DCBC312

Reg. No. | | | | | | | | | |

III Semester B.Com.(Regular)/B.D.A./L.S.C.M./A&F Degree Examination,
December/January - 2025/26
COMMERCE
Quantitative Analysis for Business Decisions - I
(SEP Scheme 2025-26 onwards)
Paper : 3.1

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Time : 3 Hours **Maximum Marks : 80**

Instructions to Candidates:

Answers should be completely written in English only.

SECTION - A

Answers any Five of the following sub-questions. Each sub-question carries 2 marks. **(5×2=10)**

1. a) Define Statistics.
   b) Define Sampling.
   c) Mention the types of classification.
   d) What are the essentials of a good average?
   e) Mention the different measures of dispersion.
   f) State any two uses of Index numbers.
   g) Calculate Range and its co-efficient from the following.
   35, 76, 53, 44, 26, 19, 95, 63, 5.
   h) Find mode using empirical formula Mean = 50, Median = 58.33.

SECTION - B

Answer any Four of the following questions. Each question carries 5 marks. **(4×5=20)**

2. Construct the multiple bar diagram for the following data.

Year	Ragi	Wheat	Rice
2023	100	400	1,000
2024	120	600	800

[P.T.O.

3. Calculate Mean Deviation from the following information using mode.

x	125	126	130	132	134	138	140	141
f	8	4	3	10	7	8	4	2

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4. Calculate Arithmetic mean for the following.

Marks	Below 20	30	40	50	60	70	80	90	100
No. of Students	10	18	25	32	43	61	67	85	100

5. Briefly explain the different methods of sampling.

6. From the following data calculate the simple average price Index number.

Items	**P_0**	**P_1**
Wheat	35	90
Rice	55	70
Sugar	40	60
Oil	50	90
Cloth	60	100

7. Draw a blank table and explain its Parts.

SECTION - C

Answer any Three questions. Each question carries 15 marks. **(3×15=45)**

8. Compute Fisher's price Index and show that it satisfies TRT and FRT.

Commodities	**2024**		**2025**	
	Price	**Quantity**	**Price**	**Quantity**
A	8	80	10	110
B	10	90	12	108
C	16	256	20	340
D	20	420	24	456
E	25	550	32	704

9. Find out Karl Pearson's co-efficient of Skewness from the following data.

Wages	No. of persons
10-20	12
20-30	18
30-40	35
40-50	42
50-60	50
60-70	45
70-80	20
80-90	8

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10. Calculate Mean, Median and Mode from the following data.

Mid value	Frequency
115	6
125	25
135	48
145	72
155	116
165	60
175	38
185	22
195	3

11. The following table gives the age distribution of boys and girls in a school. Find which age group is more variable in age.

Age	:	10	11	12	13	14	15
No. of Boys	:	11	14	7	10	8	5
No. of Girls	:	13	15	10	9	5	3

12. I. **Students details for the year 2021-22.**

Total strength - 1,100

I B.Com strength - 400

II B.Com strength - 300

III B.Com strength - 200

Balance - M.Com.

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II. Strength of students for the year 2022-23.

In the I, II, III year B.Com strength fell down by 10%. When compared to 2021-22 M.Com strength was 200.

III. Strength of students for the year 2023-24.

The strength of each class increased by 10% compared to 2022-23.

IV. Students strength for the year 2024-25

Total strength of the college was 1250.

I year B.Com strength was just double the strength of M.Com.

II year B.Com strength was 20 more than the M.Com.

III year B.Com strength was 330.

Tabulate the above information.

SECTION - D

Answer the following question which carries 5 marks. **(1×5=5)**

13. A rupee spent on "Khadi" is distributed as follows.

Farmer	-	20 paise
Spinner	-	30 paise
Weaver	-	25 paise
Dyer	-	10 paise
Agent	-	15 paise
Total	-	**100 paise**

Present the data in the form of Pie chart.