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Total Number of Pages : 01

B.Tech
PMG6M0016th Semester Back Examination 2018-19

ENVIRONMENTAL SCIENCE & ENGINEERING

BRANCH : AERO, AUTO, BIOTECH, CHEM, CIVIL, CSE, ECE, EEE, EIE, ELECTRICAL,
ETC, IEE, IT, MANUTECH, MECH, METTA, MINERAL, MINING, MME, PE, PLASTIC, TEXTILE

Max Marks : 100

Time : 3 Hours

Q.CODE : F387

Answer Question No.1 (Part-1) which is compulsory, any EIGHT from Part-II and any TWO from Part-III.

The figures in the right hand margin indicate marks.

Part- I

Q1 Only Short Answer Type Questions (Answer All-10)

(2 x 10)

- Define sustainable development.
- What is formal environmental education?
- Give two causes of deforestation.
- Define biosphere.
- Write two indirect benefits obtained from forests.
- What are Boreal or Taiga forests?
- Explain ecological succession.
- What are tropic levels in eco system?
- Differentiate between a grazing food chain and a detritus food chain.
- What is the unit of measurement of noise pollution? How do you define it?

Part- II

Q2 Only Focused-Short Answer Type Questions- (Answer Any Eight out of Twelve)

(6 x 8)

- Environmental education is multi-disciplinary in nature. Explain.
- What are biogeochemical cycles? Explain the carbon cycle with a neat sketch.
- Define environment and ecosystem. Discuss about the structure and function of an ecosystem.
- Discuss about the direct and indirect benefits derived from forests.
- What are the effects of deforestation?
- Give a note on Chipko movement.
- Discuss about the guiding principles of Environmental Education.
- Discuss about the sources and classification of solid wastes.
- Define a food chain. Explain different types of food chains with a neat sketch. What is a food web?
- Explain rain water harvesting with a neat sketch.
- What are green house gasses? How they are formed? What are their effects?
- How does energy flow across the various tropic levels in an ecosystem? How does it differ from nutrient flow? Interpret with a neat labeled diagram.

Part-III

Only Long Answer Type Questions (Answer Any Two out of Four)

Q3 What are different criteria air pollutants? Describe about their sources and effects on human being, flora, fauna and monuments. (16)

Q4 What are urban problems related to energy? Define energy conservation. What is the need for energy conservation? Discuss the measures for promoting energy conservation. (16)

Q5 Describe the salient features of Water(prevention and control of pollution) act, 1974 (16)

Q6 Define noise pollution. Discuss about the sources of noise pollution. Discuss about the effects of noise pollution on human being, plants and animals. (16)