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RN-8141

B. E. - II (Sem. III) (T.T. & T.P.) Examination

May / June - 2010

Textile Fibres [132901]

(New Syllabus as per GTU)

Time : 3 Hours]

[Total Marks : 100

Instructions :

(1)

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| नीचे दृशावेव निशानीवाणी विगतो उत्तरवडी पर अवश्य लपवी. Fillup strictly the details of signs on your answer book. | Seat No. : |
| Name of the Examination : | <input type="text"/> |
| <input type="text" value="B. E. - 2 (Sem. 3) (T.T. & T.P.)"/> | <input type="text"/> |
| Name of the Subject : | <input type="text"/> |
| <input type="text" value="Textile Fibres [132901]"/> | <input type="text"/> |
| Subject Code No. : <input type="text" value="8"/> <input type="text" value="1"/> <input type="text" value="4"/> <input type="text" value="1"/> | <input type="text" value="Student's Signature"/> |
| Section No. (1, 2,.....) : <input type="text" value="1&2"/> | |

- (2) Answer to the **two** sections must be written in **separate** answer books.
- (3) Figures to the right indicate full marks.
- (4) Tie the **two** sections **separately**.

SECTION - I

- 1 (a) Match the following : 5
- | | |
|------------|------------------|
| A | B |
| (a) Kapok | (i) Australia |
| (b) Wool | (ii) Egypt |
| (c) Cotton | (iii) Bangladesh |
| (d) Silk | (iv) Indonesia |
| (e) Jute | (v) China |
- (b) State whether true or false : 5
- (i) The epithelial cells in the wool fibre are called SCALES.
 - (ii) The mulberry silk is produced by the moth BOMBYX Mori.
 - (iii) CASHMERE is a fruit fibre.

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[Contd...

- (iv) Staple length of ASIATIC cotton is less than one inch.
- (v) Another name for PALF fibre is PINA.
- (c) Explain in detail the growth, manufacture and production of cotton fibre. **10**
- 2** Explain in detail the following BAST fibres: **15**
- (i) RAMIE
- (ii) JUTE
- (iii) BAMBOO

OR

- 2** (a) Explain in detail the microscopic appearance of Wool fibre. **5**
- (b) Explain in detail the physical and chemical properties of wool fibres. **10**
- 3** Write short notes on (any **three**) **15**
- (i) Minor natural fibres
- (ii) Minor hair fibres
- (iii) Types of cotton fibre
- (iv) Properties of jute fibres.

SECTION - II

- 4** (a) Answer the following : **10**
- (i) Acrylic fibres are spun by _____ or _____ spinning method.
- (ii) Give melting point of Nylon 6 and Nylon 6,6.
- (iii) DINEL is trade name of _____ fibre.
- (iv) Give the name of monomers used for manufacturing of SARAN fibre.
- (v) List the raw material of PET mfg.
- (vi) State two end uses of vinyon fibre.

- (vii) Specific gravity of PET is _____.
- (viii) Melting point of PAN fibre is _____.
- (ix) Give safe ironing temperature of Nylon 6, and Nylon 6,6.
- (x) Give two trade name of Diacetate fibres.
- (b) Explain in brief with neat diagram various spinning methods of man-made fibres. **10**
- 5** (a) Describe manufacturing of viscose rayon with neat sketch. **10**
- (b) Discuss various properties of viscose rayon in detail. **5**
- OR**
- 5** Explain manufacturing process of cuprammonium rayon. Also discuss its properties in detail. **15**
- 6** Write short notes on any **three** : **15**
- (a) Vinyon fibres
- (b) Acetate rayon
- (c) Preparation of Nylon 6 and Nylon 6,6
- (d) Casein fibres.
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