Roll No. $\square$
Total No. of Questions : 07
B.Com.(Professional) (2013 to 2017 Batch) $\quad$ (Sem.-1)
BUSINESS MATHEMATICS
Subject Code : BCOP-104
M.Code $: 22004$

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. Answer briefly :
a) What are the applications of Arithmetic progressions?
b) What is meant by representation of A.P.?
c) Differentiate between simple and compound interest.
d) What is amortization of a loan?
e) Define Bill Discounting.
f) How is the cost computation done on proceeds of stock buying / selling?
g) What are callable bonds?
h) How is accrued interest different from annual interest?
i) Define Rate of Exchange.
j) What is meant by compound conversions?

## SECTION-B

2. A sum of Rs 6240 is paid off in 30 installments, such that each installment is Rs 10 more than the preceding installment. Calculate the value of the first installment.
3. If the difference between the simple interest and compound interest is Rs 200 at $4 \%$ for 2 years on certain principal, then find the principal.
4. Due to fall in manpower, the production in a factory decreases by $25 \%$. By what percent should the working hours be increased so as to restore the original production?
5. Explain how is the computation of gains / losses done on convertible bonds.
6. Write short notes on :
a) Chain rule
b) Cross rate of exchange
7. What are foreign exchange markets? Explain how is the rate of exchange decided?

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.

