

Code: 9ABS402/9ABS303

**II B.Tech II Semester (R09) Regular & Supplementary April/May 2012 Examinations
ENVIRONMENTAL SCIENCE****(Common to Civil Engineering, Mechanical Engineering, Information Technology, Computer Science & Engineering, Aeronautical Engineering and Bio Technology)****Time: 3 hours****Max Marks: 70****Answer any FIVE Questions
All Questions carry equal marks**

1. (a) Define environmental studies. Give the scope and importance of studying environmental science.
(b) Discuss the need for public awareness on environmental hazards.
2. (a) Define energy. Discuss the different types of energy.
(b) What is sustainable agriculture? Write short notes on integrated crop management.
3. (a) Write about concept of an ecosystem.
(b) What is a grassland ecosystem? Write about the different types of grasslands in India.
4. (a) Give the biogeographic classification of India.
(b) Write about in-situ and ex-situ conservation of biodiversity.
5. (a) Discuss the effects of air pollution on the following
 - I. Human beings
 - II. Plants
(b) Give concepts that help individuals contribute towards a better quality of our environment and human life.
6. (a) Give the classification of wastelands. Write about the need for wasteland development.
(b) Write notes on global warming and its effects on temperature and rainfall.
7. (a) Discuss how environmental issues are closely linked to human rights.
(b) What is the nature of population growth? Discuss its variation among nations.
8. (a) Prepare a proforma for fieldwork on documenting environmental assets of river ecosystem.
(b) Write the general guidelines for study of common plants, insects and birds.

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1. (a) Define environmental studies. Give the scope and importance of studying environmental science.
(b) Discuss the need for public awareness on environmental hazards.
- Write about the following earth's resources:
2. (a) Atmosphere
(b) Biosphere
3. (a) Write about concept of an ecosystem.
(b) What is a desert ecosystem? Write about the structure and functions of the desert ecosystem.
4. (a) What is a biodiversity hot spot? Explain giving examples.
(b) Discuss the different threats to biodiversity.
5. (a) What is marine pollution? Give the different pathways of marine pollution.
(b) Discuss disaster management. What are different phases and professional activities associated to disaster management?
6. (a) Discuss the different functions of watershed management
(b) What is climate change? What are the causes for climate change?
7. (a) Discuss how environmental issues are closely linked to human rights.
(b) What is value education? Discuss its importance in the present day context.
8. (a) Prepare a proforma for fieldwork on documenting environmental assets of forest ecosystem.
(b) Write the general guidelines for study of common plants, insects and birds.

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1. (a) Discuss the multidisciplinary nature of environmental studies.
(b) Discuss the need for public awareness on environmental hazards.
2. (a) List the available energy sources for the world today and 40 years from now in order of decreasing importance in accordance to your perception.
(b) Discuss the environmental consequences of mining industry.
3. (a) Define an ecosystem. Discuss about energy flow in ecosystems.
(b) Cite three examples of large diversified ecosystems and note the factors threatening their existence.
4. (a) Define biodiversity. Discuss the human benefits of biodiversity.
(b) What is a biodiversity hot spot? Explain with examples.
5. (a) Discuss the effects of presence of the following contaminants in water
 - I. pathogens
 - II. organic matter
 - III. Inorganic nutrients
 - IV. Toxic and hazardous substances.
(b) Describe an integrated urban and industrial waste management strategy.
6. (a) What is an acid rain? What are the effects of acid rain on aquatic and terrestrial ecosystems?
(b) Define sustainable development. How can one ensure sustainable development?
7. (a) Write about family welfare programs taken up by our country in response to phenomenal population growth.
(b) What are values? Discuss the role of value education in the context of environment.
8. (a) Prepare a proforma for fieldwork to study the cause and effects of pollution at a local polluted site.
(b) Write the general guidelines on aspects that can be observed and documented during ecosystem field studies.

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1. (a) Define environmental studies. Give the scope and importance of studying environmental science.
(b) Discuss the need for public awareness on environmental hazards.
2. What is sustainable lifestyle? Discuss the equitable use of resources for sustainable lifestyle.
3. (a) Write about concept of an ecosystem.
(b) What is an aquatic ecosystem? Write about the structure and functions of the desert ecosystem.
4. (a) Write short notes on conservation of biodiversity.
(b) What are the human benefits of biodiversity.
5. (a) Discuss the effects of soil pollution on the following
 - I. Health
 - II. Ecosystem
(b) Give concepts that help individuals contribute towards a better quality of our environment and human life.
6. (a) Give the classification of wastelands. Write about the need for wasteland development.
(b) Write notes on consumerism and its effect on society and environment.
7. (a) Discuss how environmental issues are closely linked to human rights.
(b) What is population explosion? Discuss its effect on environment and human health.
8. (a) Prepare a proforma for fieldwork on documenting environmental assets of grassland ecosystem.
(b) Write the general guidelines for study of common plants, insects and birds.
