PFT7J001   **Smart Textiles & Functional Garments**   **3-0-0**

MODULE –I
Concept of Smart Textiles. Detailed study (objectives, properties, fibres used & end uses) of the Smart Garments likeChameleonic Garments, Garment made from Shape memory and Phase Change material, Self Cleaning Fabrics, Wearable Electronics (Garments with sensors andcomputing devices).

MODULE –II
Study (objectives, properties, fibres used & end uses) of functional fabrics like thermal.protective fabrics,water proof & water breathable fabrics, high tenacity fabrics etc.Flame retardant & Fire fighters clothing.

MODULE –III
 High performance Sportswear. Radiation Protective clothing from uv, x-ray, alpha ray, beta ray, gamma ray. Bullet proof and ballistic protective clothing. Defence clothing,Space suit. Garment for medical & hospital use, Antimicrobial textile wear, Pathogen resistantsurgical gown,Clothing for protection against chemicals &nuclear

Reference Books:

1. Industrial Textile by SabitAdanur