



US – 462

**II Semester B.Com. Examination, May 2017
(CBCS) (Freshers + Repeaters) (2014-15 and Onwards)
COMMERCE**

Paper – 2.6 : Quantitative Analysis for Business Decisions – I

Time : 3 Hours

Max. Marks : 70

Instruction : Answer should be written either completely in English or Kannada.

SECTION – A

Answer any five sub-questions from this Section. Each sub-question carries two marks. (5×2=10)

1. a) State any two limitations of statistics.
b) What is a histogram ?
c) Write any two objectives of tabulation.
d) What is meant by skewness ?
e) How do you calculate 'Mode' in case it is ill-defined ?
f) If variance = 36, $\sum x = 150$, $N = 10$, find c.v.
g) What do you mean by Time Reversal Test (TRT) ?

SECTION – B

Answer any three of the following. Each question carries six marks. (3×6=18)

2. Form a continuous frequency table. The marks scored by 50 students in an examination are given below, taking class interval of 10-20, 20-30 etc. Prepare frequency table and calculate Median :

48	30	31	39	18	54	33	10	29
62	38	41	43	51	37	71	62	34
55	29	43	64	43	52	64	44	
55	45	22	32	21	59	61	22	
74	19	46	73	33	85	85	51	
63	58	27	44	32	31	47	18	

P.T.O.



3. Compute Mean Deviation and its co-efficient about mean from the following data :

45 110 78 70 52 75 83 64 98

4. Calculate Arithmetic Mean.

Marks: 0 - 10 10 - 30 30 - 60 60 - 100

Students: 7 13 22 8

5. The Mean and Standard Deviation of two brands of bulbs are given below :

Brand	A	B
Mean life	1000 hrs	820 hrs
S.D.	100 hrs	65 hrs

Which category of bulb has more consistency in its life ?

6. Calculate Consumer Price Index from the following data :

Commodity	P ₀	P ₁	W
A	2	4	2
B	4	6	4
C	6	6	3
D	2	3	1
E	1	1	1

SECTION - C

Answer **any three** questions. **Each** question carries **fourteen** marks. (3×14=42)

7. Draw an ogives (lessthan and morethan), calculate and locate median from the following data :

Marks: 0 - 10 10 - 20 20 - 30 30 - 40 40 - 50 50 - 60 60 - 70

No. of Students: 3 8 12 20 24 12 7



8. Compute Quartile Deviation and its co-efficient from the following data :

X :	10 - 20	20 - 30	30 - 40	40 - 50	50 - 60	60 - 70	70 - 80
F :	12	25	55	120	60	30	13

9. You are given below the daily wages paid to workers in two factories X and Y.
Find:

- a) Which factory pays higher average wages ?
- b) Which factory pays more total wages ?
- c) In which factory are wages more variable ?

Daily wages ₹ : 50 - 60 60 - 70 70 - 80 80 - 90 90 - 100

No. of workers :

Factory X : 30 60 90 40 20

Factory Y : 40 70 100 20 10

10. Determine the Fisher's ideal index and show how it satisfies the TRT and FRT :

Items : M N O P Q

2015

Price ₹ : 20 50 40 60 10

Quantity : 8 10 5 20 6

2016

Price ₹ : 30 40 50 60 40

Quantity : 10 8 12 16 10

11. Calculate Median and Mode of the following data :

X : less than 10 20 30 40 50 60 70 80

F : 4 16 40 76 96 112 120 125



MS – 424

II Semester B.Com. Examination, May 2016

(CBCS) (Freshers + Repeaters) (2014-15 and Onwards)

COMMERCE

Paper – 2.6 : Quantitative Analysis for Business Decisions – I

Time : 3 Hours

Max. Marks : 70

Instruction: Answer should be written either completely in **English** or **Kannada**.

SECTION – A

Answer any five sub-questions. Each sub-question carries two marks. (5x2=10)

- What is Tabulation ?
- Mention any four types of statistical averages.
- List any four methods of studying variation.
- Mention two methods of measuring Consumer Price Index.
- What is meant by skewness ?
- If $\bar{X} = 12$, $Z = 13$ find Median.
- Mention any two functions of statistics.

SECTION – B

Answer any three of the following. Each question carries six marks. (3x6=18)

- Calculate Median from the following data :

Marks :	50	40	30	20	10
Frequency :	10	40	20	12	16

- Which company has greater variability of salary ?

	Company 'X'	Company 'Y'
No. of employees :	250	200
Standard Deviation :	500	600
Average monthly salary (₹) :	20,000	25,000

- Find \bar{X} if CV = 40%, S.D. = 12.
 - Find Co-efficient of Mean Deviation, if $\bar{X} = 120$ and M.D. = 12.

P.T.O.



5. From the following data compute Quartile Deviation (QD) and its co-efficient.

Marks : 10-20 20-30 30-40 40-50 50-60

No of students : 15 18 20 9 6

6. Calculate SD from the following :

Size : 25 35 45 55 65 75

Frequency : 28 38 50 45 40 20

SECTION - C

Answer any three questions. Each question carries fourteen marks. (3×14=42)

7. From the following compute coefficient of skewness.

Weekly wages : 40-60 60-80 80-100 100-120 120-140 140-160 160-180

No. of Workers : 6 10 18 30 15 12 7

8. Following are the marks obtained by two students Suraj and Dheeraj in ten tests of 100 marks each :

Tests	1	2	3	4	5	6	7	8	9	10
Marks obtained by Suraj	40	80	76	48	52	72	68	56	60	56
Marks obtained by Dheeraj	48	75	54	60	63	69	72	51	72	60

Find who is the better scorer and if consistency is the criterion for awarding prize who should get the prize ?

9. Calculate Mode and Median from the following data.

x : 0-10 10-20 20-30 30-50 50-70 70-100

f : 5 10 17 40 62 60

10. Compute Fisher's Ideal Index from the following and show how it satisfies TRT and FRT.

Commodities	2012		2013	
	Price	Quantity	Price	Quantity
M	8	80	10	110
N	10	90	12	108
O	16	256	20	340
P	20	420	24	456
Q	25	550	32	704

11. Draw less than and more than ogives for the following data.

Salary : 0-40 40-80 80-120 120-160 160-200 200-240 240-280

No. of employees : 9 36 91 147 87 22 8

Also locate the value of median and verify the answer.



SA – 750

II Semester B.Com. Examination, April/May 2015
(Semester Scheme) (Repeaters)
(2012-13 and Onwards)

COMMERCE

Paper – 2.6 : Quantitative Analysis for Business Decisions – I

Time : 3 Hours

Max. Marks : 100

Instruction : Answers should be written **completely** either in **English** or
in **Kannada**.

SECTION – A

Answer **any ten** sub-questions. **Each** question carries **two** marks : (10x2=20)

1. a) Mention any four functions of Statistics.
- b) What is meant by Tabulation ?
- c) Give any four general rules of construction of diagrams.
- d) What are the characteristics of a good measure of central tendency ?
- e) What is Ogives curves ?
- f) What is Mean Deviation ?
- g) State any four merits of Standard Deviation.
- h) How range is calculated ?
- i) Define Index Number.
- j) Mean and Variance of 100 items are found to be 40 and 121. What is its CV ?
- k) Find the value of mode, when mean = 20 and median = 22.
- l) Co-efficient of variation of a series is 58% and its S.D. is 21.2. Find mean.

P.T.O.



SECTION - B

Answer **any four** questions. Each question carries **eight** marks.

(4×8=32)

2. Present the following data by means of sub-divided Bar-diagram :

Year	Boys	Girls	Total
2007	1000	100	1100
2008	400	50	450
2009	300	30	330
2010	200	20	220

3. In 2012, out of total customers visiting a hotel, 750 were non-vegetarians and 1250 were vegetarians. In total there were 550 male non-vegetarian customers and 300 female vegetarian customers. In 2013, the total number of customers increased by 25%, while non-vegetarian customers increased by 20%. In all there were 1700 male customers among whom 650 were non-vegetarians in 2013. Tabulate the above information.
4. Following are the runs scored by two Batsmen A and B.

Batsman A	70	90	80	50	40	60	30
Batsman B	70	90	60	50	30	40	60

Find :

- 1) Who is a better run getter ?
- 2) Which Batsman is more consistent ?



5. Calculate MD from mean of the following data :

Marks	10	20	30	40	50	60	70
No. of Students	4	10	20	40	30	15	5

6. Calculate cost of living index numbers from the following data :

Items	Index	Weights
Food	323.79	50.0
Clothing	310.00	10.0
Lighting	220.00	8.0
Rent	150.00	12.0
Miscellaneous	300.00	20.0

SECTION - C

Answer **any three** questions. **Each** question carries **16** marks :

(3×16=48)

7. Compute the mean, median and mode from the following data :

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

8. Find out by calculating coefficient of variation which of the following 2 series is more variable :

Age		0 - 10	10 - 20	20 - 30	30 - 40	40 - 50	50 - 60	60 - 70
Population (In 000)	City-A	18	16	15	12	10	5	2
	City-B	10	12	14	32	29	11	3



9. Construct Fisher's Ideal Index from the following data :

Items	Base Year		Current Year	
	Quantity	Price Per kg (₹)	Quantity	Price Per kg (₹)
Wheat	20	12	20	14
Rice	22	16	24	18
Gram	20	32	18	36
Pulses	8	29	12	29
Ghee	1	62	2	70
Sugar	5	14	4	16

10. Find Karl Pearson's co-efficient of skewness for the following data :

Marks	:	0 - 10	10 - 20	20 - 30	30 - 40	40 - 50	50 - 60	60 - 70
No. of Students	:	5	12	16	25	10	8	4

ಕನ್ನಡ ಆವೃತ್ತಿ

ವಿಭಾಗ - ಎ

ಯಾವುದಾದರೂ ಹತ್ತು ಉಪ-ಪ್ರಶ್ನೆಗಳಿಗೆ ಉತ್ತರಿಸಿ. ಪ್ರತಿ ಪ್ರಶ್ನೆಗೆ ಎರಡು ಅಂಕಗಳು :

(10×2=20)

1. a) ಸಂಖ್ಯಾಶಾಸ್ತ್ರದ ಯಾವುದಾದರೂ ನಾಲ್ಕು ಕಾರ್ಯಗಳನ್ನು ತಿಳಿಸಿ.
- b) ಪಟ್ಟಿಕರಣ ಎಂದರೇನು ?
- c) ಚಿತ್ರ ರಚಿಸಲು ಯಾವುದಾದರೂ ನಾಲ್ಕು ಸಾಮಾನ್ಯ ನಿಯಮಗಳನ್ನು ನೀಡಿ.
- d) ಒಂದು ಒಳ್ಳೆಯ ಸರಾಸರಿಯ ಕೇಂದ್ರ ಪ್ರವೃತ್ತಿಯ ಲಕ್ಷಣಗಳು ಯಾವುವು ?
- e) ಒಜೈವ್ ವಕ್ರರೇಖೆಗಳು ಎಂದರೇನು ?
- f) ಸರಾಸರಿ ವಿಚಲತೆ ಎಂದರೇನು ?
- g) ನಿರ್ದಿಷ್ಟ ಚದುರುವಿಕೆಯ ಯಾವುದಾದರೂ ನಾಲ್ಕು ಉಪಯೋಗಗಳನ್ನು ತಿಳಿಸಿ.

