R-16

Code: 4202/19

Faculty of Commerce

B.Com. II-Year, CBCS - IV Semester Examinations, May/June 2019

(For All Streams of B.Com)

PAPER: BUSINESS STATISTICS-II

Time: 3 Hours

Max Marks: 80

Section-A

I. Answer any FIVE of the following questions. (5x4=20 Marks)

1. Linear Regression
2. Base Shifting and Slicing
3. Components of Time Series
4. Baye's Theorem
5. Importance of Poisson Distribution
6. Calculate Price Index Number in Laspeyre's and Paasche methods
   Σp_1q_0= 1900, Σp_0q_0=1360, Σp_1q_1=1880, Σp_0q_1=1344
7. Given the following Time Series data, calculate 3 yearly moving averages

Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Value	260	105	124	183	90	181	295	210	150	270	120

8. From a bag containing 5 white, 8 black and 17 red balls, a ball is drawn at random. What is the probability that it is white and it is not white?

Section-B

II. Answer the following questions. (5x12=60 Marks)

9. (a) Fit the regression equation of Y on X and hence predict Y, if X=20 from the following bivariate data

X	2	6	4	3	2	2	8	4
Y	7	2	1	1	2	3	2	6

(OR)

(b) Calculate two regression equations from the following data.

X	40	38	35	42	30
Y	30	35	40	36	29

10.(a) Explain the methods of constructing Index Numbers.

(OR)

(b) Test whether the following data satisfy the Time Reversal test in case of Fisher's Ideal Index formula.

commodity	P0	Q0	P1	Q1
A	6	50	10	56
B	2	100	2	120
C	4	60	6	60
D	10	30	12	24
E	8	40	12	36

11.(a) Compute the trend values on the method of Least Square from the data given below.

Year	2007	2008	2009	2010	2011	2012	2013
Production (in tons)	70	75	90	91	95	98	100

(OR)

(b) What are the Uses and Limitations of Time Series and explain?

12.(a) A card is drawn at random from a well shuffled pack of 52 cards. What is the probability of getting

i) A black queen?

ii) A queen, A king, or an ace of any suit?

iii) A red card?

(OR)

(b) Compute $A \cup (B \cup C), A \cap (B \cup C)$, when $A=\{2,3,7,8,10\}$, $B=\{2,8,11,12\}$, $C=\{3,4,6,10\}$

13.(a) What is Theoretical Distribution? Explain about various theoretical distributions.

(OR)

(b) Fit a Binomial Distribution to the following data.

X	0	1	2	3	4
Y	28	62	46	10	4

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