

F-56/2110

10316/NJ

Applied Statistics
Paper – CSM-233
Semester -III
(Syll-Dec-2019)

Note: Students need to attempt any four questions in all. All questions will carry equal marks.

Time: 02:00 hours

Marks: 30

Section – A

I What are the different methods of determining trend? Describe any one in detail.

II Calculate the seasonal indices by using Link Relative method in the case of the following quarterly data in certain units assuming no trend in the data:

Year	Quarter			
	I	II	III	IV
1980	39	21	52	81
1981	45	23	63	76
1982	44	26	69	75
1983	53	26	64	84

III Discuss cyclic and random components of time series.

IV What are various mathematical models for time series? Discuss.

Section – B

V Define Fisher's ideal index number. Show that it satisfies both time reversal and factor reversal tests.

VI Define index number. Discuss various problems in the construction of index numbers.

VII Discuss various types of index numbers .

VIII Write note on Engel curve. Also discuss Engel's law.

Section – C

IX (a) What do you understand by price elasticity of demand? ,Discuss.

(b) Explain the uses of index numbers.