| Reg. No Name . | 25P2015 |
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## M. Sc. DEGREE END SEMESTER EXAMINATION - APRIL 2025 SEMESTER 2 : ENVIRONMENTAL SCIENCE

COURSE: 24P2EVST05: EARTH AND ATMOSPHERE

(For Regular - 2025 Admission)

| Durat  | (For Regular - 2025 Admission) ion : Three Hours                  | Max. Weights: 30                |  |  |
|--------|---|---------------------------------|--|--|
| PART A |   |                                 |  |  |
|        | Answer any 8 questions  | Weight: 1                       |  |  |
| 1.     | Briefly explain the formation of oceans.                          | (An, CO 1)                      |  |  |
| 2.     | Explain the significance of water vapour in the atmosphere.       | (A, CO 3)                       |  |  |
| 3.     | Comment on the chemistry of Earth's atmosphere.                   | (U, CO 1, CO                    |  |  |
|        |   | 4)                              |  |  |
| 4.     | What is meant by water logging?                                   | (U, CO 2)                       |  |  |
| 5.     | Define ENSO.  | (R, CO 3)                       |  |  |
| 6.     | Distinguish between physical and chemical weathering.             | (A, CO 1, CO<br>4)              |  |  |
| 7.     | Discuss water cycle.  | (R, CO 5, CO 6)                 |  |  |
| 8.     | Discuss nearshore currents.                                       | (A, CO 5, CO<br>6)              |  |  |
| 9.     | Comment on components of the Earth's life-support system.         | (R, CO 1)                       |  |  |
| 10.    | Define salinization.  | (R, CO 2)<br><b>(1 x 8 = 8)</b> |  |  |
|        | PART B  |                                 |  |  |
|        | Answer any 6 questions  | Weights: 2                      |  |  |
| 11.    | Explain the role of microbes in soil.                             | (An, CO 1, CO<br>4)             |  |  |
| 12.    | Describe the anatomy of waves with image.                         | (An)                            |  |  |
| 13.    | What do you know about landscape ecology? Discuss its importance. | (U, CO 2)                       |  |  |
| 14.    | Briefly describe the formation of backwaters.                     | (An, CO 5, CO<br>6)             |  |  |
| 15.    | Briefly describe the formation of oxygen in the atmosphere.       | (R, CO 1)                       |  |  |
| 16.    | What do you mean by Geomorphological processes?                   | (E, CO 1, CO 4)                 |  |  |
| 17.    | Discuss the global distribution of precipitation.                 | (E, CO 3)                       |  |  |
| 18.    | Discuss beach system with suitable diagram.                       | (A, CO 5, CO                    |  |  |
|        |   | 6)<br><b>(2 x 6 = 12)</b>       |  |  |

## PART C Answer any 2 guestions

|     | Answer any 2 questions   | Weights: 5          |
|-----|--|---------------------|
| 19. | Explain water cycle and different aquatic habitats.  | (An, CO 1, CO<br>4) |
| 20. | Explain the Physico-chemical characteristics, divisions and composition of atmosphere and comment on the significance of atmospheric components. | (E, CO 1, CO 4)     |
| 21. | Write an essay on erosional and depositional features with reference to Kerala Coast.  | (A, CO 5, CO<br>6)  |
| 22. | Explain Koeppen's classification of climate and comment on its ecological significance.  | (A, CO 3)           |
|     | •  | (5 x 2 = 10)        |

## **OBE: Questions to Course Outcome Mapping**

| СО   | Course Outcome Description   | CL | Questions                      | Total<br>Wt. |
|------|--|----|--------------------------------|--------------|
| CO 1 | Outline the concept of life and life supporting systems                                    | U  | 1, 3, 6, 9, 11, 15, 16, 19, 20 | 20           |
| CO 2 | Formulate plans for ecological assessment of landscape for vegetation and habitats         | Cr | 4, 10, 13                      | 4            |
| CO 3 | Identify the importance of weather and climatic patterns                                   | U  | 2, 5, 17, 22                   | 9            |
| CO 4 | Examine the effect of climate change on ecosystems and human welfare                       | An | 3, 6, 11, 16, 19, 20           | 16           |
| CO 5 | Summarize the climatic regions of India with special reference to tropical monsoon climate | An | 7, 8, 14, 18, 21               | 11           |
| CO 6 | Develop knowledge on how to effectively manage the various water resources                 | Cr | 7, 8, 14, 18, 21               | 11           |

Cognitive Level (CL): Cr - CREATE; E - EVALUATE; An - ANALYZE; A - APPLY; U - UNDERSTAND; R - REMEMBER;