

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.

- 210 210 210 210 210 210 210 210 210
- 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.
- 210 210 210 210 210 210 210 210 210
- Part-III**
- Q3 Only Long Answer Type Questions (Answer Any Two out of Four) (16)**
- What are different criteria air pollutants? Describe about their sources and effects on human being, flora, fauna and monuments.
- Q4 (16)**
- What are urban problems related to energy? Define energy conservation. What is the need for energy conservation? Discuss the measures for promoting energy conservation.
- Q5 (16)**
- Describe the salient features of Water(prevention and control of pollution) act, 1974
- Q6 (16)**
- Define noise pollution. Discuss about the sources of noise pollution. Discuss about the effects of noise pollution on human being, plants and animals.