53 (ES 101) ENEN

2014

ENVIRONMENTAL & SAFETY ENGG.

Paper : ES 101

Full Marks : 100

Pass Marks : 30

Time : Three hours

The figures in the margin indicate full marks for the questions.

*Answer **any five** questions out of seven.*

1. *(a)* What is a resource ? Give the classification of resources with example. 1+4=5

   (b) What are the advantages and disadvantages of renewable resources ? 4

   (c) What do you mean by population explosion ? What are the causes of population explosion ? 1+4=5

   (d) What are the effects of depletion of resources ? 3

(e) What is ecosystem ? What are the components of a ecosystem ? 1+2=3

2. (a) Give the classification of ecosystem. 5

(b) Define the term 'food web'. 2

(c) Give the composition of atmosphere. 3

(d) Describe briefly the different modes of heat transfer. 6

(e) What are the causes and effects of green-house effect ? 4

3. (a) Define pollutant. 2

(b) Distinguish between primary and secondary pollutants. 4

(c) Discuss the various types of pollutants. 7

(d) What is criteria air pollutant ? 3

(e) What are the effects of H_2S (hydrogen sulphide) and nitrogen oxides. 4

4. (a) Describe briefly the causes and effects of acid rain. 8

(b) Write short notes on : 3+3=6

(i) Troposphere

(ii) Exosphere.

(c) Discuss the objectives of Kyoto Protocol, Japan (1997) and Montreal Protocol (1985). 3+3=6

5. (a) Write about the causes and effects of water pollution. 10

(b) What is pesticides ? Classify it. What are the effects of pesticides on plants and animals ? 1+2+6=9

(c) What do you mean by COD (chemical oxygen demand) ? 1

6. (a) Discuss the effects of noise pollution. 6

(b) Give the classification of noise pollution. 5

(c) Discuss the causes and effects of solid wastes from Urban and Industrial areas. Provide some remedial measures to control pollution from such wastes. 5+4=9

7. *(a)* What do you mean by food chain ? Discuss its general characteristics. 5

(b) Write short notes on : ***(any three)*** 3×5=15

(i) Ozone layer depletion

(ii) Acid rain

(iii) Thermal pollution

(iv) Deforestation.
