



K15U 0554

Reg. No. : .....

Name : .....

I Semester B.Com. Degree (CCSS – Reg./Supple./Improv.)

Examination, November 2015

(2014 Admn. Onwards)

Complementary Course

1C01 COM : BUSINESS STATISTICS

Time : 3 Hours

Max. Marks : 40

PART – A

Answer **all** questions. **Each** carries  $\frac{1}{2}$  mark.

1. The inequalities of income in various countries may be computed for the sake of their \_\_\_\_\_
2. Any set of \_\_\_\_\_ figures cannot be regarded as statistics.
3. What is quadratic mean ?
4. Typist A can type a letter in five minutes, B in ten minutes and C in fifteen minutes. What is the average number of letters typed per hour per typist ?

(4 ×  $\frac{1}{2}$  = 2)

PART – B

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

5. List out different methods of collection of primary data.
6. What is Chebyshev's Theorem ?
7. What are the main uses of index numbers ?
8. What do you mean by applied statistics ?

P.T.O.



9. The income of 12 workers on a particular day was recorded as given below. Represent the data by a line diagram :

**S. No. of workers :** 1 2 3 4 5 6 7 8 9 10 11 12

**Income (in Rs.) :** 25 35 30 45 50 55 40 50 60 55 40 35

10. Construct an index number for 1989 taking 1981 as base for the following data, by using :

- a) Weighted arithmetic mean of price relatives :

Commodities	Price in 1981	Price in 1989	Weights
A	60	100	30
B	20	20	20
C	40	60	24
D	100	120	30
E	120	80	10

(4×1=4)

### PART – C

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

- Discuss the characteristics of statistical data.
- What are the limitations of statistics?
- List out the main parts of a Table.
- Define average. What are its characteristics?
- In a trip organised by a college there were 80 persons, each of whom paid Rs. 15.15 on an average. There were 60 students each of whom paid Rs. 16. Members of teaching staff were charged at a higher rate. The number of servants was six they were not charged anything (all males). The number of ladies was 20 percent of the total and there was only one lady staff member. Tabulate this information.



16. Admission during 1971 to 'Vidya Mandir' and 'Children's Home increased by 20% and 40% respectively over there during 1970. If the admission in 1970 were 800 and 200 respectively find the mean increase in the admission of the two schools.
17. Find out the median and mode from the following table :

No. of days absent	No. of students	No. of days absent	No. of students
Less than 5	29	Less than 30	644
Less than 10	244	Less than 35	650
Less than 15	465	Less than 40	653
Less than 20	582	Less than 45	655
Less than 25	635		

18. Karl Pearson's coefficient of skewness of a distribution is + 0.32. Its standard deviation is 6.5 and mean is 29.6. Find the mode and median of the distribution.

(6×3=18)

PART – D

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

19. What is skewness ? Explain measures.
20. By using Fisher's method construct index numbers of prices from the following data :

Commodity	1960		1970	
	Price	Qty.	Price	Qty.
A	4	50	10	40
B	3	10	9	2
C	2	5	4	2



21. The price quotations of four different commodities for 1976 and 1977 are given below. Calculate the index number for 1977 with 1976 as base by using :

- 1) Simple average of price relatives.
- 2) Weighted average of price relatives.
- 3) Explain system of weighting.

Commodity	Unit	Weight	Price	
			1976	1977
A	kg	5	2.00	4.50
B	quintal	7	2.50	3.20
C	dozen	6	3.00	4.50
D	kg	2	1.00	1.80

(2×8=16)

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