

Question Paper

Exam Date & Time: 30-Nov-2018 (08:30 AM - 11:30 AM)



MANIPAL INSTITUTE OF TECHNOLOGY
MANIPAL
(A constituent unit of MAHE, Manipal)

FIRST SEMESTER B.TECH END SEMESTER EXAMINATIONS, NOV 2018

Environmental Studies [CIE 1052 - 2018 -CHM]

Marks: 50

Duration: 180 mins.

Answer all the questions.

Instructions to Candidates: Answer ALL questions

- 1) Define the term 'Sustainable development'. Enumerate the goals of green technology. (3)
 - A)
 - B) Discuss the role of three R's in sustainable development. (3)
 - C) With a neat sketch explain the concept of energy pyramids. (4)
List out the inorganic substances that cycle through biogeochemical cycles.
- 2) Discuss the causes and effects of Eutrophication. (3)
 - A)
 - B) Discuss the impacts of mining in coastal areas. Enumerate any four measures to be taken to protect the environment during mining? (4)
 - C) Describe the sources and effects of persistent toxins. (3)
- 3) Illustrate with a neat sketch how a geothermal pump can heat and cool a building. (5)
 - A)
 - B) Describe low level nuclear waste and its various methods of disposal. (3)
 - C) Why do we refer to Environmental Protection Act (EPA) as an umbrella act? Discuss the three penalties imposed for violating the EPA act. (2)
- 4) Explain the different steps involved in Environmental Impact Assessment. (3)
 - A)
 - B) What is disaster management? Explain any four techniques of disaster management that are implemented in the event of an earthquake. (3)
 - C) (4)

Define the following terms:

- a) Eluviation
- b) Check Dam
- c) Bioremediation
- d) Watershed

- 5) Describe the innovative strategies adopted by the residents of Jabrol village and Morena town in the state of Madhya Pradesh to protect their farmlands from the advancing ravines along the Chambal River. (3)
- A)
- B) How has mobile wildlife tracking "An initiative in Karnataka that has given a new meaning to conservation" benefited the farmers from the human - wildlife conflicts. (4)
- C) Explain how the soil condition in the state of Punjab has been affected from the green revolution. (3)

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