

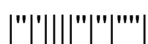
Code No: R10106/R10

Set No. 1

I B.Tech I Semester Supplementary Examinations, Jan/Feb 2015
ENVIRONMENTAL STUDIES
 (Common to Mechanical Engineering, Electronics & Communication
 Engineering, Chemical Engineering, Information Technology, Electronics &
 Computer Engineering, Mining and Petroleum Technology)
Time: 3 hours **Max Marks: 75**

Answer any FIVE Questions
All Questions carry equal marks

1. (a) Explain why public awareness is needed with regard to Environmental issues along with any case study?
 (b) Briefly discuss what is the protocol to be followed to make aware the public about environmental issues? [8+7]
2. (a) What are the various sources of food? Explain the terms Hunger hotspots, Malnutrition, Under-nutrition and what are the constituents of a balanced diet?
 (b) Describe in detail the food related problems occur in developing and under-developed nations though the WHO & FAO are taking initiatives and suggest remedies to overcome the problem. [8+7]
3. (a) "Aquarium a pond" - Explain.
 (b) Explain the biogeochemical cycles of a phosphorous and sulphur. [7+8]
4. (a) Explain the typical features of westernghats biodiversity in india.
 (b) What are the advantages and disadvantages of ex-situ conservation? [8+7]
5. (a) How does industrial waste cause water pollution? Write about biodegradable and non biodegradable pollutants?
 (b) How do agricultural chemicals cause water pollution? [8+7]
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 is meant by Environmental Health?
 (b) Write the causes of population growth?
 (c) Problems of family welfare programmes [4+6+5]
8. (a) Give a brief account of survey of river ecosystem that you have studied.
 (b) What are the types of forests you can observe in the terrestrial Ecosystem [8+7]



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Set No. 2

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Time: 3 hours

Max Marks: 75

**Answer any FIVE Questions
All Questions carry equal marks**

1. (a) Environmental studies subject is multidisciplinary in nature"? Explain.
(b) Describe what is the need to study the subject Environmental studies at all levels? [8+7]
2. What is the resident time of water in terms of vapors in the atmosphere and what are the methods of conserving water resources? Explain how will you reduce evaporational losses of water at different areas? [15]
3. (a) What are the different zones in a lake ecosystem?
(b) Explain the biogeochemical cycles of a phosphorous and sulphur. [7+8]
4. (a) Comment upon Indian biodiversity with reference as a mega diversity nation.
(b) What is meant by extinction of a species? Describe with examples. [8+7]
5. (a) Write short notes on
(i) Biological control of pests (ii) Cultural practice of pest control
(b) Thermal pollution plants are deemed essential for generation of electricity, but they also provide wastes which are harmful for man and his environment. Elucidate [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 short notes on the following with examples
(a) Birth rate
(b) Death rate
(c) Poverty
(d) Migration [4+4+4+3]
8. (a) Explain how you carried out the field study of forest region in detail do.
(b) How does the forests play vital role in the economy of the country explain? [8+7]

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Set No. 3

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ENVIRONMENTAL STUDIES**

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Time: 3 hours

Max Marks: 75

**Answer any FIVE Questions
All Questions carry equal marks**

1. Explain different types of environments and describe the three important constituents of physical environment? How will you differentiate between microclimate and weather. [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) Describe the abiotic and biotic components of a grassland ecosystem
(b) With a neat sketch, explain how the element carbon is recycled in nature. [8+7]
4. (a) What is the objective of identifying biodiversity hot spots
(b) Explain the efforts taken towards conservation of biodiversity in India. [6+9]
5. (a) What are the methods of purifying water?
(b) What is ecological sanitation? [8+7]
6. (a) "Population, consumerism & waste production are inter related" – comment?
(b) Discuss the salient features of
(i) Air Pollution (Prevention & Control) Act , 1981
(ii) Water Pollution (Prevention & Control) Act , 1974 [8+7]
7. (a) What are the major chemical infections to organisms?
(b) Write about "Swachh Bharat" [8+7]
8. (a) Explain how does grass lands varied from the forest regions.
(b) Explain the water pollution, air pollution, noise pollution effects you observe. [8+7]

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Set No. 4

**I B.Tech I Semester Supplementary Examinations, Jan/Feb 2015
ENVIRONMENTAL STUDIES**

**(Common to Mechanical Engineering, Electronics & Communication
Engineering, Chemical Engineering, Information Technology, Electronics &
Computer Engineering, Mining and Petroleum 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. Justify the need for forest management. List the strategies adopted for conserving the forest wealth in India. [15]
3. (a) Explain briefly about different types of forest ecosystems.
(b) How do human activities lead to degradation of forest ecosystems. [8+7]
4. (a) Explain about In-situ conservation of biodiversity.
(b) What is the medicinal value of biodiversity? [8+7]
5. (a) What are the different sources of air pollution
(b) What is BOD? How does it help to measure the pollution of water body? [8+7]
6. (a) What is a watershed? How can watershed management solve the problem of depletion of the ground water table?
(b) Describe the effects of waste product and over-exploitation of natural resources as a result of consumerism culture? [8+7]
7. Write short notes on
(a) Doubling time
(b) Total fertility rate
(c) Zero population growth
(d) Life-expectancy. [4+4+3+4]
8. (a) Explain how the forest resource reduces the earth quakes on the land.
(b) Explain the effect of dumping sites in the polluting industry. [8+7]
