

15U548

(Pages: 2)

Name:.....

Reg. No.....

FIFTH SEMESTER UG DEGREE EXAMINATION, OCTOBER 2017

(CUCBCSS-UG)

CC15U ST5 D01-ECONOMIC STATISTICS

(Statistics- Open Course)

(2015- Admission Regular)

Time: Two Hours

Maximum: 40 Marks

Use of Calculator is permitted.

**Section A**

Answer *all* the questions. Each question carries 1 mark.

1. In index numbers, price relative of a commodity is the ratio of current year price to -----
2. The weights used in Laspayre's index number is -----
3. The geometric mean of Laspayre's and Paasch'e Index number is known as ----- index number
4. The long term changes in a time series are termed as -----
5. The additive model of a time series is expressed as -----

**(5x1=5 marks)**

**Section B**

Answer all the questions, Each question carries 2 marks

6. What are linear and non linear trend.
7. Briefly explain cyclic variations in a time series
8. Explain the method of least squares for setting trend in a time series data.
9. Explain any two uses of index numbers
10. Why Fisher's Index number is called Ideal?

**(5x2= 10 marks)**

**Section C**

Answer any *three* questions. Each question carries 5 marks

11. Explain the ratio to trend method of computing the indices of seasonal variation.
12. Index numbers are economic barometers-Explain.
13. How do you construct Consumer Price Index Numbers?
14. What are the various components of a time series ?
15. Using semi average method identify the trend in the following data

<b>Year</b>	2001	2002	2003	2004	2005	2006	2007	2008	2009
<b>Sales</b>	335	367	350	365	354	370	378	382	374

(3x5=15marks)

### Section D

Answer any **one** of the questions. Each question carries 10 marks

16. a) Explain the limitations of index numbers and the problems in the construction of index numbers

b) Find out four year moving average for the following data.

<b>Year</b>	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
<b>Sales</b>	80	81	85	79	86	94	90	108	120	121	148

17. From the following data find i) Laspayre's Index number ii) Paasche's Index number iii) Fisher's Index Number and show that the Fisher's Index Number satisfies Time and Factor Reversal tests are satisfied by it.

Commodity	Base year		Current year	
	Price	Expenditure	Price	Expenditure
A	8	80	10	120
B	10	120	12	96
C	5	40	5	50
D	4	56	3	60
E	20	100	25	150

18.

Fit a straight line trend by the method of least squares from the following data and estimate the value of 1999.

<b>Year</b>	1990	1991	1992	1993	1994	1995	1996	1997
<b>Values</b>	380	400	650	720	690	600	870	930

(1x10=10marks)

\*\*\*\*\*