

[Time: Three Hours]

[Marks:80]

Please check whether you have got the right question paper.

- N.B:
1. All Questions are compulsory.
 2. Draw neat diagram wherever necessary.
 3. Figure to the right indicate full marks.

- Q.1 a. Define 1 Dobson unit. **01**
 b. Define Ecology. **01**
 c. What is sanitary landfill. **01**
 d. 'Carrying your fabric bag to market' is example of which of 3 Rs of control measures, define and justify. **01**
 e. Define troposphere **01**
 f. Explain the difference between species, population and community. **02**
 g. Give two examples each of sources of renewable and non-renewable energy. **02**
 h. Name two indoor air pollutants and their effects. **02**
 i. State the need for environmental legislation in Indian scenario. **02**
 j. What is the role of technology with reference to environment. **02**
 k. Illustrate disaster management cycle. **02**
 l. Enlist merits and demerits of wind turbines. **03**
- Q.2 a. Explain causes, effects and preventive measure of 'Ozone layer depletion.' **04**
 b. With a neat labelled diagram explain the principle and working of Photovoltaic cell. **04**
- OR**
- b. With a neat labelled diagram explain the principle and working of flat plate collector. **04**
 c. With a neat labelled diagram explain working of hydropower generators. **04**
- Q.3 a. Enumerate on the sources and effects of noise pollution. **04**
 b. Give the functions of Ministry of Environment and forest (MoEF). **04**
 c. Enumerate on indoor air pollutants and their effects. **04**
- OR**
- c. Describe Carbon credit. What are its advantages? **04**
- Q.4 a. Enumerate on any two methods for control of air pollution. **04**
 b. Explain any two approaches used for primary treatment and prevention of water pollution. **04**
 c. With a neat labelled sketch explain Rotating Biological Contactor. **04**
- OR**
- c. Explain the concept of Global Warming along with the enhanced Green House Effect. **04**

(P.T.O)

- Q.5 a. What do you mean by green building? What are its benefits. 04
b. With a neat labelled diagram discuss Flash Steam Plants. 04
c. Explain food chains & food webs. Give their significance. 04

OR

- c. What do you mean by sustainable development? What are the major measures to attain sustainability. 04

- Q.6 a. Discuss major environmental impact of deforestation 04

- b. What adverse effects can solid waste cause? How can the solid waste be managed by vermicomposting. 04
c. Discuss penalties and punishment under Environment Protection Act. 04

OR

- c. Discuss the procedure for Environmental Clearance. 04