

# GUJARAT TECHNOLOGICAL UNIVERSITY

## B.E. SEMESTER : VIII

### TEXTILE TECHNOLOGY

Subject Name: **TECHNICAL TEXTILE-II**

<b>Sr. No.</b>	<b>Course Contents</b>	<b>Total Hrs</b>
<b>1.</b>	Application of textile in medical. Non implantable materials, implantable materials, extracorporeal devices, health care / hygiene products. Medical Textiles: Introduction, Classification, Recent developments in fibres used for medical textiles, e.g. 3-layer silicon laminated fabric, self-adherent dressing, Microclimate improvement in wound dressings. Activated carbon cloth, Blankets	<b>08</b>
<b>2.</b>	Geotextiles: Types and application of geosynthetics. Functions and application areas of geotextiles. Fibres and fabric selection criteria for geotextile applications. Mechanics of reinforcement, filtration and drainage by geotextiles.	<b>08</b>
<b>3.</b>	Application of textile in transportation. Use in cars and other road vehicles, textiles in air craft.	<b>08</b>
<b>4.</b>	Conveyor and Power transmission belts: Different types of Conveyor belts and their properties, Different types of Power transmission belts and their constructional features. Other Industrial Textiles: Shoe liners, Electrical cables, outdoor fabrics, Fibre reinforced Plastics.	<b>08</b>
<b>5.</b>	Protective textiles. Fire proof jacket, bullet proof jacket and application in defense.	<b>08</b>
<b>6.</b>	Emerging trends in technical textiles nanotechnology.	<b>05</b>

#### Text Books:

<b>Sr. No.</b>	<b>Title</b>	<b>Author</b>
1.	Handbook of Technical Textiles	Horrocks & Anand

#### References:

<b>Sr. No.</b>	<b>Title</b>	<b>Author</b>
1.	Nonwovens	Giovanni Tanchis
2.	Automotive Textiles', Text.Prog, Vol. 29, No.1/2	Mukhopadhyay, S.K. & Partridge J.F,
3.	BTRA, Collection of papers on Defense Textiles	Bandopadhyay B.N. & Bhar N.M
4.	Weelington Sears Handbook of Industrial Textiles	S. Adanur