



**Indian Association for the Cultivation of Science**  
(Deemed to be University under *de novo* Category)  
**Master's/Integrated Master's-PhD Program/Integrated Bachelor's-Master's**  
**Program/PhD Course**  
**Mid-Semester Examination-Spring 2023**

**Subject: Know Your Environment**  
**Full Marks: 25**

**Subject Code(s): AEC 1201**  
**Time Allotted: 2 h**

**Answer Q. 1 and 2 any one from the rest**

1. Choose the right answer and justify your answer in one or two sentences. 10x1=10

- a. Which of the following is a fossil fuel?  
(a) Tar (b) Coal (c) Petroleum (d) ☒ All the above
- b. Hydropower plants convert the \_\_\_\_\_ energy of flowing water into \_\_\_\_\_.  
☒ (a) Mechanical energy (b) ☒ Tidal energy (c) Wind energy (d) Electricity
- c. Biotic resources include  
(a) Plants and animals (b) Human population (c) Coal and Oil (d) ☒ All the above
- d. The most abundantly available fossil fuel in India is \_\_\_\_\_.  
☒ (a) Coal (b) Natural Gas (c) Petroleum (d) Oil
- e. Ozone layer is present in \_\_\_\_\_.  
☒ (a) Troposphere (b) Ionosphere (c) Lithosphere (d) ☒ Stratosphere
- f. Green House Gases are  
(a) Carbon monoxide, Carbon dioxide, Methane and Nitrogen  
(b) Carbon monoxide, Sulphur dioxide, Nitric oxide and Methane  
☒ (c) Carbon dioxide, nitrogen oxides, methane and CFC  
(d) Carbon dioxide, Sulphur dioxide, CFC and methane
- g. June 5th is observed as  
☒ (a) World Environmental Day (b) World Forest Day (c) World Wildlife Day (d)  
World Population Day
- h. Which are the following strategies for sustainable development?  
(a) Adopting 3-R approach (b) Environmental education and awareness (c) Using  
appropriate technology and Sustainable agriculture (d) ☒ All of the above
- i. The Primary Goals of Sustainability (a) ☒ The end of poverty and hunger (b) Better  
standards of education and healthcare and better sanitation (c) To achieve gender  
equality (d) All the above

2. Answer in short.

5x2=10

- ☒ a. What is Stockholm+50 and why is it important?
- ☒ b. Identify the key components of an environment.
- ☒ c. Give two examples of Earth's natural climate change phenomena and explain how it is different from anthropogenic causes?

- ✓ d. What are SDG goals and which conference laid the foundation of 'Transforming the World'?
- ✓ e. Name 2 conventional and 2 unconventional sources of nonrenewable energies.

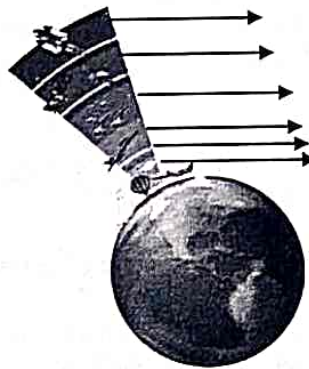
5x1=5

### 3. Fill in the Gap

- (a) The Coriolis effect predicts the direction of the global atmospheric circulation currents like the westerlies, the polar winds or trade winds. Coriolis also affects the directions of the ocean.
- (b) The MNRE is the nodal Ministry of the Government of India for all matters relating to new and renewable energy.
- (c) Exposed Archean rocks all around the earth contains geological signature of oldest crust, known as Archean.
- (d) Rock and fossil evidence indicates that all of the earth's present-day continents were connected in a supercontinent called Pangea.
- (e) New crust generates from subduction zones which are highly tectonically active.

### 4. Label the Layers of Earth's Atmosphere

5



### 5. Label the Layers of Earth's Interior and write down their overall composition and rheology.

5

