P. P. SAVANI UNIVERSITY

First Semester of B.Sc. Examination
Feb-2022
SSES1010–Introduction to Environment Science-I

11.02.2022, Friday   Time: 12:00p.m. to 02:30 p.m.   Maximum Marks: 60

Instructions:
1. The question paper comprises of two sections.
2. Section I and II must be attempted in separate answer sheets.
3. Make suitable assumptions and draw neat figures wherever required.
4. Use of scientific calculator is allowed.

Section-I (Total Marks - 30)

Q.1	**Short Questions**	[10]
1.1	**Objectives**	[05]

1.1a Coal is an example of
- A renewable resources
- B non-renewable resources
- C human resources
- D potential resources

1.1b Blanket of gases surrounding the earth is known as
- A Atmosphere
- B Hydrosphere
- C Lithosphere
- D Biosphere

1.1c CEE stands for
- A Centre for energy education
- B Centre for Environment Education
- C Centre for electricity education
- D None of above

1.1d Urbanization
- A refers to the population shift from rural to urban areas
- B refers to the population shift from urban to rural areas
- C Cause the agriculture development
- D A & C both

1.1e Reason for decreasing ground water
- A Increased usage decreases the ground water.
- B Insufficient rain fall
- C Building construction activities sealing the permeability of the soil.
- D All above

1.1f Blue baby syndrome is caused due to excess of ___

    A   Nitrate

    B   Phosphate

    C   Sulphate

    D   Magnesium

1.1g Full form of LPG

    A   Limited petroleum gas

    B   Large petroleum gas

    C   Liquefied petroleum gas

    D   None of above

1.1h Nuclear fission means

    A   Heavier nucleus split into lighter nuclei on bombardment of neutrons

    B   lighter nucleus is combined together at extremely high temperature

    C   No changes in molecule structure

    D   None of above

1.1i Devegetation means

    A   Top soil and vegetation increases

    B   Top soil and vegetation get removed

    C   Increasing of biomass

    D   None of above

1.1j Which are the examples of Freshwater Resources?

    A   River

    B   Pond

    C   lake

    D   All above

1.2   **Answer the Following: (MCQ/Short Question/Fill in the Blanks)**   [05]

1.2a Define :Hydrosphere

1.2b Give an example of renewable sources

1.2c Define: Mal Nutrition

1.2d What is Eutrophication?

1.2e What is an abiotic components?

Q.2   **Short Notes (Attempt any two)**   [06]

  A   Explain ecological and commercial uses of Forest

  B   Explain effects of Mining process in Environment.

  C   Give a detail on Types of fresh water resources.

Q.3   **Explain in detail (Attempt any two)**   [14]

  A   What are the energy resources? Explain its types.

  B   What is drought? Effects of Drought and its management.

  C   What are the scopes of environmental studies? Explain.

Section-II (Total Marks - 30)

Q.1   **Short Questions**   [10]

1.1   **Objectives**   [05]

1.1a   In an ecosystem, energy
- A   is absorbed
- B   is released
- C   flows
- D   None of the above

1.1b   When Ecosystem passes from a less complex state to more complex state is
- A   Ecological succession
- B   Ecological niche
- C   Ecological pyramid
- D   Ecological energy

1.1c   Which of the following region has maximum biodiversity?
- A   Mangroves
- B   Taiga
- C   Tropical rain forest
- D   Temperate rain forest

1.1d   Select the food chain found in forest ecosystem.
- A   Phytoplankton->water fleas-> small fish->Tuna
- B   Grass-> Grasshopper-> Frog-> Snake-> Hawk
- C   Leaf litter-> Algae-> crab-> small carnivore fish-> Large carnivore fish
- D   Organic matter-> Fungi-> Bacteria

1.1e   In parasitic food chain,the pyramid of number is
- A   Linear
- B   Upright
- C   Inverted
- D   Inverted upright

1.1f   Placing of the threatened animals and plants in a special care unit for protection is called
- A   In-situ conservation
- B   Ex-situ conservation
- C   Wild life sanctuary
- D   National Park

1.1g   How many biogeographic does India have?
- A   4
- B   7
- C   8
- D   10

1.1h _____ occurs when the death of the last individual in a species occurs.

    A Adaptation
    B Phylogenic diversity
    C Speciation
    D Extinction

1.1i Species that are found only in a particular region are known as
    A Extinct species
    B Endangered species
    C Endemic species
    D Vulnerable species

1.1j The diversity at an ecological level or habitat level is known as
    A Ecosystem diversity
    B Species diversity
    C Genetic diversity
    D All of the above

1.2   **Answer the Following: (MCQ/Short Question/Fill in the Blanks)**   **[05]**
1.2a Define the term Ecosystem.
1.2b Differentiate between food chain and food web.
1.2c What are primary consumers? Give their examples.
1.2d What is Biome?
1.2e What are functions of biodiversity?

Q.2   **Short Notes (Attempt any two)**   **[06]**
A   In-situ conservation
B   Biotic components of an ecosystem
C   Species diversity Vs. Genetic diversity.

Q.3   **Explain in detail (Attempt any two)**   **[14]**
A   Ecological pyramids
B   Threats to biodiversity
C   Function of an Ecosystem