

| Name: Set 2 Enrolment No: | |  | |
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| UPES End Semester Examination, December 2023 | | | |
| Course: Weather Forecasting Program: B.Sc (H):Physics Course Code: PHYS2021 | | Semester: III Time : 03 hrs. Max. Marks: 100 | |
| Instructions: All Questions are compulsory | | | |
| SECTION A (5Q x 4 = 20Marks) | | | |
| S. No. | | Marks | CO |
| Q 1 | Draw the graph to show the variation of temperature and pressure with altitude. | 4 | CO2 |
| Q 2 | What is the significance of traditional weather forecasting methods? | 4 | CO1 |
| Q 3 | What do you mean by Air masses? | 4 | CO1 |
| Q 4 | Discuss the depletion of the ozone layer | 4 | CO1 |
| Q 5 | Define and analyze the formation of Geostrophic Winds | 4 | CO2 |
| SECTION B (4Q x 10 = 40 Marks) Question 9 consists of an internal choice. | | | |
| Q 6 | What are temperature sensors? Classify different types of temperature sensors and discuss their applications. | 10 | CO1 |
| Q 7 | What do you mean by scattering of electromagnetic radiation? Discuss the role of different types of scattering processes in the atmosphere. | 10 | CO2 |
| Q 8 | What is a Jet Stream? Explain the formation of different types of Jet streams. | 10 | CO3 |
| Q 9 | What do you mean by precipitation? Discuss in detail the different types of precipitation prevalent in different climate zones. Or | 10 | CO3 |
| | Discuss the formation and classification of different types of clouds. | 10 | |
| SECTION-C (2Q x 20 = 40 Marks) Question 11 consists of an internal choice. | | | |
| Q 10 | a) Explain the concept of Global Warming and its overall impact on the society. | 10 | CO3 |

