Course outcome:

1. Students will be able to understand the importance of synthetic fibres in textile industry.
2. They will know the process of manufacture of the synthetic fibres.
3. They will be able to find the structure property relation of synthetic fibres

UNIT - I

Introduction to man made fibers – Distinction between Natural and Man Made Fibres for Production, Properties & End Uses - important operations in the production of synthetic fibres – fibres varying substrate and geometry – Principles of fibre forming polymers, parameters influencing the quality – glass transition temperature – Melting temperature-Principles of spinning of man made fibres

UNIT - II


UNIT – III


Surface modification of polyester cause and effect – recent developments in polyesters like CDP, EDP, CFDP, APP etc.

UNIT - IV

Introduction to solution spinning – salient features of solution spinning – principles of wet and dry spinning-Rheology of Wet & Dry Spinning – comparison – a brief note on dry jet wet spinning.

Manufacture of Rayons - viscose, acetate and cuprammonium – physical and chemical properties- A brief note on Recent developments in viscose manufacturing (Lyocell fibre). Stretching and

UNIT - V


TEXT BOOKS:


REFERENCE BOOKS: