

2021

M.Sc. Information Technology
Third Semester

MS-14: System Approaches to Management and Optimization Techniques

Time allowed: 3 Hours

Max. Marks: 80

NOTE: Attempt five questions in all, including Question No. IX (Unit-V) which is compulsory and selecting one question each from Unit I – IV.

x-x-x

UNIT – I

- I. Distinguish between:-
 - a) Decision Support Systems and Knowledge Based Systems
 - b) Marketing Research and Marketing Intelligence (2x8)
- II. Discuss the characteristics, subsystems and general processes of Accounting Information system.

UNIT – II

- III. Throw light on the Financial Information system w.r.t. the following:-
 - a) Model
 - b) Subsystems including forecasting funds management and control (2x8)
- IV. What is meant by Human Resource intelligence? Also discuss about the HRIS database and HRIS output. (16)

UNIT – III

- V. Discuss at length the Origin and Development of Operations Research. Also dwell upon its role in Decision Making. (16)
- VI. How is dual Simplex Method different from Revised Simplex Method? Explain. (16)

UNIT – IV

- VII. Explain the Branch and Bound Techniques for solving Linear Programming Problems. (16)
- VIII. What is Probabilistic and Deterministic Dynamic Programming? Discuss. (16)

P.T.O.

(2)

UNIT – V

IX. Attempt the following:-

- a) Enlist five major features of Package Tally.
- b) What are the limitations of Operations Research..
- c) What is the role of Quality and Cost Subsystems in Manufacturing sub systems.
- d) Define Sensitivity analysis. (4x4)

x-x-x