Savitribai Phule Pune University

(Formerly University of Pune)

Styaniketan's

Adv. M. N. Deshmukh Arts, Science and Commerce College Rajur

B.Sc. in Mathematics

(Faculty of Science & Technology)

Course Outcomes

T.Y. B. Sc. Mathematics

(As Per National Education Policy-2020)

Course Outcomes

Semester-V

MTS-341-MN : A) Integral Transform

Course type: Minor (Theory) No. of Credits: 2

Course Outcomes

1. Remember: Recall definitions and properties of Laplace transforms, Fourier series, and Fourier transforms, including standard formulas and theorems.

2. Understand: Explain concepts of piecewise continuous functions, exponential order, and Dirichlet conditions, and apply them to Laplace and Fourier transforms.

3. Apply: Apply Laplace transforms to solve linear differential equations, and use Fourier series to represent periodic functions.

4. Analyze: Analyze properties of Laplace and Fourier transforms, including shifting theorems and convergence of Fourier series.

5. Evaluate: Evaluate Laplace transforms of derivatives, inverse Laplace transforms, and Fourier transforms of standard functions.

6. Create: Apply Laplace and Fourier transforms to solve real-world problems, including initial value problems and periodic function representations.

MTS-341 MN : B) Operations Research

Course type: Minor (Theory) No. of Credits: 2

Course Outcomes

1. Remember: Recall concepts of linear programming, transportation, and assignment problems, including methods like Simplex, Big-M, and Hungarian.

2. Understand: Explain formulations and mathematical models of linear programming, transportation, and assignment problems.

3. Apply: Apply methods like Simplex, Big−M, North West Corner Rule, VAM, MODI, and Hungarian to solve linear programming, transportation, and assignment problems.

4. Analyze: Analyze types of solutions and optimality of linear programming, transportation, and assignment problems.

5. Evaluate: Evaluate solutions to linear programming, transportation, and assignment problems using Python programming.

6. Create: Formulate and solve real-world problems using linear programming, transportation, and assignment models, and implement solutions using Python.