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Paper ID:

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Sub Code: EAS 105

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B.TECH
(SEM-I) THEORY EXAMINATION 2018-19
ENVIRONMENT AND ECOLOGY

Time: 3 Hours

Total Marks: 100

Note: 1. Attempt all Sections. If require any missing data; then choose suitably.

SECTION A

1. Attempt all questions in brief. 2 x10 = 20

- a. Define ecosystem. Who has given the term ecosystem?
- b. What are occupational diseases? Give examples.
- c. Differentiate between bioaccumulation and biomagnification.
- d. How conventional energy resources vary from non-conventional one?
- e. Enumerate few water borne diseases and water induced diseases.
- f. What is GWP? Write the increasing order of gases in terms of GWP.
- g. How could you differentiate between BOD and COD?
- h. What was the theme of World Environment Day 2018 hosted by India?
- i. What are 4R rules of solid waste management?
- j. Differentiate between aerobic and anaerobic decomposition.

SECTION B

2. Attempt any three of the following: 10 x 3 = 30

- a. Discuss the structural and functional attributes of ecosystem.
- b. 'Ozone layer depletion takes place over Antarctica'. Throw light on the statement and discuss the involved chain reactions.
- c. Elaborate waste water treatment plant with the help of neat diagram.
- d. Elaborate the impacts of mining and industries on environment.
- e. Elaborate solar energy and fossil fuel energy as renewable and non-renewable energy resources.

SECTION C

3. **Attempt any *one* part of the following:** **10 x 1 = 10**
- (a) Define Biogeochemical cycle. Describe nitrogen cycle with the help of neat and clean diagram.
 - (b) Discuss the scope and importance of environmental studies. How public awareness could be created regarding environment?
4. **Attempt any *one* part of the following:** **10 x 1 = 10**
- (a) Define EIA. Discuss all the methodological steps involved in EIA process.
 - (b) Discuss in detail solid waste management including the treatment and disposal methods.
5. **Attempt any *one* part of the following:** **10 x 1 = 10**
- (a) Define greenhouse effect? Discuss the impacts of global warming.
 - (b) How anthropogenic activities like modern agriculture and transportation have its impact on human and environment?
6. **Attempt any *one* part of the following:** **10 x 1 = 10**
- (a) Discuss the impacts of air pollution on plants, human being and materials.
 - (b) Discuss in detail Environmental (Protection) Act, 1986.
7. **Attempt any *one* part of the following:** **10 x 1 = 10**
- (a) Describe Air (Prevention and Control of Pollution)Act, 1981
 - (b) Elaborate the biomass energy as a renewable source of energy.