Seat No.:	Enrolment No.

## GUJARAT TECHNOLOGICAL UNIVERSITY

Date: 09/12/2015

## **BE - SEMESTER-VII EXAMINATION - WINTER 2015**

Subject Code: 173503 **Subject Name: Environmental Management** Time: 10:30am to 1:00pm **Total Marks: 70 Instructions:** 1. Attempt all questions. Make suitable assumptions wherever necessary. 3. Figures to the right indicate full marks. (a) How International laws play an important role in national law explain. 0.1 07 Write a structure of SPCB and explain motive behind it. 07 How one can conduct preliminary energy audit, explain with example. 07 **Q.2** Draw and describe importance of PDCA concept in environment management 07 system. OR (b) Explain EMS is an envelope of all controlling and preventive mechanism of 07 environmental impact. Draw a water mass balance diagram for Humpty dumpty power house. 07 0.3 (a) Particulars Water consumption, Kl/day Effluent Generation, kl/day Sr.No Existing After Proposed Existing After Proposed Expansion Expansion 940 1190 0 1 Domestic 0 1000 234 1.1 General Service 2200 80 1.2 Boiler makeup 660 2350 0 0 1.3 Cooling Water 28600 75076 4920 12524 makeup Fire fighting 400 1.4 616 0 0 2 Ash handing 5000 12758 0 0 36600 94374 5080 Total 12898 **(b)** Write a short note on ISO-14000 family. 07 0.3 Explain Liability audit, Management audit and Activity audit. 07 (a) Define 1) Normative standard 2) Blue angle program 3) Civil law countries 07 **(b)** 0.4 Explain socio economical impact of rapid industrialization. 07 What is a procedure of public hearing after EIA has been done. 07 OR Briefly explain detail checklist method and Step matrix method of EIA. 07 0.4 (a) Use Scoping, Screening, Alternatives and mitigation measures in a sequential **(b)** 07 manner to explain Environmental Impact Assessment. What are boundary conditions for LCA? Explain with chart. 07 Q.5 (a) **(b)** Describe limitations of LCA. 07 OR **07 Q.5** Write a note on REAch. (a) **(b)** Discuss environmental Project planning pre inception and post inception. **07** \*\*\*\*\*\*

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