

17U598

(Pages: 2)

Name:

Reg. No.....

FIFTH SEMESTER UG DEGREE EXAMINATION, NOVEMBER 2019

(Regular/Supplementary/Improvement)

(CUCBCSS-UG)

CC15U ST5 D01 - ECONOMIC STATISTICS

(Statistics - Open Course)

(2015 Admission onwards)

Time: Two Hours

Maximum:40 Marks

Use of calculators is permitted

Section A

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

1. The fluctuations in the sales of confectionaries during Diwali days is an example of -
----- type of component of a time series.
2. For a set of seven values 24, 33, 30, 36 40, 42 and 44 the five yearly moving averages are ..., ...,
3. ----- index is known as the 'ideal' formula for constructing index numbers.
4. The price of an item in 2010 and 2001 are Rs.175 and Rs. 180 respectively, then its price relative in percentage is -----
5. Theoretically the best average in construction of index numbers is -----

(5 x 1 = 5 Marks)

Section B

Answer *all* questions. Each question carries 2marks.

6. Explain briefly with an example of seasonal variations in business data.
7. What is the principle of Least squares?
8. What are index numbers? Point out their uses?
9. Distinguish weighted index numbers and unweighted index numbers.
10. Define Kelly's Index number.

(5 x 2 = 10 Marks)

Section C

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

11. Using semi average method identify the trend from the following data.

Year	2006	2007	2008	2009	2010	2011	2012	2013	2014
Values	56	50	53	60	63	67	68	62	70

12. Explain briefly the method of moving averages for calculating the trend.

13. What are the advantages and disadvantages of the method of least squares?
14. What are the properties of an ideal index number? Explain each.
15. From the following data compute index number for the year 2011 using arithmetic mean of price relatives method.

Commodity	A	B	C	D	E	F	G
Prices in 2010	56	53	63	70	60	76	61
Prices in 2011	60	50	70	69	68	80	71

(3 x 5 = 15 Marks)

Section D

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

16. The following table gives the worked production of uranium. Fit a straight line trend by the method of least squares and compute the trend values and estimate the production for the year 2016:

Year	2008	2009	2010	2011	2012	2013	2014
Production (in lakh ounces)	12.7	10.1	13.0	12.6	13.2	14.2	13.7

17. a) Explain four components of a time series
- b) From the following data compute Fisher's Ideal index number

Commodities	2010		2012	
	Price	Quantity	Price	Quantity
A	24	3	30	6
B	92	2	96	3
C	50	5	48	4
D	42	2	50	3
E	65	4	73	5
F	24	4	29	3

18. (a) Examine whether Fishers price index number satisfies time and factor reversal test.
- (b) Compute the trend values by finding four- yearly moving averages for the following time series.

Year	1988	1989	1990	1991	1992	1993	1994	1995	1996
Value	103	104	107	101	102	104	105	99	100

(1 x 10 = 10 Marks)
