

**003 - Aptitude Development-I**

P. Pages : 1

Time : Two Hours



**GUG/S/25/14289**

Max. Marks : 60

1. a) By selling 90 ball pens for ₹ 160 a person loses 20%. How many ball pens should be sold for ₹ 96 so as to have a profit of 20%? **12**

**OR**

- b) A cloth merchant sold half of his cloth at 20% profit, half of the remaining at 20% loss and the rest was sold at the cost price. Calculate the overall, profit % or loss%? **12**

2. a) Find the compound interest if Rs. 5,000 was invested for 2 years at 10% p.a. compounded half yearly. **12**

**OR**

- b) A sum of money lent out at simple interest amounts to Rs. 720 after 2 years and to Rs. 1020 after a further period of 5 years. Find the sum and the rate %. **12**

3. a) A cricketer hit 120 runs in 150 balls during a test match. 20% of the runs came in 6'S, 30% in 4'S, 25% in 2'S, and the rest in is. **12**  
What percentage of the total runs came in  
i) Sixes ii) Fours  
iii) Twos iv) Singles

**OR**

- b) Rs. 3,500 is to be shared among three people so that the first person get's 50% of the second, who in turn get's 50% of the third. How much will each of them get? **12**

4. a) The average weight of 49 students in a class is 39 kg. Seven of them whose average weight is 40kg leave the class and other seven students whose average weight is 45kg join the class. What is the new average weight (in kg) of the class? **12**

**OR**

- b) The average salary per head of all the employees of an institution is Rs. 60. The average salary of 12 officers is Rs. 400, the average salary per head of the rest is Rs. 56. Find the total number of employees in the institution. **12**

5. a) The cost price of an article is Rs. 500 and its selling price is Rs. 600. Calculate profit and profit %. **3**  
b) Calculate simple interest and amount if principal amount is Rs. 3,000, time period is 2 years and the rate of interest is 10%. **3**  
c) If 20% of  $x = y$ , what is the value of  $y\%$  of 20 in terms of  $x$ ? **3**  
d) Find the average of the following set of numbers 65, 85, 70, 90 and 105. **3**

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