NP – 826

33

VI Semester B.Sc. Examination, June/July 2025
(NEP) (F+R)
STATISTICS
Applied Statistics

Time : 2½ Hours Max. Marks : 60

Instructions : 1) *Scientific calculators are* ***permitted****.*
2) *Statistical tables and graphs are provided on* ***request****.*

PART – A

Answer **any four** questions (**2** marks **each**). **(2×4=8)**

1. Define operation research.
2. Define feasible solution.
3. What do you mean by game theory ?
4. What is irregular variation ?
5. Define index numbers.
6. What is expectation of life ?

PART – B

Answer **any four** questions (**5** marks **each**). **(5×4=20)**

7. What is a linear programming problem ? Express the mathematical form of general LPP.
8. Explain the North-West Corner rule.
9. Explain the graphical method of solving a (m × 2) game.
10. Briefly explain the method of finding trend by fitting a straight line.
11. What is consumer price index number ? Mention its important uses.
12. Define a life table. Explain the application and limitation of it.

P.T.O.

PART – C

Answer **any four** questions (**8** marks **each**). **(8×4=32)**

13. Briefly explain the application, scope and importance of operation research.

14. What is an assignment problem ? Explain the Hungarian's method of solving an AP.

15. Explain :
    i) Two person zero sum game
    ii) Strategy
    iii) Pay-off.

16. Explain the problem of the construction of index numbers with special reference to
    i) Selection of base period
    ii) Selection of commodities
    iii) Selection of weights
    iv) Purpose of index number.

17. a) What do you mean by trend ? Describe the method of exponential trend by the method of least squares.

    b) What do you understand by seasonal variation ? **(5+3)**

18. a) Define :

    i) CDR ii) ASDR iii) IMR iv) MMR

    b) Write a note on observational studies. **(4+4)**
