

(205CS17)

M.Sc DEGREE EXAMINATION, APRIL 2018.

SECOND SEMESTER

Branch – Computer Science

OPERATIONS RESEARCH

(New syllabus for batch 2017)

Time : 3 Hours

Max. Marks : 70

PART – A

Answer any FOUR questions from part -A. Each question carries 5 marks.

(Marks : 4×5 marks = 20 marks)

1. Write the steps involved in formulation of Research?
2. Write about dual simple method?
3. Write about Northwest corner rules?
4. What is Hungarian method for optimal solution?
5. Write about group replacement policy?
6. Define unconstrained optimization? List its applications.
7. List dominance principles?
8. What is Inventory cost? List its applications?

PART – B

Answer ALL questions from part -B. Each question carries 12.5 marks.

(Marks : 4×12.5 marks = 50 marks)

UNIT I

9. (a) Explain minimization case -Big M method.

Or

- (b) Explain Dual Simplex problem in detail?

UNIT II

10. (a) What is transportation problem? Explain Least Cost method or the Matrix Minima Method (MMM) in detail?

Or

- (b) Write a short note on sequencing models?

[P.T.O]

UNIT III

11. (a) Write short notes on Replacement models?

Or

(b) What is Non-Linear Programming? Explain problem constrained and unconstrained optimization?

UNIT IV

12. (a) Briefly explain Game theory?

Or

(b) Explain deterministic inventory models?
