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SE-7501

B. E. - IV (Sem. VII) (Textile Technology) Examination

April / May – 2011

Post Spinning Operations for Manmade Fibres

Time :3 Hours] [Total Marks : **100**

Instructions :

નીચે દર્શાવેલ ☛ નિશાનીવાળી વિગતો ઉત્તરવહી પર અવશ્ય લખવી.
Fillup strictly the details of ☛ signs on your answer book.

Name of the Examination :

☛ **B. E. - 4 (SEM. 7) (TEXTILE TECHNOLOGY)**

Name of the Subject :

☛ **Post Spinning Operations for Manmade Fibres**

☛ Subject Code No. : **7 5 0 1** ☛ Section No. (1, 2,.....) : **1&2**

Seat No. :

Student's Signature

(1) Answers to the two sections must be written in separate answer books.
(2) Tie two sections separately.
(3) Figures to the right indicate full marks.

SECTION – I

1.(a). Answer the following :

i	In air Jet Texturising Air is supplied at 90^0 to the yarn . True or False	[1]
ii	How can we change the crimp frequency of in Gear crimping?	[1]
iii	_____ process is suitable for texturising of Non thermoplastic yarns.	[1]
iv	Coarser Denier filaments are more suitable for Airjet texturising. True or False	[1]
v	The spinning speed of POY is around _____ .	[1]
vi	In case of core yarns , the over feed % for core & sheath yarn is same. True or False	[1]
vii	The length of yarn sample for Dupont yarn stability test is _____ .	[1]
viii	State the objects of Texturising.	[3]

(b). With a neat sketch , describe False twist Texturising process in detail. [10]

2.(a). With the help of neat sketch, Multiple end Stuffer box process. State the factors affecting yarn quality. [10]

(b) Describe Gear crimping process briefly with a neat sketch. [5]

OR

2.(a). Describe Air jet texturising process with a neat sketch. [10]

(b). Describe Knit – de-knit texturing process briefly. [5]

3. Write Short Notes [**ANY THREE**] [15]

(i) Solvent Texturing
(ii) Dynafil - M
(iii) Comparison between air texturing & Intermingling
(iv) Edge crimping process

SECTION – II

4.(a). Answer the following :

i	Explain the terms Glass transition temperature & Melting point temperature.	[2]
ii	If the resultant denier of 80 is produced with a Draw ratio of 1.5 , Calculate POY denier.	[2]
iii	State the advantages of TFO.	[3]
iv	As the twist level increases , Snarling tendency _____.	[1]
v	If TFO spindle is running at 10,000 rpm and Take up speed is 25 mts/min , Calculate TPM in yarn.	[2]

(b). With a neat sketch describe construction and working of a modern Draw warping machine. **[10]**

5.(a). Highlight the significance of Drawing process and its effect on various yarn properties. **[5]**

(b) Explain with neat sketches , Homogeneous drawing and Non homogeneous drawing. **[10]**

OR

5.(a). With a neat sketch, describe the Principle and working of TFO. **[10]**

(b). Discuss the advantages of TFO. **[5]**

6. Write Short Notes [**ANY THREE**] **[15]**

(i) Advantages of Draw Warping
(ii) Temporary sett and Permenant sett
(iii) Draw Twister
(iv) Intermingling