Set No. 1

I B.Tech I Semester Supplementary Examinations, Feb/Mar 2014 ENVIRONMENTAL STUDIES

(Common to Mechanical Engineering, Electronics & Communication Engineering, Chemical Engineering, Information Technology, Electronics & Computer Engineering, Mining and Petroliem Technology)

Time: 3 hours Max Marks: 75

Answer any FIVE Questions All Questions carry equal marks

- 1. Critically discuss what are the important objectives and the guiding principles of environmental studies? [15]
- 2. Discuss the reasons for land degradation and suggest steps to control it and explain what is Soil management, Shifting cultivation, Desertification and Man induced landslides. [15]
- 3. (a) Define ecosystem? and types of ecosystems in the nature.
 - (b) What are the general characteristics of an ecosystem? [8+7]
- 4. (a) Name a few birds and their contribution to the environment?
 - (b) What are the ecological services rendered by forests? Cite the examples of aesthetic, recreational, economic, historical, cultural and religious values of forest around your place. [5+10]
- 5. (a) How does marine pollution occur?
 - (b) What are the International activities to control marine pollution? [8+7]
- 6. (a) What are the powers provided to the central Government by the Environmental Protection Act, 1986?
 - (b) Write short note on environmental victims and their rehabilitation? [8+7]
- 7. (a) what is the Maximum carrying capacity and Exponential growth of population? Explain?
 - (b) what is your role for control of diseases in your local region? [8+7]
- 8. (a) Explain the types of components that are present in the solid waste material.
 - (b) What are the types of observations you find when you visited the polluted and non polluted zone. [8+7]

Set No. 2

I B.Tech I Semester Supplementary Examinations, Feb/Mar 2014 ENVIRONMENTAL STUDIES

(Common to Mechanical Engineering, Electronics & Communication Engineering, Chemical Engineering, Information Technology, Electronics & Computer Engineering, Mining and Petroliem Technology)

Time: 3 hours Max Marks: 75

Answer any FIVE Questions All Questions carry equal marks

- 1. Describe the guiding principles of environmental education? Give an account of formal and non-formal environmental education being imparted in India? [15]
- 2. (a) Is it necessary to construct multipurpose dams, if not suggest alternatives and discuss the impact of dams on forests and tribal people?
 - (b) Discuss any two case studies of people's movement against construction of dams. [8+7]
- 3. (a) What roles do autotrophs and heterotrophs play in the ecosystem?
 - (b) Explain the process of a succession in a newly formed pond ecosystem. [8+7]
- 4. (a) What are the major biogeographical regions in India.
 - (b) Enumerate the biosphere reserves of India.

[8+7]

- 5. (a) How to control thermal pollution in Industries?
 - (b) Define noise pollution? How noise pollution can be controlled?

[7+8]

- 6. (a) Discuss the salient features of Wild life (protection) Act, 1972
 - (b) Discuss the salient features of Forest (conservation) Act, 1980

[8+7]

- 7. (a) What do you mean by "Slum"? What kind of shelter does it provide?
 - (b) What are the objectives of UDHR by the United Nations?

[8+7]

- 8. (a) Explain the types of components which are present in the solid waste material.
 - (b) What are the types of observations you find when you visited a polluted and non polluted zone. [8+7]

Set No. 3

I B.Tech I Semester Supplementary Examinations, Feb/Mar 2014 ENVIRONMENTAL STUDIES

(Common to Mechanical Engineering, Electronics & Communication Engineering, Chemical Engineering, Information Technology, Electronics & Computer Engineering, Mining and Petroliem Technology)

Time: 3 hours Max Marks: 75

Answer any FIVE Questions All Questions carry equal marks

- 1. Write a detailed note on the various governmental institutions and organizations in the field of public awareness and preservation of natural assets? [15]
- 2. Explain the use of solar energy for the purpose of Solar water heating, Solar cooking, Solar electric power generation, Solar green houses and Solar drying of agriculture animal products. [15]
- 3. Write note on:
 - (a) Nitrogen cycle
 - (b) Carbon cycle
 - (c) Hydrological cycle

[5+5+5]

- 4. (a) Explain how the study of biodiversity is beneficial to human life.
 - (b) Explain about consumptive value of biodiversity.

[8+7]

- 5. (a) How does degradation of pesticides take place in soil?
 - (b) What are the effects of using synthetic pesticides?

[8+7]

- 6. (a) Do you think moral values prevent pollution in the environment? Explain your view?
 - (b) Define climate change? Explain the sources and effects of Global warming? [8+7]
- 7. Write notes on the fallowing social security measures
 - (a) Life insurance
 - (b) Public Provident Fund
 - (c) Categorical benefits
 - (d) Employee's provident fund

[5+5+5]

- 8. (a) What are the types forests in India? Define them and give proper examples.
 - (b) What is the role of river water in preparing the EIA report for an Industry?

[8+7]

Set No. 4

I B.Tech I Semester Supplementary Examinations, Feb/Mar 2014 ENVIRONMENTAL STUDIES

(Common to Mechanical Engineering, Electronics & Communication Engineering, Chemical Engineering, Information Technology, Electronics & Computer Engineering, Mining and Petroliem Technology)

Time: 3 hours Max Marks: 75

Answer any FIVE Questions All Questions carry equal marks

- 1. (a) Describe the various conservation practices followed in the society and by individuals for preservation of environmental assets?
 - (b) Explain about "Urjagram and Model villages".

[8+7]

- 2. (a) Explain selective felling and what are the negative impacts of timber extraction? Explain what measures need to be taken for conserving forest wealth?
 - (b) "Forests act as factories of soils and often called as Earth lungs". Explain the statement. [8+7]
- 3. (a) What are decomposers? Explain their role in the ecosystem.
 - (b) Discuss the major feature of a stream (river) that differs from that of a lake.

[7+8]

- 4. (a) Explain about In-situ conservation of biodiversity.
 - (b) What is the medicinal value of biodiversity?

[8+7]

- 5. (a) How is liquid waste managed?
 - (b) How municipal waste is handled in Indian cities and towns?

[8+7]

- 6. (a) What are the objectives of Environmental Impact Assessment(EIA)?
 - (b) write short notes on
 - (i)Polluter pays principle(PPP)?
 - (ii) Carbon Trading

[8+7]

- 7. Write the following
 - (a) occupational health hazards
 - (b) water born diseases
 - (c) Air born diseases

[5+5+5]

- 8. (a) What are the types of farming carried out by tribal culture and explain the effects of such farming on mountains.
 - (b) What are differences you observe between the Eco Tourism Park and normal amusement park. [8+7]