SYNICATE MANIPAL PRACTICE SET
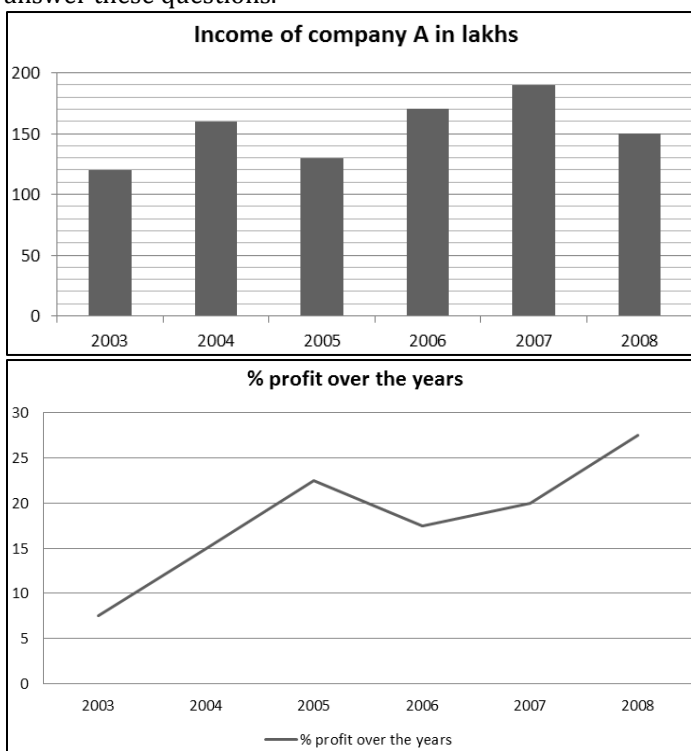# QUANTITATIVE APTITUDE

Direction (51-55) Study the following table carefully to answer these questions.

Income of company A in lakhs

% profit over the years

51. In which of the following years was the amount of profit the maximum?
(1) 2008 (2) 2004 (3) 2003
(4) 2005 (5) None of these

52. Approximately what was the average expenditure of the given years?
(1) Rs. 110 lakhs (2) Rs. 130 lakhs
(3) Rs. 135 lakhs (40) Rs. 140 lakhs
(5) None of these

53. In which of the following years was the increase/decrease in percent profit from the previous year the minimum?
(1) 2004 (2) 2006 (3) 2007
(4) 2005 (5) None of these

54. Approximately what was the expenditure in 2004?
(1) Rs. 120 lakhs (2) Rs. 160 lakhs
(3) Rs. 140 lakhs (4) Rs. 180 lakhs
(5) None of these

55. If the profit percentage in 2007 was 25, what would have been the expenditure in that year?
(1) Rs. 130 lakhs (2) Rs. 148 lakhs
(3) Rs. 120 lakhs (4) Rs. 152 lakhs
(5) None of these

Directions (56-60): What **approximate** value will come in place of the question mark (?) in each of the following question?

56. 59.995 x 16.001 ÷ 12.005 = ?
(1) 58 (2) 69 (3) 78
(4) 80 (5) None of these

57. $\dfrac{5}{9}$ of 183 + 162% of 850 = ?
(1) 1379 (2) 1468 (3) 1478
(4) 1579 (5) None of these

58. $\sqrt[3]{79509} + (7.002)^3 = ?$
(1) 286 (2) 304 (3) 359
(4) 386 (5) None of these

59. $\dfrac{4}{7}$th of $\dfrac{5}{16}$th of 161% of ? = 20815
(1) 46,400 (2) 72,400 (3) 82,400
(4) 94,000 (5) None of these

60. 28943.008 – 8762.950 + ? = 20223
(1) 25 (2) 36 (3) 43
(4) 55 (5) None of these

Directions (61-65): In each of the following questions a series of numbers is given. Only one number in the series is wrong. Find out that wrong number.

61. 17 18 22 31 48 69
(1) 18 (2) 22 (3) 48
(4) 69 (5) 31

62. 3 5 7 9 13 17
(1) 5 (2) 3 (3) 9
(4) 13 (5) 17

63. 4 6.5 10 14.5 20 27.5
(1) 10 (2) 6.5 (3) 14.5
(4) 20 (5) 27.5

64. 14 27 49 53 66 79 92
(1) 92 (2) 79 (3) 66
(4) 53 (5) 49

65. 5 6 14 42 184 925
(1) 42 (2) 14 (3) 6
(4) 184 (5) 925

Directions (66-70): 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 state are sufficient to answer the question. Read both the statement and

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

66. What is the area of the circle?
  I. Diameter of the circle is 14% of its circumference.
  II. Circumference of circle is 95 cm.

67. What is the speed of the train whose length is 450 metres?
  I. The train crosses a standing man in 20 seconds.
  II. The train crosses a platform of equal length in 40 seconds.

68. What is the cost of 9 dozen bananas?
  I. Cost of 24 bananas and 6 apples in Rs X.
  II. Cost of 35 bananas and 24 apples is RS Y.

69. What is Mohan's present age in years?
  I. Mohan's present age is more than his sister's present age by 5 years.
  II. Five years hence Mohan's age will be one-third of his sister's age that time.

70. What is a two-digit number?
  I. The number obtained by interchanging the digits of the number is greater than the original number by 36.
  II. The sum of the two digits of the number is 26.

71. In how many different ways can the letters of the word 'TROPHY' be arranged?
  (1) 840   (2) 720   (3) 360
  (4) 120   (5) None of these

72. If the numerator of a fraction is increased by 300% and the denominator of the fraction is increased by 200%, the resultant fraction is 3/5. What is the original fraction?
  (1) 9/17   (2) 9/20   (3) 6/17
  (4) 4/15   (5) None of these

73. Manish covers a distance of 36 km at the speed of 9 km/hr and a distance of 16 km at the speed of 8 km/hr. further, the covers a distance of 24 km at the speed of 4 km/hr. what is his average speed in covering the whole distance.
  (1) 5.5 km/hr   (2) 6 km/hr   (3) 6.3 km/hr
  (4) 6.9 km/hr   (5) None of these

74. The mean of the marks obtained by 150 aspirants is 70. If the marks obtained by one of the aspirants was incorrectly calculated as 85, whereas the actual marks obtained by him was 75, what is the correct mean of the marks obtained by the aspirants?
  (1) 69   (2) 69.93   (3) 70
  (4) Cannot be determined   (5) None of these

75. The difference between a two-digit number and the number obtained by interchanging the two digits of the numbers is 45. What is the difference between the two digits of the number?
  (1) 6   (2) 4   (3) 5
  (4) Cannot be determined   (5) None of these

Directions (76-80): Study the information carefully to answer the following questions:

A bank consists of 2000 employees. The ratio of officers to clerks is 12 : 13. All the employees work in five different departments named A, B, C, D and E. 25 percent of clerks are in department A. 15% of the officers work in department B. One-third of the officers work in department E. the ratio of clerks to officers in department B 3 : 2. 20 percent of the total number of employees are in department C. Clerks working in department E are 70 percent of the officers working in the same department. 15 percent of the clerks are in department D. The remaining clerks are in the department C. 10 percent of the officers work in department A and the remaining officers are working in the department D.

76. What is the number of officers working in the department C?
  (1) 320   (2) 260   (3) 216
  (4) 224   (5) 184

77. Number of officers working in the department D forms what percent of the number of clerks working in the same department?
  (1) 115.25   (2) 116.54   (3) 116.89
  (4) 117.94   (5) None of these

78. What is the number of clerks working in the department E?
  (1) 96   (2) 144   (3) 156
  (4) 184   (5) None of these

79. Number of the officers working in the department A forms **approximately** what percent of total number of the employee in the bank?
  (1) 3   (2) 4   (3) 5
  (4) 8   (5) 6

80. What is the total number of clerks working in the department B and D together?
  (1) 270   (2) 228   (3) 316
  (4) 372   (5) None of these

Directions (81-85): Study the table carefully to answer the questions that follow:

Total Number of Players Registered in Various Cricket Academy over the Years

Year	Cricket Academy				
	A	B	C	D	E
2005	1225	1300	1270	1050	1234
2006	1355	1365	1150	1225	1325
2007	1180	1480	1290	1360	1430
2008	1585	1590	1680	1455	1260
2009	1850	1600	1750	1680	1820
2010	2000	1875	1540	1720	1790
2011	2250	2500	2325	2105	2250

81. What is the average number of players in the Academy A over the given years?
  (1) 1650   (2) 1791   (3) 1881
  (4) 1635   (5) None of these

82. The number of players registered in Academy C in the year 2009 is **approximately** what percent of the total number of players registered in the various Cricket Academies in that year?
  (1) 15   (2) 17   (3) 20
  (4) 21   (5) 25

83. What is the ratio of the number of players registered in Academy A in the year 2010 to the number of players registered in Academy E in the year 2011?
(1) 5 : 4   (2) 12 : 11   (3) 8 : 9
(4) 7 : 5   (5) None of these

84. What is the difference between the average number of players registered in Academy D over the given years and the average number of players registered in Academy C over the given years. (**approximately**)
(1) 43   (2) 49   (3) 62
(4) 58   (5) 70

85. What is the difference between the total number of players registered in Academy B over the given years and the total number of players registered in Academy D over the given years?
(1) 1015   (2) 1085   (3) 1100
(4) 1130   (5) None of these

Directions (86-90): In the following questions two equations numbered I and II are given. You have to solve both equations and give answer.
(1) if p > q   (2) if p ≥ q
(3) if p < q   (4) if p ≤ q
(5) if p = q or the relationship cannot be established.

86. I. $P^2 - 6p + 8 = 0$ II. $q^2 + 11q + 10 = 0$

87. I. $p = \sqrt{2809}$ II. $q^2 = 2809$

88. I. $2p - 3q = -3.5$ II. $3p - 2q = -6.5$
89. I. $p^2 + 8p + 15 = 0$ II. $q^2 + 10q + 24 = 0$
90. I. $p^2 + 28p + 192 = 0$ II. $q^2 + 16q + 48 = 0$

91. Two numbers are such that if the first is subtracted from six times the second, their difference becomes 71, and if the second be added to 7 times the first, their sum becomes 62. The two numbers are:
(1) 19, 7   (2) 13, 7   (3) 7, 13
(4) 17, 3   (5) None of these

92. The respective ratio between the present ages of Yogesh, Vinod & Kamal is 3 : 4 : 5. If the average of their present ages if 28 years then what would be the sum of the ages of Yogesh and Vinod together after 5 years?
(1) 45 years   (2) 55 years   (3) 52 years
(4) 59 years   (5) None of these

93. Sum of area of a circle and a rectangle is equal to 1166 sq.cm. The diameter of the circle is 28 cm. What is the sum of the circumference of the circle and the perimeter of the rectangle if the length of the rectangle is 25 cm?
(1) 186 cm   (2) 182 cm   (3) 184 cm
(4) Cannot be determined   (5) None of these

94. A 320 metre long Metro moving with an average speed of 120 km/hr crosses a platform in 24 seconds. A woman crosses the same platform in 4 minutes. What is the speed of wo man in metre/second?
(1) 2.4   (2) 1.5   (3) 1.6
(4) 2.0   (5) None of these

95. Nipa's science test consist of 85 questions from three sections- i.e. A, B and C. 10 questions from section A, 30 questions from section B and 45 question from section C. Although, she answered 70% of section A, 50% of section B and 60% of section C correctly. She did not pass the test because she got less than 60% of the total marks. How many more questions she would have to answer correctly to earn 60% of the marks which is passing grade?
(1) 4   (2) 2   (3) 5
(4) 6   (5) 8

96. Mansi purchased an item of Rs. 46,000 and sold it at a loss of 12 percent. With that amount she purchased another item and sold it at a gain of 12 percent. What was her overall gain/loss?
(1) Loss of Rs. 662.40   (2) Profit of Rs. 662.40
(3) Loss of Rs. 642.80   (4) Profit of Rs. 642.80
(5) None of these

97. A boat covers a certain distance downstream in 1 hour, while it comes back in 3/2 hours. If the speed of the stream be 3 kmph, what is the speed of the boat in still water?
(1) 14 kmph (2) 17 kmph   (3) 12kmph
(4) 18 kmph (5) 15 kmph

98. An article was purchased for Rs. 78,350. Its price was marked up by 30%. It was sold at a discount of 20% on the marked up price. What was the profit percent on the cost price?
(1) 4   (2) 7   (3) 5
(4) 3   (5) 6

99. Gopal Je starts a business with Rs. 6,500 and after 8 months Saurabh joins Gopal Je as his partner. After 4 years the profit is divided in the ratio of 13 : 12. What is saurabh's contribution in the capital?
1) Rs. 7400   2) Rs. 7200   3) Rs. 7250
4) Rs.7630   5) Rs.7480

100. The speed of a boat in still water is 20 kmph and the rate of current is 4 kmph. The distance travelled by the boat downstream in 30 minutes is
1) 8km   2)10km   3)12km
4)14 km   5)16km