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VEERMATA JIJABAI TECHNOLOGICAL INSTITUTE
[Central Technological Institute, Maharashtra State]
Matunga, Mumbai-400 019

SEMESTER EXAMINATION
SEMESTER & PROGRAM

April 2014 (Re-exam)
S. Y. B. Tech, SEM IV
Mechanical, Production,
Electronics, Electronic &
Telecommunication, Civil
Engineering
3 HRS.
Environmental Studies

DATE OF EXAM *20th May 2014*
TIME : *1:30 - 4:30 pm*

TIME ALLOWED

COURSE (Course Code) :

MARKS

100

Instructions

1. All Questions are compulsory.
2. Figures to the right indicate full marks
3. Use of scientific calculators is allowed

Q.1 [A] Fill in the blanks.

[5x1]

- i Illegal killing of prohibited endangered animals is called -----
- ii The organisms which feed directly on producers are called -----
- iii Terrace farming is practiced as a soil conservation measure in ----- areas.
- iv Blue baby syndrome is caused by the presence of ----- in drinking water.
- v DDT stands for-----.

[B] Write the correct option as answer to the following objective questions

[5x1]

- i Effluent discharge standards of BOD -----
i) 20 mg/l ii) 30 mg/l iii) 50 mg/l iv) 100 mg/l
- ii The shape of pyramid of biomass for a pond or any aquatic ecosystem is
i) inverted ii) upright iii) linear iv) not certain
- iii Chernobyl disaster is associated with
i) nuclear accident ii) water pollution iii) air pollution iv) none of these
- iv Which one of the following is not associated with reducing the run-off loss of water
i) contour cultivation ii) chemical wetting iii) surface crop residues iv) fallow soil
- v The overnourished lakes with 'algal blooms' are called
i) Eutrophic ii) oligotrophic iii) Dystrophic iv) Meromictic

[C] Answer the following questions in short.

[5x2]

- i) Explain extinct & endangered species.
- ii) Write the acceptable limit for the following drinking water quality parameters viz. pH, Chlorides, Turbidity & Nitrates.
- iii) What is food security?

- iv) What was the objective of Kyoto Protocol?
- v) What is a wasteland?
- Q2
- a. What are the major threats to biodiversity? explain 8
- b. Define ecological succession. Explain the process stating various stages involved. 8
- c. What is the need for solid waste management? 4
- Q3
- a. What is watershed? How can it solve the problem of depletion of ground water table? What are the benefits of watershed management? 8
- b. Define noise pollution. State its sources, effects and control measures. 6
- c. Explain food web and a food chain using sketches. 6
- Q4
- a. Explain the functions of following units in wastewater treatment. 8
- i) Primary Sedimentation tank ii) Aeration Tank iii) sludge digester iv) screens
- b. What are biogeochemical cycles, what is their significance? Explain Carbon Cycle. 8
- c. Write a brief note on Arsenic pollution. 4
- Q.5 Write short notes on following (Any 4) [5x4]
- a. Consumerism and waste products
- b. Electrostatic precipitators
- c. E-waste
- d. Value Education
- e. The Wildlife Protection Act, 1972
- f. Sustainable development