

Total No. of Questions : 5]

SEAT No. :

PA-1719

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F.Y. B.Com.

114 - A : BUSINESS MATHEMATICS & STATISTICS - I

(2019 Credit Pattern) (Semester - I)

Time : 2½ Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) All Questions are compulsory.
- 2) Figures to the right indicate full marks.
- 3) Use of simple calculator is allowed.

Q1) A) Fill in the blanks with suitable choice (Any five): [5]

a) The sum which is repaid with interest is called _____.

- | | |
|---------------|-------------------|
| i) Principal | ii) Present value |
| iii) Interest | iv) Amount |

b) EMI stands for _____.

- i) Equal Money Instalment
- ii) Equated Monthly Instalment
- iii) Equal Monthly Instalment
- iv) Easy Money Instalment

c) Shareholders received _____ on their capital.

- | | |
|-------------|----------------|
| i) Interest | ii) Dividend |
| iii) Rent | iv) Commission |

d) SIP is _____ investment.

- | | |
|-------------|--------------|
| i) Lump Sum | ii) Periodic |
| iii) Fixed | iv) One Time |

e) _____ is the selected set of data under consideration of study.

- | | |
|-------------|----------------------|
| i) Sample | ii) Population |
| iii) Census | iv) All of the above |

P.T.O.

Q3) Solve any three from the following:

[15]

- a) Find the compound interest on ₹ 50,000 at 8% p.a. for 3 years.
- b) Find out how many units of mutual funds has purchased by Sunil if he invested ₹ 20,000 in Reliance mutual fund with N.A.V. of ₹ 40 each. There is no entry load in transaction.
- c) Find the mean of the following frequency distribution.

Weight (kg)	0-10	10-20	20-30	30-40	40-50
No. of students	1	3	10	4	2

- d) What is SRSWR and SRSWOR?
- e) Explain scope of statistics in management science.

Q4) Solve any three from the following:

[15]

- a) Find EMI on a loan of 5,00,000 to be paid in 2 years at 12% p.a. on the outstanding amount at the beginning of each month.
- b) Find the mode of the following frequency distribution:

Class	0-20	20-40	40-60	60-80	80-100
Frequency	4	8	9	20	9

- c) Compute the range and the coefficient of range for the data given below:
100, 24, 14, 105, 21, 35, 106
- d) State merits and demerits of mean.

- e) The frequency distribution of marks obtained by 100 students in F.Y. B.COM. is given below:

Marks	0-19	20-39	40-59	60-79	80-99
No. of students	8	26	24	12	5

Answer the following questions:

- State the type of classification.
- Find the class-mark of 2nd class.
- State the class boundaries of 3rd class.
- Find the class width of fourth class.
- Find the number of students getting marks less than 79.

Q5) Solve the following:

[10]

- a) Find the median of the following frequency distribution:

[5]

Marks	10-30	30-50	50-70	70-90	90-110
No. of Students	10	40	80	35	15

- b) Compute standard deviation from the following data:

[5]

2, 3, 5, 2, 7, 5, 7, 6, 11, 12

OR

- b) Draw histogram of the following frequency distribution:

[5]

Marks	0-10	10-20	20-30	30-40	40-50
No. of students	4	12	18	16	3

