

(Following Paper ID and Roll No. to be filled in your Answer Books)

Paper ID : 164857

Roll No.

--	--	--	--	--	--	--	--	--	--

B. TECH.

Theory Examination (Semester-VIII) 2015-16

EMERGING TECHNOLOGY

Time : 3 Hours

Max. Marks : 100

Section-A

- 1. Attempt all parts. All parts carry equal marks. Write answer of each part in short. (2×10 = 20)**

- (a) Name one HMHT fibre.
- (b) What is the chemical composition of bamboo fibre?
- (c) Name latest technology eliminating kerosene as pigment printing solvent.
- (d) State lotus-leaf finish theory.
- (e) What is micro encapsulation?

- (f) Which enzyme is suitable for bio-finish of cotton?
- (g) Name the element suitable for anti-bacterial finish on textiles.
- (h) Name one auxiliary used for combined desizing and scouring of cotton.
- (i) State one latest carpet knot other than Persian and Turkish.
- (j) What is the latest universal relation amongst diameter and yarn number?

Section-B

2. Attempt any five questions from this section.

(10×5 = 50)

- (a) What are bi-functional reactive dyes for cellulosics? How these dyes help in overcoming the drawbacks of cold pad-batch dyeing ?
- (b) Give the developments made in the field of tissue engineering, sutures and wound care textiles.

(2)

- (c) What are geo textiles? Give the developments made in this field.
- (d) What are the reasons for static charge generation on carpets? Describe the treatments available to overcome this problem.
- (e) How the weaving efficiency is improved in the newly developed Axminster machines? What are the new developments made in creeling system?
- (f) Describe textile sports surfaces and general merits of artificial sport turf.
- (g) How many types of compact spinning prevailing in Textile industry? Describe any one of them.
- (h) How macromolecular orientation of HPPE differs from that of normal PE? Name any two commercial grade of HPPE.

Section-C

Attempt any two questions from this section (2×15 = 30)

- 3. What do you know about latest regeneration of cellulose mentioning source and characterization of pulp.

4. Describe latest developments made in the backing of tufted carpets.
5. What are phase change materials? How this property is used to make various life-saving goods? Describe applications of such materials into medical textiles.

