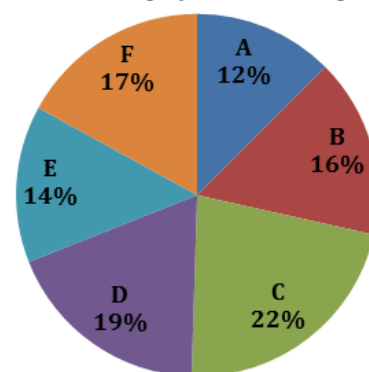


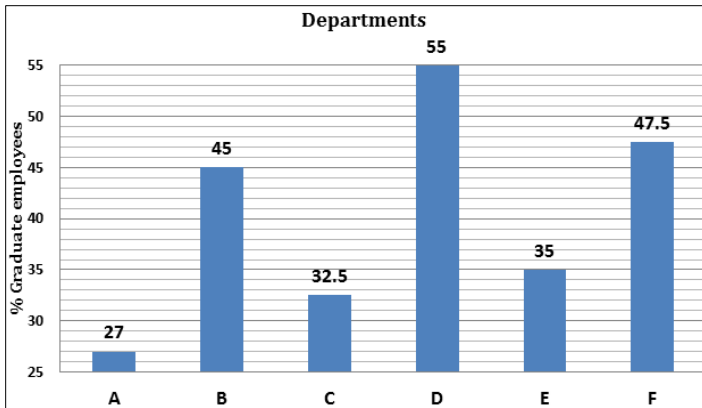
SECTION WISE QUANTITATIVE APTITUDE SET FOR LIC AAO

NUMERICAL ABILITY

31. The length of a rectangle is 20% more than its breadth. What will be the ratio of the area of this rectangle to the area of a square whose side is equal to the breadth of the rectangle?
 A) 5 : 6 B) 6 : 5 C) 3 : 2
 D) 2 : 3 E) None of these
32. Mr. Anand invested Rs 20,000 with rate of interest at 20 % per annum. 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) 9500 B) 5040 C) 8200
 D) 9040 E) None of these
33. A bag contains 3 red, 5 yellow and 4 green balls. 3 balls are drawn at random. What is the probability that the balls drawn contain exactly 2 green balls?
 A) $\frac{1}{2}$ B) $\frac{13}{55}$ C) $\frac{12}{54}$
 D) $\frac{12}{55}$ e) None of these
34. 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?
 A) 98 m² B) 146 m² C) 84 m²
 D) 168 m² E) None of these
35. A, B, and C invested some money in ratio 3 : 4 : 5. After some time, they receive a profit which is divided among them in ratio 4 : 5 : 6. Find the ratio of the time of their respective investments.
 A. 80 : 72 : 75 B. 80 : 75 : 72 C. 75 : 72 : 80
 D. 72 : 80 : 75 E. None of these
36. A contractor undertakes to make a road in 40 days and employs 25 men. After 24 days, he finds that only one-third of the road is made. How many extra men should he employ so that he is able to complete the work 4 days earlier?
 A) 100 B) 60 C) 75
 D) 55 E) None of these
37. A motorboat in still water travels at a speed of 36 kmph. It goes 56 km upstream in 1 hour 45 minutes. The time taken by it to cover the same distance down the stream will be
 A) 2 hours 25 minutes B) 3 hours
 C) 1 hour 24 minutes D) 2 hours 21 minutes
 E) None of these
38. In an examination a student who gets 20% of the maximum marks fails by 5 marks. Another student who scores 30% of the maximum marks gets 20 marks more than the pass marks. The necessary percentage required for passing is
 A) 32% B) 23% C) 22%
 D) 20% E) None of these
39. A trader bought two horses for Rs 19,500. He sold one at a loss of 20% and the other at a profit of 15%. If the selling price of each horse is the same, then their cost prices are respectively?
 A. 10,000 and 9,500 B. 11,500 and 8,000
 C. 12,000 and 7,500 D. 10,500 and 9,000
 E. None of these
40. The diameter and the height of a right circular cylinder are 11.2 cm and 21 cm respectively. The metal around its outer body is 0.4 cm thick. What is the volume of the metal?
 A) 186.34 cm³ B) 306.24 cm³ C) 156.56 cm³
 D) 336.24 cm³ E) None of these
- Directions (41-45):** Find out the wrong number in the following number series.
41. 12 25 52 55 57 115 117
 (a) 55 (b) 117 (c) 25
 (d) 52 (e) None of these
42. 2478 819 257 84 24 6
 (a) 257 (b) 24 (c) 6
 (d) 819 (e) 1
43. 2 3 6 15 45 160 630
 (a) 45 (b) 630 (c) 6
 (d) 3 (e) 160
44. 199 176 195 180 190 184 187
 (a) 180 (b) 190 (c) 184
 (d) 187 (e) 199
45. 1 5 2 30 28 2620
 (a) 5 (b) 2620 (c) 28
 (d) 30 (e) 2
- Directions (46-50):** The given pie-chart shows the percentage distribution of employees among different departments of a Company and the line graph shows the percentage of graduate employees among them. Answer the following questions based on these graphs.

Total number of employees in the company is 8000





46. What is the total number of graduate employees working in Department A?
 (a) 540 (b) 270 (c) 135
 (d) 1080 (e) 730
47. What is the total number of employees working in the Company who are non-graduates?
 (a) 3780 (b) 3940 (c) 4360
 (d) 4730 (e) 5730
48. The total number of graduate employees working in Department E is what per cent of the total number of employees of the Company?
 (a) 7.2% (b) 6.4% (c) 4.9%
 (d) 4.3% (e) None of these
49. The total number of graduate employees working in Department D is approximately what per cent more or less than the total number of non-graduate employees working in that department?
 (a) 18% more (b) 22% more (c) 24% less
 (d) 27% less (e) 32% less
50. What is the average number of graduate employees working in the Company in all departments together?
 (a) 535 (b) 545 (c) 555
 (d) 565 (e) 575

Directions (51-55): In each of these questions two equations numbered I & II are given. You have to solve both the equations and give answer.

- (1) If $x < y$ (2) If $x > y$
 (3) If relationship between a and b cannot be established
 (4) If $x \geq y$ (5) If $x \leq y$

51. I. $x^2 - 12x + 27 = 0$ II. $y^2 + 5y - 84 = 0$

52. I. $x^2 - 4x - 60 = 0$ II. $y^2 - 26y + 165 = 0$
 53. I. $x^2 = 4624$ II. $y = \sqrt{4624}$
 54. I. $32x^2 - 68x + 35 = 0$ II. $8y^2 - 14y + 5 = 0$
 55. I. $9x^2 - 27x + 14 = 0$ II. $3y^2 - 17y + 10 = 0$

Directions (56 -60) Following table shows the number of items (in thousands) produced by four different companies (A, B, C and D) and the ratio of sold(S) to unsold(US) items among them.

Company ⇒	A		B		C		D	
Year ↓	Total	S : US	Total	S : US	Total	S : US	Total	S : US
2006	45.5	4:03	64.8	5:03	42.14	4:03	50	3:02
2007	48.6	5 : 4	70.15	3:02	49.5	4:05	52.7	8:09
2008	40	2 : 3	77.11	5:06	51	9:08	56.4	1:01
2009	55	3 : 2	86.4	5:03	54	1:01	51	2:01
2010	64.4	3 : 4	85	8:09	66.22	6:05:00	60.5	2:03
2011	68	5 : 3	81.18	5:04	66.8	5:03	62.1	3:02

56. What is the number of items sold by Company A in all six years together? (Answer options are in thousands)
 1) 168.4 2) 171.6 3) 172.1
 4) 173.2 5) None of these
57. What is the average number of items produced by Company D in all six years (Answer options are in thousands).
 1) 54.25 2) 55.45 3) 56.75
 4) 57.5 5) None of these
58. The number of items sold by Company D in the year 2009 is what percentage of the number of items which remain unsold by Company D in the year 2006?
 1) 58.82% 2) 80% 3) 120%
 4) 150% 5) 170%.
59. The number of items which remain unsold by Company C in 2008 is what percentage more or less than the number of items which are sold by Company B in the year 2010?
 1) 16% 2) 24% 3) 32%
 4) 40% 5) 48%
60. What is the difference between the total items sold and the total items that remain unsold by Company D in all six years together?
 1) 24220 2) 25640 3) 26380
 4) 27550 5) None of these