

Roll No. 

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Total No. of Questions: 07

Total No. of Pages: 02

**B. Com. (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 have to attempt any FOUR questions.**

**SECTION A**

1.
  - a) Explain the terms 'Arbitrated rate of exchange'
  - b) How stocks are named?
  - c) What do you mean by common ratio of a G.P.?
  - d) Define compound interest.
  - e) Differentiate between stock and cash.
  - f) Define arithmetic mean between 2 numbers.
  - g) What is meant by bill of exchange?
  - h) Define face value.
  - i) What is true discount?
  - j) Convert pound into shillings.

**SECTION B**

2. A broker wishing to buy a bill for 7000 dollars drawn on New York borrowed £ 2500 from a money lender for 15 days at  $5\frac{3}{4}\%$  He bought the bill at  $3\frac{7}{16}$  exchange & sold it 15 days later at  $3\frac{1}{8}$  exchange & repaid the loan. How much did he gain or lose?
3. A man borrows money for are year from a bank which charges a simple discount rate of 9% p.a. He promises to pay Rs 200 a month at the end of each month. Find the sum recovered by him.
4. A person invests Rs13650 in a 4% stock. When its price faces to 75 he sells it out and invests the proceeds in a  $7\frac{1}{2}\%$  stock at 125. On account of this change, his annual income increases by Rs 75. Find the original price at which he bought the first stock.

5. Which term of the series?  
 $12+9+6+\dots\dots\dots$   
is equal to      i)      -30?                      ii)      -100?
6. If a bill is due after 5 years, its present worth is Rs 800. If it were due after 3 years, its present worth would be Rs 1000. Find out the face value of the bill as well as the rate of interest?
7. The rate of exchange between London & Calcutta is 1sh, 6d. per rupee, between London & New York 5sh. , 10d. per dollar & between Calcutta & New York Rs 4.80 per dollar. If a merchant at Calcutta remits a debt of 350 dollar to New York through London, instead of direct, does he gain a lose thereby & by how much?