



END OF SEMESTER EXAMINATIONS, APRIL / MAY - 2019
STATISTICS AND ITS APPLICATIONS
SUBJECT CODE: 08UBIT01

MAJOR : B.Sc.(IT)
 TIME : 3 HOURS

SEMESTER : III
 MAX.MARKS : 75

SECTION – A (5 X 2 = 10)

Answer ALL Questions:

1. What is Statistics?
2. What is meant by positive correlation.
3. Define index numbers.
4. What is Trend?
5. What are the methods of entering data in SPSS for windows?

SECTION – B (5 X 4 = 20)

Answer ALL Questions:

6. a) Write the general rules for Tabulation.
 (OR)
 b) Calculate mean deviation from mean for the following data.

Class Interval :	2-4	4-6	6-8	8-10
Frequency :	3	4	2	1

7. a) Write any four properties of correlation.
 (OR)
 b) The ranking of 10 students in two subjects A and B are as follows:

A	6	5	3	10	2	4	9	7	8	1
B	3	8	4	9	1	6	10	7	5	2

Calculate rank correlation.

8. a) What are the uses of Index Numbers?
 (OR)
 b) Explain the construction of Index Numbers by Family Budget method.
9. a) What is Semi-Average method? What are its merits and demerits in time series?
 (OR)
 b) Calculate three yearly moving Average of the following data:

Year	:1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
No. of Students :	15	18	17	20	23	25	29	33	36	40

10. a) Explain Graphical representation of data using SPSS.
 (OR)
 b) Write the procedure for Bivariate correlation using SPSS.

SECTION – C (3 X 15 = 45)**Answer ANY THREE Questions:**

11. Calculate mean, median and mode for the following data:

Class Interval	:	10-20	10-30	10-40	10-50	10-60	10-70	10-80	10-90
Frequency	:	4	16	56	97	124	137	146	150

12. Determine the two regression lines:

X	6	2	10	4	8
Y	9	11	5	8	7

Also estimate Y when X = 100.

13. Calculate price index numbers for 2007 with 2006 as base by (i) Laspeyre's method (ii) Paasche's method (iii) Marshall Edge worth method and (iv) Fisher's Ideal method from the following data.

Commodity	2006		2007	
	Price	Quantity	Price	Quantity
A	20	8	40	6
B	50	10	60	5
C	40	15	50	15
D	20	20	20	25

14. Find the seasonal variation by ratio to trend method from the data given below:

Year	Quarterly Production			
	I	II	III	IV
2001	86	95	96	99
2002	96	102	104	110
2003	103	108	106	107

15. Briefly explain the procedure of processing Chi-square Analysis.
