Reg. No. : | | | | | | | | | | | |

J 3429

B.E./B.Tech. DEGREE EXAMINATION, MAY/JUNE 2009.

Sixth Semester

Textile Technology

TT 1001 — TEXTURED YARN TECHNOLOGY

(Regulation 2004)

Time : Three hours Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. Define the term " Texturisation".

2. Mention the need for bulking of Synthetic filaments.

3. Enlist the various factors involved in Heat Setting Process.

4. What are the merits and demerits of Thermo Mechanical Texturing?

5. What are "UDY" and "POY "?

6. Enumerate the various twisting devices used in false twist texturing process.

7. Enlist the types of yarn produced in Air jet texturing.

8. State the process parameters of Air jet textured yarn that influence the properties of textured yarn.

9. State the limitations of Edge Crimping Method.

10. What is Bio–Component filament texturing?

PART B — (5 × 16 = 80 marks)

11. (a) Classify the textured yarns. State the properties and applications of different texturing methods.

Or

(b) Discuss in detail the various development in High Speed Spinning of POY.

12. (a) Explain in detail the effect of fiber morphology and mechanical properties on heat setting. Discuss in detail the different types of heat setting.

Or

(b) With neat sketch explain the working principle and application of "Helanca Process" and also state the limitations of the same.

13. (a) With neat sketch explain the working principle and application of false twist texturing machine. And also state the limitations of the same.

Or

(b) Write detailed notes on :

(i) Testing of textured yarns (8)

(ii) Simultaneous and sequentional draw texturing. (8)

14. (a) Explain in detail the working principle and application of air jet texturing machines.

Or

(b) Discuss the evaluation of air jet textured yarn vis–a–vis false twist textured yarn.

15. (a) Discuss in detail with neat sketches the working principle, application and limitations of the Knit–de–Knit texturing.

Or

(b) Write detailed notes on :

(i) Stuffer Box Texturing. (6)

(ii) Chemo Mechanical Texturing. (5)

(iii) Thermo–Mechanical Texturing. (5)
