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Question Paper Code: AHSD06



INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)

Dundigal-500043, Hyderabad

B.Tech I SEMESTER END EXAMINATIONS (REGULAR) - FEBRUARY 2024

Regulation: BT23

ENVIRONMENTAL SCIENCES

(COMMON TO ALL BRANCHES)

Time: 3 Hours

Max Marks: 60

Answer ALL questions in Module I and II

Answer ONE out of two questions in Modules III, IV and V

All Questions Carry Equal Marks

All parts of the question must be answered in one place only

MODULE – I

1. (a) State the different types of aquatic ecosystems. Discuss briefly about each, bringing out their unique characteristics, and the threats to these ecosystems. [BL: Understand| CO: 1|Marks: 6]
- (b) Outline about food chain and food web. Describe the organisms which typically occupy various levels in an ecological pyramid. [BL: Understand| CO: 1|Marks: 6]

MODULE – II

2. (a) How are big dams beneficial? Discuss the environmental impacts of building the water reservoirs and dams. [BL: Understand| CO: 2|Marks: 6]
- (b) Summarize different types of renewable energy system. Differentiate between renewable and non renewable energy sources. [BL: Understand| CO: 2|Marks: 6]

MODULE – III

3. (a) What is value of biodiversity and describe different types of values of biodiversity. [BL: Understand| CO: 3|Marks: 6]
- (b) List the major hotspots of biodiversity in our country. Why is it important to preserve these areas and how do they contribute to the environment in different ways? [BL: Understand| CO: 3|Marks: 6]
4. (a) Explore the necessity for viewing biodiversity as a global resource. Discuss the various threats to biodiversity due to habitat loss and poaching of wild life. [BL: Understand| CO: 4|Marks: 6]
- (b) Write a short notes on
 - i) In-situ and Ex-situ conservation of biodiversity
 - ii) Endangered and endemic species. [BL: Understand| CO: 4|Marks: 6]

MODULE – IV

5. (a) Identify the sources, characteristics and environmental impacts of e-waste. Suggest the measures to be taken against the detrimental effects of electronic wastes. [BL: Understand| CO: 5|Marks: 6]

- (b) Elaborate the sources, effects and methods of control of the following:
- i) Soil pollution
 - ii) Noise pollution. [BL: Understand| CO: 5|Marks: 6].
6. (a) Describe in detail the principle of primary and secondary waste water treatment methods. [BL: Understand| CO: 5|Marks: 6]
- (b) Explain how sustainable life styles are closely linked to prevention of pollution and conservation of resources. [BL: Understand| CO: 5|Marks: 6]

MODULE – V

7. (a) Summarize the legal aspects and the rules framed in wild life protection act and forest conservation act [BL: Understand| CO: 6|Marks: 6]
- (b) How do you reduce the issues involved in enforcement by environmental legislation? Explain in brief. [BL: Understand| CO: 6|Marks: 6]
8. (a) Discuss the guidelines and methods to be followed for the handling and disposal of biomedical wastes. [BL: Understand| CO: 6|Marks: 6]
- (b) Write short notes on
- i) Environmental protection act
 - ii) Prevention and control of pollution act. [BL: Understand| CO: 6|Marks: 6]

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