

C.U.SHAH UNIVERSITY

Winter Examination-2018

Subject Name : Environment Science and Energy Management

Subject Code : 2TE01ESE1 **Branch :** Diploma (All)

Semester : 1 **Date :** 30/11/2018 **Time :** 02:30 To 05:30 **Marks :** 70

Instructions:

- (1) Use of programmable calculator & any other electronic instrument is prohibited.
- (2) Instructions written on main answer book are strictly to be obeyed.
- (3) Draw neat diagrams and figures (if necessary) at right places.
- (4) Assume suitable data if needed.

- Q-1 Attempt the following questions: (14)**
- a)** The 'world environment day' is celebrated on **01**
 (a) 15th June (b) 5th June (c) 5th January (d) 15th February
- b)** Environment has two major components **01**
 (a) Plants and animals (b) Physical and chemical
 (c) Natural and artificial (d) Biotic and abiotic
- c)** Elements of environment are **01**
 (a) Nitrogen, Carbon dioxide, Oxygen
 (b) Nitrogen, Oxygen, Ozone
 (c) Oxygen, Ozone, Carbon dioxide
 (d) Lithosphere, Atmosphere, Hydrosphere, Biosphere
- d)** Lowest layer of atmosphere is called **01**
 (a) Thermosphere (b) Troposphere (c) Stratosphere (d) Mesosphere
- e)** The biggest pollutant receptor or sink on the earth is **01**
 (a) Biosphere (b) Atmosphere (c) Lithosphere (d) Hydrosphere
- f)** Most stable ecosystem is **01**
 (a) Forest (b) Desert (c) Ocean (d) Mountain
- g)** The shape of the pyramid of biomass for a pond or any ecosystem is **01**
 (a) Inverted (b) Up right (c) Linear (d) Not certain
- h)** Which of the following is not a renewable resource? **01**
 (a) Coal (b) Wind (c) Water (d) Geothermal energy
- i)** All sources of water such as the oceans, rivers, lakes and underground sources together constitute. **01**
 (a) Hydrosphere (b) Atmosphere (c) Lithosphere (d) Bio-sphere
- j)** Ozone layer is present in **01**
 (a) Troposphere (b) Stratosphere (c) Mesosphere (d) Thermosphere
- k)** Which of the following is not a solution for global warming? **01**
 (a) Reducing fossil fuel consumption (b) Planting more trees
 (c) Deforestation (d) None of the above
- l)** How is rotor axis in savonius type window mill? **01**
 (a) Horizontal (b) Inclined (c) Vertical (d) connected to nessel
- m)** What process is charcoal made by? **01**
 (a) Anaerobic process (b) pyrolysis (c) Hydrolysis (d) Chemical titanium
- n)** What is the highest percentage of gas in biogas formation? **01**
 (a) Carbon dioxide (b) Nitrogen (c) Oxygen (d) Methane gas



Attempt any four questions from Q-2 to Q-8

- Q-2 Attempt all questions (14)**
- (a) Write importance of environmental education. **05**
 - (b) Define environment also enlist component parts of environment and describe any one in brief. **05**
 - (c) Explain hydrological cycle with sketch. **04**
- Q-3 Attempt all questions (14)**
- (a) Explain food chain and web with example of it. **07**
 - (b) Classify ecosystem also explain components of ecosystem. **07**
- Q-4 Attempt all questions (14)**
- (a) What is deforestation? Describe its causes and ill effects. **07**
 - (b) Explain remote sensing. **07**
- Q-5 Attempt all questions (14)**
- (a) What is acid rain? Explain adverse effect of acid rain. **05**
 - (b) Enlist and explain various green-house gases. **05**
 - (c) Describe various effects of global warming. **04**
- Q-6 Attempt all questions (14)**
- (a) Write short note: Renewable sources of energy. **05**
 - (b) Enlist various steps for fuel saving in boiler. **05**
 - (c) Compare conventional and non-conventional sources of energy. **04**
- Q-7 Attempt all questions (14)**
- (a) Explain solar water heating with diagram of solar water heater. **07**
 - (b) What is bio-mass energy? Explain its advantages and disadvantages. **07**
- Q-8 Attempt all questions (14)**
- (a) Explain wind energy with its use and limitation. **07**
 - (b) Describe various steps for energy conservation in transportation. **07**

