Roll No. Total No. of Pages : 02

Total No. of Questions : 07

B.Com. (2011 & Onward) (Sem.–1)

BUSINESS MATHEMATICS

Subject Code : BCOP-104

Paper ID : [B1104]

Time : 3 Hrs. **Max. Marks : 60**

INSTRUCTIONS TO CANDIDATES :

1. **SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.**
2. **SECTION-B contains SIX questions carrying TEN marks each and students have to attempt any FOUR questions.**

SECTION-A

1. Write briefly :

a) Differentiate between A.P & G.P.

b) What do you mean by the terms "Mint-Par of Exchange"?

c) Explain different kinds of stock.

d) Define Simple Interest.

e) What is meant by sale of stock?

f) Write the general equation for the n^{th} term of a G.P.

g) Convert Pound into Shillings.

h) Define the term : 'The course of exchange'.

i) What is true discount?

j) The difference between single interest and true discount an a certain sum of money for 2½ years at 4% is Rs. 4.50. Find the sum.

SECTION-B

2. The rate of exchange between Calcutta & London is Re 1 = 1 sh., $4\frac{13}{16}$ d. and between London and Paris is 87.80 francs per pound. Find the arbitrated rate between Calcutta & Paris. How much should a Calcutta merchant pay to a merchant in Paris for a bill of 20,000 francs due 4 months at 4½%?

3. Ajit purchased goods worth Rs. 624 from Surjit at 6 months credit and Surjit purchased goods worth Rs. 530 from Ajit at 9 months credit. If Rate of Simple Interest is 8%, what cash payment should be made to clear the amount?

4. A debt of Rs. 1200 is to be paid in one year by making payments of Rs. 100 at the end of each month plus interest at the rate of 1% per month on the outstanding balance. Find the total interest paid.

5. A man invests Rs. 39,200 in Govt. loans party in 3% at 96 and the rest in 4% at par. After paying Income Tax at 25% his total income amount to Rs. 1050. Find the amount, invested in each loan.

6. Find the sum of :

   a) The first *n* natural numbers

   b) The natural numbers below 1000 and divisible by 11.

   c) The natural numbers below 1000 which are neither divisible by 5 nor by 2.

7. A Merchant of Delhi buys goods at Geneva for the value 2310 francs. Find the value of goods in rupees, if the exchange between London & Delhi is $13\frac{17}{24}$ rupees & between London & Geneva 25.333 francs to £ 1. Calculate the arbitrated rate of exchange between Delhi & Geneva.