

F.Y.B.COM. SEM – I (2014 COURSE) : WINTER - 2017
SUBJECT: BUSINESS MATHEMATICS & BUSINESS STATISTICS – I

Day: Wednesday
Date: 01/11/2017

Time: 12.00 NOON TO 02.00 PM
Max. Marks: 40

W-2017-0246

N.B.:

- 1) All questions are **COMPULSORY**.
- 2) Figures to the right indicate **FULL** marks.
- 3) Draw neat and labeled diagram **WHEREVER** necessary.
- 4) Use of logarithmic table and pocket **CALCULATOR** is allowed.

Q.1 Attempt any **TWO** of the following: **(10)**

- a) Write a procedure of stratified Random Sampling with suitable illustration.
- b) Answer the questions given below using following frequency distribution.

I.Q.	60-69	70-79	80-89	90-99	100-109	110-119	120-129
Frequency	21	37	51	49	21	13	4

- i) Mid-point of 2nd class.
 - ii) Class boundary of 3rd class.
 - iii) Number of candidates having intelligent quotient less than 89.5.
 - iv) Class width of 3rd class.
 - v) State type of classification.
- c) Draw histogram for the following frequency distribution.

Salary	40-60	60-80	80-100	100-120	120-140
Frequency	6	12	17	10	5

- d) Find the median and mode for the following frequency distribution.

Class	0-10	10-20	20-30	30-40	40-50	50-60
Frequency	4	16	13	20	7	5

Q.2 Attempt any **TWO** of the following: **(10)**

- a) State the uses of Index number.
- b) Find the combined mean of the following data.
Group I : $n_1 = 10, \sum x = 60$
Group II : $n_2 = 15, \sum y = 80$
- c) With the help of following data calculate Laspeyre's and Paasches Price index Number:

Commodity	Year 2006		Year 2010	
	Price	Quantity	Price	Quantity
A	36	100	40	95
B	80	12	90	9
C	45	16	41	18
D	5	1100	6	1200

P.T.O

