

B.Sc Semester-4 Examination**CC-205****Statistics****April-2024****Time : 2-30 Hours]****[Max. Marks : 70**

Q.1 (A) Explain the seasonal variation in time series. (07)

(B) Explain moving average method of determining trend. (07)

OR

(A) What is trend in time series? Explain the least square method for measurement of trend in time series? (07)

(B) What is time series? Explain important and advantage of time series data. (07)

Q.2 (A) Define price index number and quantity index number with example with example. Also gives the merits and demerits of index number. (07)

(B) Discuss construction of cost-of-living index number. State its uses. (07)

OR

(A) what is index number? Give its uses and limitations. (07)

(B) What is cost of living index number? Explain types of cost living index. (07)

Q.3 (A) Define demographic data and explain the method of collection the demographical data. (07)

(B) What is vital statistics data? Explain its merits and demerits. (07)

OR

(A) What is Death Rate? Explain different types of death rates. (07)

(B) What is life table? Explain the uses, merits and demerits of life table. (07)

Q.4 (A) Explain the Gross and Net Reproduction Rates. Interpret the Net Reproduction Rate. (07)

(B) Explain components of time series in detail. Explain any two with merit and demerit. (07)

OR

(A) Write a detail note on fertility rate (CBR, GFR, SFR and TFR). (07)

(B) Discuss weighted and unweighted index numbers in detail. (07)

Q.5 Answer the following Question. (Any Seven). (14)

1. What is link relative?
2. What is unit test?
3. Define Seasonal Variation?
4. Define value index.
5. What do you mean by $NRR = 1$?
6. What is P_x in life table?
7. What is base and current year in time series?
8. Define factor reversal test.
9. Define circular test.
10. Define unweighted index numbers.
11. Define Marshal-Edgeworth index number.
12. What is different between the seasonal and Cyclic variation?
13. What is full form of TFR, NRR, GFR & IMR?
14. Define e^0_x in life table.
