Roll No. $\square$
Total No. of Questions : 07

# B.Com. (2013to 2017 Batch) (Sem.-1) <br> BUSINESS MATHEMATICS <br> Subject Code :BCOP-104 <br> 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) Find the 50 th term of the progression $2,5,8,11, \ldots$
B) Differentiate between Arithmetic Progression and Geometric Progression.
C) What will be the simple interest earned on an amount of Rs. 16,800 in 9 months at the rate of $61 / 4 \%$ p.a.?
D) Relation between Simple Interest and compound Interest.
E) If $x: y=3: 4$, find $(4 x+5 y):(5 x-2 y)$.
F) $30 \%$ of a certain number is 12.9 . Find the number.
G) Differentiate between callable and convertible Bonds.
H) Explain the concept of Annual Interest.
I) Name some foreign Exchange Market.
J) Explain the concept of cross rate.

## SECTION-B

2. Find the sum of the first 35 terms of an Arithmetic Progression whose third term is 7 and seventh term is two more than thrice of its third term.
3. Given the terms a $10=3 / 512$ and a $15=3 / 16384$ of a geometric sequence, find the exact value of the term a 30 of the sequence.
4. Deva took a loan of Rs. 1200 with simple interest for as many years as the rate of interest. If she paid Rs. 432 as interest at the end of the loan period, what was the rate of interest?
5. On a certain sum of money, after 2 years the simple interest and compound interest obtained are Rs. 400 and Rs. 600 respectively. What is the sum of money invested?
6. In a library $60 \%$ of the books are in Hindi, $60 \%$ of the remaining books are in English rest of the books are in Malayalam. If there are 4800 books in English, then find the total number of books in Malayalam.
7. Suppose spot USD/INR is 46.75 and 1 year US interest rate is $5 \%$ while it is $11 \%$ in India. Calculate the 1 year USD/INR forward rate.

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.

