MATHEMATICS

91. The Municipality of a town increases water tax by 20% and water consumption decreased by 20%. Then the percentage of increase or decrease in the monthly expenditure is:

   (A) 4% increase
   (B) 4% decrease
   (C) 5% increase
   (D) 5% decrease

92. A child was born on 13th January 1976 which was a Tuesday. What day of the week will be the child's birth day in the year 1986?

   (A) Sunday
   (B) Friday
   (C) Saturday
   (D) Monday

93. The perimeter of a rectangle is 60 cms. If its length is twice its breadth, then its area is:

   (A) 200 cm^2
   (B) 180 cm^2
   (C) 160 cm^2
   (D) 220 cm^2

94. A tree grows at the rate of 1/5th of its height annually. By how much height will it grow after 2 years, if its present height is 75 cms?

   (A) 108 cms
   (B) 90 cms
   (C) 144 cms
   (D) 112 cms

95. A train 600 meters long is running at a speed of 90 kms/hr. If it crosses a tunnel in one minute, then the length of the tunnel is:

   (A) 500 meters
   (B) 550 meters
   (C) 600 meters
   (D) 900 meters

96. A book seller sold a box of 10 pencils for Rs. 80 and incurred a loss. Had he sold it for Rs. 98, his gain would have been twice the loss he incurred earlier. The cost price of the box of pencils is:

   (A) Rs. 84
   (B) Rs. 86
   (C) Rs. 88
   (D) Rs. 90

97. In a 100 meters race, A beats B by 20 meters B beats C by 5 meters. In the same race, A beats C by:

   (A) 26 meters
   (B) 25 meters
   (C) 24 meters
   (D) 22 meters

98. Beena got married 8 years ago. Today, her age is 11/4 times her age at the time of marriage. If her daughter's age is 1/10 times her age, then her daughter's age is:

(A) 3 years

(B) 4 years

(C) 5 years

(D) 2 years

99. A clock gains 2 minutes every hour. Then the angle traversed by the second hand in one minute is:

(A) 360°

(B) 370°

(C) 390°

(D) 372°

100. 80% of students of a class took Statistics and 45% took Mathematics. If each student took Statistics or Mathematics and 40 took both, the total number of students in the class was:

(A) 160

(B) 180

(C) 200

(D) 225

101. Kiran's brother is 5 years older to her. Her father was 30 years old when Kiran's sister was born, while her mother was 28 years old when Kiran was born. If Kiran's sister was 2 years old when her brother was born, what was the age of their father when Kiran's brother was born?

(A) 32

(B) 34

(C) 37

(D) 30

102. If Second Saturday and Sunday of every month is a holiday, then the total number of working days in a month of 31 days beginning with a Wednesday will be

(A) 23

(B) 24

(C) 25

(D) 26

103. A mess contractor can either serve 450 students with the meal that he prepares or can cater to 270 cops with the same meal. If 300 students have already eaten in the mess, how many cops can be fed with the remaining meal?

(A) 20

(B) 45

(C) 90

(D) 180

104. A car driver increases the average speed of his car by 3 km/hr every hour. The total distance travelled in 7 hours if the distance covered in first hour was 30 km, is

(A) 266 km

(B) 273 km

(C) 280 km

(D) 287 km

105. A grocer mixes coffee powder of 2 types, one of which is priced at Rs. 60 and the other at Rs. 90. What should be the ratio of combining the two, to sell the blended mix coffee powder of the two types at Rs. 80?

   (A)   2:1   (B)   2:3

   (C)   1:2   (D)   3:2

106. The smallest number that should be subtracted from 2085, so that the new number is completely divisible by 23 is

   (A)   9   (B)   15

   (C)   20   (D)   19

107. A tank is connected to three pipes – Pipe A, B and C. Pipe A can fill the tank in 6 hours, B can fill the tank in 8 hours and Pipe C can empty the full tank in 12 hours. How much time will it take to fill the tank completely if all three pipes are working together?

   (A)   4 hours   (B)   4 hours 48 minutes

   (C)   5 hours   (D)   5 hours 20 minutes

108. Naresh bought a bicycle each for his two sons, each bicycle priced at Rs. 3500. If the first bicycle is sold at a profit of 5%, the how much should the other bicycle be sold for, to gain a total of 20% on both?

   (A)   15%   (B)   10%

   (C)   25%   (D)   35%

109. An employee of an organization invests a total of Rs 25,400 in two different schemes X and Y at a simple interest rate of 18% per annum and 10% per annum respectively. If a total of Rs. 6460 has been earned as simple interest in 2 years, what amount was invested in Scheme Y?

   (A)   Rs. 8,625   (B)   Rs. 16,775

   (C)   Rs. 12,240   (D)   Rs. 10,930

110. The difference between Simple Interest and Compound Interest on Rs. 500 for 1 year at 10% per annum, reckoned half yearly is

   (A)   Rs. 1   (B)   Rs. 1.25

   (C)   Rs. 1.5   (D)   Rs. 2