

**Faculty of Science**  
**B.Sc (Statistics) III-Year, CBCS-VI Semester**  
**Regular Examinations –June/July, 2022**  
**PAPER-VII: Applied Statistics-II**

Time: 3 Hours

Max Marks: 80

**Section –A**I. Answer any *eight* of the following (8X4=32 Marks)

1. Define ANOVA and state Cochran's theorem.
2. Find the expected sum of squares due to error in two-way classification.
3. Explain the estimation of parameters in one-way classification.
4. What are the principles of experimental design? Explain.
5. Explain missing plot technique in CRD.
6. Discuss the layout of L.S.D.
7. Explain registration Method and Census Method.
8. Explain the measurement of population growth.
9. What is abridged life-table? Discuss its importance in vital statistics.
10. Briefly explain Yield Statistics.
11. Index numbers are barometers. Explain
12. Explain base shifting, deflecting of an index number.

**Section –B**

II. Answer the following questions. (4X12=48Marks)

13. (a) Explain in detail the statistical analysis of variance of two-way classification.  
(OR)  
(b) Why we need for ANOVA and explain the assumptions of ANOVA.
14. (a) Explain Statistical Analysis of CRD.  
(OR)  
(b) Explain efficiency of LSD over RBD when rows are taken as blocks.
15. (a) Explain in detail different fertility rates.  
(OR)  
(b) Define Life table and explain the various columns of life table.
16. (a) Explain what are the different methods of measuring National Income.  
(OR)  
(b) Define Index Numbers and explain what the problems are involved in the construction of Index Numbers.

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