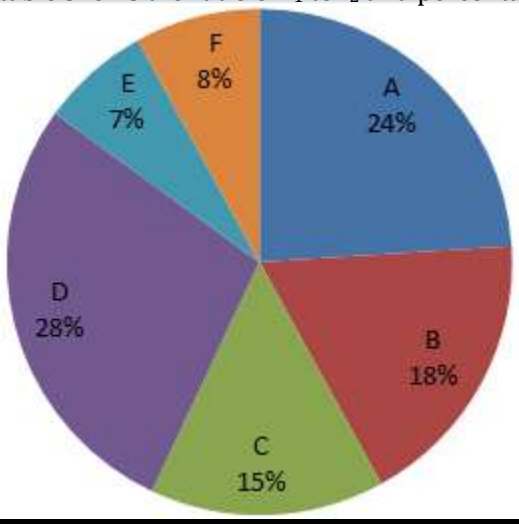
II. Length of the rectangular plot is 60 m.

50. The difference between the simple interest and the compound interest on a sum of money at the end of four years is Rs. 641. Find the sum.

I. Amount of simple interest accrued after four years is Rs. 4000.

II. Rate of interest is 10% per annum

Directions (51-55): Following pie-chart shows the percentage distribution of total items (I_1 and I_2) produced by six companies (A, B, C, D, E and F) and the table shows the ratio of I_1 to I_2 and percentage sale of I_1, and 1_2.



Company	I_1	I_2	% Sold I_1	% Sold I_2
A	5	3	65	62
B	5	4	56	78
C	2	3	72	66
D	3	4	75	60
E	4	3	64	55
F	3	2	50	48
Total item($I_1 + I_2$)= 16 lakh				

51. What is the difference between the total items produced by Company A and B together and the total items produced by Company D?

1) 3.84 lakh 2)3.06 lakh 3)2.96 lakh 4)2.24 lakh 5)1.78 lakh

52. What is the difference between the total number of I_1 items and the total number of I_2 items produced by Company F?
1)24800 2) 25600 3) 26300 4)27500 5) 28300

53. What is the average number of I_1 items sold by all six companies together?
1) 89480 2) 89580 3) 89680 4) 89780 5) None of these

54. What is the difference between the number of I_1 items sold and the number of I_2, items sold by Company E?
1)14560 2) 14480 3)14610 4)14340 5)14220

55. The number of I_1, items sold by Company A is what percentage of the number of I_1, items sold by Company F?
1)40.625% 2)120% 3) 184.64%
4) 296.5% 5) None of these

Directions (56-60): In each of the following number series, a wrong number is given. Find out the wrong number

56. -6 -5 3 28 94 219 435
1) -5 2) 3 3) 28
4) 94 5) 219

57. -1 0 2 21 340 8510
1) 0 2) 2 3) 21
4) 340 5) 8510

58. 24 12 12 18 27 90 270
1) 27 2) 90 3) 18
4) 12 5) 270

59. 6 7 13 20 33 53 96
1) 20 2) 33 3) 53
4) 96 5) 13

60. 144 72 48 36 28 24
1) 24 2) 28 3) 36
4) 48 5) 72