M 7815

Reg. No. : .....

Name : .....

I Semester B.Com. Degree (CCSS – Regular) Examination, November 2014
(2014 Admn.)
1C01 COM : Complementary Course : BUSINESS STATISTICS

Time: 3 Hours Max. Marks : 40

PART – A

Answer **all** questions. **Each** carries ½ mark.

1. _____ refers to the variability in the size of items.
2. Those methods which are used to test certain hypotheses regarding characteristic of population is known as _____
3. The investigation of relationship between rainfall and the yield of a crop is an example for _____
4. Arithmetic mean in discrete series under direct method = _____ **(4×½=2)**

PART – B

Answer **any four** questions. **Each** carries **1** mark.

5. List out three kinds of lies.
6. What is meant by units of measurement ?
7. What are the features of an average ?
8. Define statistical series.
9. Find the Arithmetic mean of the following values : 45, 48, 50, 52, 60.
10. Distinguish between relative measures and absolute measures of dispersion. **(4×1=4)**

P.T.O.

PART – C

Answer **any six** questions. (**Not** exceeding **one** page) **Each** carries **3** marks.

11. Discuss importance of statistics in modern business.

12. What are the objectives of sample investigation ?

13. Define Average. State its functions.

14. Explain merits and demerits of average deviation.

15. A welfare organisation introduced an education scholarship scheme for the school going children of a backward village. The rates of scholarship were fixed as given the following table :

Age Group (in completed year)	Amount of scholarship per month (in Rs.)
5 – 7	30
8 – 10	40
11 – 13	50
14 – 16	60
17 – 19	70

The ages of 30 school going children were noted as 11, 8, 10, 5, 7, 12, 7, 17, 5, 13, 9, 8, 10, 15, 7, 12, 6, 7, 8, 11, 14, 18, 6, 13, 9, 10, 6, 15, 13, 5 years respectively, calculate mean and S.D. of monthly scholarship.

16. Given below are the prices of 5 items in 1985 and 1990. Compute the simple price index number of 1990 taking 1985 as base year. Use (a) arithmetic mean and (b) Geometric mean.

Items	Price in 1985 (Rs./Unit)	Price in 1990 (Rs./Unit)
1	15	20
2	8	7
3	200	300
4	60	110
5	100	130

17. Expenditure of a family on 3 items are in the ratio 2 : 5 : 3. The prices of these commodities rises by 30 per cent, 20 per cent, 40 per cent respectively. By what per cent has total expenditure increased ?

18. The mean age of a group of 100 persons (grouped in intervals 10 –, 12, – etc.) was found to be 32.02. Later it was discovered that age 57 was misread on 27.

    a) Find the corrected mean.

    b) What do you mean by Arithmetic mean of Grouped Data ? **(6×3=18)**

PART – D

Answer **any two** questions. **Each** carries **8** marks.

19. Explain statistical methods.

20. Construct Fisher's indices from the following data :

Item	2010		2011	
	Price (Rs.)	Expenditure (Rs.)	Price (Rs.)	Expenditure (Rs.)
1	10	60	15	75
2	12	120	15	150
3	18	90	27	81
4	8	40	12	48

21. Find the quartile deviation, percentile deviation and their coefficients from the following data :

Age (in years) :	15	16	17	18	19	20	21
No. of Students :	4	6	10	15	12	9	4

(2×8=16)