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Total No. of Questions : 07

B.Com(2011 & Onwards) (Sem.–1) BUSINESS MATHEMATICS Subject Code : BCOP-104 Paper ID : [B1104]

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTION 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 has to attempt any FOUR questions.

SECTION-A

I. Write briefly :

- a) Find the 25^{th} term of the A.P. 9, 6, 3, 0, -3.
- b) In a G.P. series the product of the first three terms is 27/8. Find the middle term.
- c) Find the simple interest on Rs. 68,000 at $16\frac{2}{3}$ % per annum for 9 months.
- d) Relation between simple interest and compound interest.
- e) Divide Rs. 1162 among A, B, C in the ratio 35:28:20.
- f) A shopkeeper marks the price of an article at Rs. 80. Find the selling price, if he allows a discount of 10%.
- g) Explain the term callable bonds.
- h) What do you mean by rate of yield in purchase and sale of stocks?
- i) Difference between direct and indirect rate of exchange.
- j) Explain the chain rule in the course of exchange.

SECTION-B

- 2. The third term of an A.P. is 1/5 and the 5th term is 1/3 show that the sum to 15 terms of the A.P. is 8.
- 3. Find the four integers a, b, c, d, such that a, b, c are in G.P.; b, c, d are in A.P and c + d = 20, a + b = 6.
- 4. Hari Ram purchased Rahat Patras for Rs. 1000. After 5 years he got Rs. 2000. Find the rate of interest if the interest is compounded half yearly. Given that $10\sqrt{2} = 1.072$.
- 5. In a certain country the consumption of tea is 5 times the consumption of coffee. If a% more tea and b% more coffee were consumed the aggregate amount consumed would be 70% more but if b% more tea and a% more coffee were consumed the aggregate amount consumed would be 30% more. Compare a and b.
- 6. Explain the concept of annual yield and computation of a rate of yield to maturity in detail.
- 7. Briefly explain the concept of foreign exchange market.