Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER–VII(NEW) • EXAMINATION – WINTER 2016

Subject Code:2172805 Date:29/11/2016

Subject Name:Ecological Aspects in Textile Processing (Department Elective - II)

Time:10.3 AM to 1.00 PM Total Marks: 70

Instructions:

1. **Attempt all questions.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks.**

Q.1 **(a)** Answer the following questions : **07**

(i) _____dyes are banned by German government for their carcinogenic effects.

(ii) What are the ecospecification for pesticides in Textiles (Grey cotton fibre/yarn) with maximum permissible limit?

(iii) List some heavy metals which are considered environmentally toxic.

(iv) What is tolerance limit in baby clothing for formaldehyde.

(v) Enlist some safe dyestuffs.

(vi) Maximum permissible level of TDS is _____ & Water hardness is _____ in Wet Processing.

(b) Discuss sources, effects and ecostandards for Heavy metals in Textiles. **07**

Q.2 **(a)** Give a list of harmful chemicals and auxiliaries used in textile processing and suggest their Ecofriendly substitute. **07**

(b) Discuss Pollution from areas other than Chemical processing. **07**

OR

(b) State the major criteria specified by Eco-labels. Enlist some Eco-labels worldwide. **07**

Q.3 Explain Major Pollutants in textile processing & Describe Characteristics of Process waste water streams from Cotton textile industry. **14**

OR

Q.3 Enlist & Explain Future developments in Eco-friendly Chemical processing of Textiles from Pretreatments to Finishing of Textiles. **14**

Q.4 **(a)** Discuss water impurities & its impact on processing. **07**

(b) Write note on Environmental Management System **07**

OR

Q.4 **(a)** Discuss protective measures for Ultraviolet radiation. **07**

(b) Write a note on German Ban. **07**

Q.5 **(a)** Write note on : Secondary Effluent treatments **07**

(b) Write note on:Flow diagram of Cotton processing **07**

OR

(a) Write note on:Clean technology for sustainable development. **07**

(b) Write note on:Pentachloro phenol in Textiles. **07**

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