

UNIVERSITY OF MADRAS
B.B.A. DEGREE COURSE IN BUSINESS ADMINISTRATION
SYLLABUS WITH EFFECT FROM 2020-2021

BBA-DSA04

ALLIED-IV: OPERATIONS RESEARCH

CREDITS:5

IV SEM/II YEAR

Learning Objectives :

1. To familiarise about operations research and its significance in business
2. To know and use the various decision-making tools used in business.

UNIT – I

Introduction to OR – Meaning and scope – Characteristics – models in OR.LPP- Formulation graphical method – Simplex method- Big M Method application in Business – merits and Demerits.

UNIT – II

Transportation model – basic feasible solution – formulation, solving a TP. Assignment models – formulation – solution.

UNIT – III

Network analysis – work break down analysis – construction – numbering of event. Time Calculation – critical path, slack, float – application.

UNIT – IV

Queuing models- elements of queuing system – characteristics of queuing model.

UNIT – V

Decision theory – statement of Baye’s theorem application. Probability – decision trees. Game theory meaning and characteristics – saddle point – Dominance property.

RECOMMENDED TEXTS / REFERANCE BOOKS

1. P.R. Vittal&V.Malini, Operative Research – Margham Publications – Chennai – 17.
2. P.K.Gupta& Man mohan, Problems in Operations Research – Sultan Chand &sons – NewDelhi
3. V.K.Kapoor, Introduction to operational Research – Sultan chand& sons – New Delhi
4. Hamdy A Taha, Operation Research – An Introduction prentice Hall of India- NewDelhi