SECTION 2-QUANTITATIVE APTITUDE (50 questions)

Directions :(for Q.No.51-100)
For each of the following questions, select the choice that best answers the question or completes the statement.

51. The greatest number of four digits which is divisible by 15,25,40,75 is :

    a) 9000
    b) 9400
    c) 9600
    d) 9800

52. If a=0.1039, then the value of $4a^2-4a+1+3a$ is:

    a) 0.1039
    b) 0.2078
    c) 1.1039
    d) 2.1039

53. The product of two numbers is 9375 and the quotient, when the larger one is divided by the smaller, is 15. The sum of the numbers is :

    a) 380
    b) 395
    c) 400
    d) 425

54. Present ages of Sameer and Anand are in the ratio of 5:4 respectively. Three years hence, the ratio of their ages will become 11:9 respectively. What is Anand's present age in years?

    a) 24
    b) 27
    c) 40
    d) 43

55. Some articles were bought at 6 articles for Rs.5 and sold at 5 articles for Rs.6. Gain percent is:

    a) 30%
    b) 33.3%
    c) 35%
    d) 44%

56. Mr. Thomos invested an amount of Rs.13, 900 divided in two different schemes A and B at the simple interest rate of 14% p.a and 11% p.a respectively. If the total amount of simple interest earned in 2 years be Rs.3508, what was the amount invested in scheme B?

   a) Rs.6400
   b) Rs.6500
   c) Rs.7200
   d) Rs.7500

57. A, B, C subscribe Rs. 50,000 for a business. A subscribes Rs. 4000 more than B and B Rs. 5000 more than C. Out of a total profit of Rs. 35,000, A receives

   a) Rs. 8,400
   b) Rs. 11,900
   c) Rs. 13,600
   d) Rs. 14,700

58. The true discount on a bill due 9 months hence at 16% per annum is Rs.189.The amount of the bill is:

   a) Rs.1386
   b) Rs.1764
   c) Rs.1575
   d) Rs.2268

59. The Captain of a cricket team of 11 members is 26 years old and the wicket keeper is 3 years older. If the ages of these two are excluded, the average age of the remaining players is one year less than the average age of the whole team. What is the average age of the team?

   a) 23 years
   b) 24 years
   c) 25 years
   d) None of these

60. Three partners shared the profit in a business in the ratio of 5:7:8.They had partnered for 14 months,8 months and 7 months respectively. What was the ratio of their investment?

   a) 5:7:8
   b) 20:49:64
   c) 38:28:21
   d) None of the above

61. Ten women can complete a work in 7 days and ten children take 14 days to complete the work. How many days will five women and ten children take to complete the work?

   a) 3
   b) 5
   c) 7
   d) 9

62. The salaries of A, B and C are in the ratio 1:3:4. If the salaries are increased by 5%, 10% and 15% respectively, then the increased salaries will be in the ratio

   a) 20:66:95
   b) 21:66:96
   c) 21:66:92
   d) 19:66:92

63. A train 240 m long passes a pole in 24 seconds. How long will it take to pass a platform 650 m long?

   a) 65 sec
   b) 89 sec
   c) 100 sec
   d) 150 sec

64. A cistern has a leak which would empty the cistern in 20 minutes. A tap is turned on which admits 4 liters a minute into the cistern, and it is emptied in 24 minutes. How many liters does the cistern hold?

   a) 360 lit
   b) 480 lit
   c) 320 lit
   d) 420 lit

65. Compound interest earned on a sum for the second and the third years are Rs.1200 and Rs.1440 respectively. Find the rate of interest?

   a) 20 % p.a
   b) 15 % p.a
   c) 18 % p.a
   d) 24 % p.a

66. A certain sum of money is invested for one year at a certain rate of simple interest. If the rate of interest is 3% higher, then the interest earned will be 25% more than the interest earned earlier. What is the earlier rate of interest?

a) 4 % p.a

b) 6 % p.a

c) 8 % p.a

d) 12 % p.a

67. A person takes 20 minutes more to cover a certain distance by decreasing his speed by 20%. What is the time taken to cover the distance at his original speed ?

a) 1 hr

b) 1 hr 20 min

c) 1 hr 10 min

d) 50 min

68.Calculate the number of bricks, each measuring 25 cm X 15 cm X 8 cm required to construct a wall of dimension of 10 m X 4 m X 5 m when 10% of its volume is occupied by concrete?

a) 6000

b) 5400

c) 3800

d) 4700

69. Arun purchased 30 Kg of wheat at the rate of Rs.11.50 per Kg and 20 Kg of wheat at the rate of 14.25 per Kg.He mixed the two and sold the mixture. Approximately at what price per Kg should the mixture be sold to make 30% profit?

a) Rs.17.80

b) Rs.16.40

c) Rs.14

d) Rs.15.40

70. The average mark of four subjects is 120. If 33 was misread as 13 during the calculation, what will be the correct average?

    a) 122

    b) 120

    c) 125

    d) 121

71. Simplify the following equation:

$$\underline{2003 \times 2004 - 2001 \times 2002} = ?$$

    a) 8010

    b) 8020

    c) 8030

    d) 8040

72. Find the least number with which 16200 should be multiplied, to make it a perfect cube?

    a) 45

    b) 48

    c) 360

    d) 36

73. Ravi and Ajay start simultaneously from a place A towards B 60 km apart. Ravi's speed is 4km/h less than that of Ajay. Ajay, after reaching B, turns back and meets Ravi at a place 12 km away from B. Ravi's speed is:

    a) 12 km/h

    b) 10 km/h

    c) 8 km/h

    d) 6 km/h

74. The angle between the minute hand and the hour hand of a clock when the time is 4.20 is:

    a) 0°

    b) 10°

    c) 5°

    d) 20°

75. The diagonal of the floor of a rectangle closet is 7.5 m. The shorter side of the closet is 4.5 m. What is the area of the closet in square meter?

a) 37
b) 27
c) 54/4
d) 21/4

76. Find the average increase rate, if increase in the population in the first year is 30% and that in the second year is 40%.

a) 41
b) 56
c) 40
d) 38

77. From a group of 7 men and 6 women, five persons are to be selected to form a committee so that at least 3 men are there on the committee. In how many ways can it be done?

a) 564
b) 645
c) 735
d) 756

78. Which of the following is the smallest?

a) 15/16
b) 16/6
c) 7/8
d) 11/12

79. If 1cm on a map corresponds to an actual distance of 40 kms and the distance on the map between Bombay and Calcutta is 37.5 cm,then the actual distance between them is :

a) 375 kms
b) 3750 kms
c) 1500 kms
d) 1375 kms

80. The numbers 34041 and 32506 when divided by a certain number of three digits, leave the same remainder. What is the number?

   a) 535
   b) 405
   c) 357
   d) 307

81. A line segment is drawn from the point (3, 5) to the point (9, 13). What are the coordinates of the midpoint of this line segment?

   a) (3, 4)
   b) (6, 8)
   c) (9, 6)
   d) (6, 9)

82. Ravi is standing 180 meters due north of point P. Latha is standing 240 meters due west of point P. What is the shortest distance between Ravi and Latha?

   a) 60 meters
   b) 300 meters
   c) 420 meters
   d) 900 meters

83. The ratio of x to y is 1/2. If the ratio of x + 2 to y + 1 is 2/3, then what is the value of x?

   a) 6
   b) 4
   c) 3
   d) 2

84. A man and a boy received Rs. 800 as wages for 5 days for the work they did together. The man's efficiency in the work was thrice that of the boy. What are the daily wages of the boy?

   a) Rs. 76
   b) Rs. 56
   c) Rs. 44
   d) Rs. 40

85. The square root of 64009 is :

   a) 253
   b) 347
   c) 363
   d) 803

86. 4.036 divided by 0.04 gives:

a) 1.009
b) 10.09
c) 100.9
d) None of these

87. What decimal of an hour is second?

a) 0.0025
b) 0.0256
c) 0.00027
d) 0.000126

88. The sum of two number is 25 and their difference is 13.Find their product.

a) 104
b) 114
c) 315
d) 325

89. The length of a rectangle is halved, while its breadth is tripled. What is the percentage change in area?

a) 25% increase
b) 50% increase
c) 50% decrease
d) 75% decrease

90. If a - b = 3 and $a^2 + b^2 = 29$, find the value of ab.

a) 10
b) 12
c) 15
d) 18

91. The price of 10 chairs is equal to that of 4 tables. The price of 15 chairs and 2 tables together is Rs.4000.The total price of 12 chairs and 3 tables is:
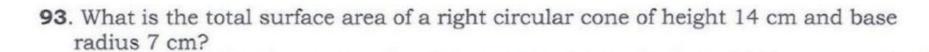
a) Rs.3500
b) Rs.3750
c) Rs.3840
d) Rs.3900

92. There are two examination rooms, A and B. If 10 students are sent from A to B, then the number of students in each room is the same. If 20 candidates are sent from B to A, then the number of students in A is double the number of students in B. The number of students in room A is:

   a) 20
   b) 80
   c) 100
   d) 200

93. What is the total surface area of a right circular cone of height 14 cm and base radius 7 cm?

   a) 344.35 cm²
   b) 462 cm²
   c) 498.35 cm²
   d) None of these

94. A hall is 15 m long and 12 m broad.If the sum of the areas of the floor and the ceiling is equal to the sum of the areas of four walls,the volume of the hall is:

   a) 720
   b) 900
   c) 1200
   d) 1800

95. How many of the following numbers are divisible by 3 but not by 9?

   2133, 2343, 3474, 4131, 5286, 5340, 6336, 7347, 8115, 9276

   a) 5
   b) 6
   c) 7
   d) None of these

96. In a camp, there is a meal for 120 men or 200 children. If 150 children have taken the meal, how many men will be catered to with remaining meal?

   a) 20
   b) 30
   c) 40
   d) 50

97. A man bought a horse and a carriage for Rs. 3000. He sold the horse at a gain of 20% and the carriage at a loss of 10%, thereby gaining 2% on the whole. Find the cost of the horse.

   a) 2200
   b) 1800
   c) 1200
   d) 1000

98. In a class of 120 students numbered 1 to 120, all even numbered students opt for Physics, whose numbers are divisible by 5 opt for Chemistry and those whose numbers are divisible by 7 opt for Maths. How many students opt for none of the three subjects?

   a) 19
   b) 41
   c) 21
   d) 26

99. When a plot is sold for Rs.18, 700, the owner loses 15%.At what price must that plot be sold in order to gain 15%?

   a) Rs.21,000
   b) Rs.22,500
   c) Rs.25,300
   d) Rs.25,800

100. A vendor bought toffees at 6 for a rupee. How many for a rupee must he sell to gain 20%?

   a) 3
   b) 4
   c) 5
   d) 6