

Syllabus for National Meteorological Olympiad (Junior category)

Chapter 1: Introduction to Weather & Climate System

- Introduction to Weather and Climate, The Earth in the Solar System, Origin and Evolution of Our Atmosphere and Ocean, Composition and Structure of Atmosphere and Ocean, India Meteorological Department, World Meteorological Organisation.

Chapter 2: Weather and Climate Processes

- Principles of Weather and Climate Systems, Observing systems, Weather and Climate: Differences and Similarities, Weather systems, Weather and Climate Forecasting Process, Seasons, Rainfall and Monsoons (southwest and northeast).

Chapter 3: Natural Hazards and Disasters

- Introduction to Natural Hazards, Types of natural Hazards, Hydro-meteorological hazards over India, Cyclones: Climatology and impacts, Thunderstorm and Lightning: climatology and impacts, Heat Waves and Cold Waves: climatology and impacts; Floods and Droughts, Fog.

Chapter 4: Hazard Prediction, Warning Systems, and Disaster Management

- Prediction of Natural Hazards, Early Warning Systems and its components, Role of Early Warnings in Disaster Risk Reduction, IMD's Website: A Vital Resource for Weather Forecasting and Disaster Management, Involving Communities in Hazard Preparedness.

Chapter 5: Climate Change: Causes and Impacts

- What is Climate Change?, Causes of Climate Change, Impacts of Climate Change, Climate Change Adaptation and Mitigation.