A-578

Total Pages: 3 Roll No.

EVS-605

ATMOSPHERE AND CLIMATE CHANGE

M.Sc. Environmental Science (MSCES)

4th Semester Examination, 2024 (June)

Time: 2:00 Hrs. Max. Marks: 70

Note:— This paper is of Seventy (70) marks divided into Two (02) Sections 'A' and 'B'. Attempt the questions contained in these Sections according to the detailed instructions given therein. Candidates should limit their answers to the questions on the given answer sheet. No additional (B) answer sheet will be issued.

Section-A

Long Answer Type Questions $2 \times 19 = 38$

- Note: Section 'A' contains Five (05) Long-answer type questions of Nineteen (19) marks each.

 Learners are required to answer any two (02) questions only.
- Q. 1. Define Climate Change. Describe the impacts of climate change with suitable examples.

(1)

- Q. 2. Write short notes on any three of the following:
 - (a) Gaia hypothesis
 - (b) Air-sea interaction
 - (c) Global Energy Balance
 - (d) Natural climate change
- Q. 3. Describe the basic properties, movement in the atmosphere at global, regional and local scale of the atmosphere.
- Q. 4. Describe the impact of anthropogenic activities on climate with suitable examples.
- Q. 5. Describe the effects of climate change on species distribution, extinction risk, spread of diseases and productivity in a forest ecosystem.

Section-B

Short Answer Type Questions $4 \times 8 = 32$

- **Note:** Section 'B' contains Eight (08) Short-answer type questions of Eight (08) marks each. Learners are required to answer any *four* (04) questions only.
- Q. 1. Write short notes on any two of the following:
 - (a) Greenhouse gases and greenhouse effects
 - (b) Southern oscillations and cyclones
 - (c) Global warming
 - (d) Kyoto protocol

A-578/EVS-605 (2)

- Q. 2. Describe the Wind stability and turbulence.
- Q. 3. Describe the energy balance of atmosphere.
- Q. 4. Describe the classification and variability of climate change.
- Q. 5. What are Glacial Cycles? Briefly describe them.
- Q. 6. What are tree rings? Briefly describe the importance of tree rings.
- Q. 7. What is Global Warming? Describe the role of greenhouse gases on global warming.
- Q. 8. What are the major Indian initiatives on climate? Briefly describe them.
