लोकसेवा आयोग
नेपाल इन्जिनियरिङ्ग सेवा, मेटेरियोरोलोजी समूहको राजपत्रांकित द्वितीय श्रेणी (खुला र आन्तरिक प्रतियोगिता) को लिखित परीक्षाको पाठ्यक्रम

द्वितीय पत्र - समूह सम्बन्धी

1. Physical Meteorology
   - 1.1 Composition of the atmosphere
   - 1.2 Radiation in the earth-atmosphere system
   - 1.3 Optical Phenomena
   - 1.4 Hydrostatic equation
   - 1.5 Stability criteria in the atmosphere
2. Station Network and Observation
   - 2.1 Surface synoptic station and operation
   - 2.2 Upper - air synoptic station and operation
   - 2.3 Meteorological Satellites
   - 2.4 Special weather observation for agriculture and aviation
   - 2.5 Application to Air pollution
3. Synoptic Meteorology
   - 3.1 Air mass and frontal system
   - 3.2 Monsoon
   - 3.3 Analysis of upper air and surface charts
   - 3.4 Streamline and Isotach
4. Weather System
   - 4.1 Subtropical cyclones and anticyclones
   - 4.2 Tropical cyclones
   - 4.3 Topographical effect in the weather system
5. Dynamic Meteorology
   - 5.1 Equation of motion
   - 5.2 Circulation and vorticity
   - 5.3 Equation of continuity
   - 5.4 Numerical weather prediction
   - 5.5 Thermodynamics of the atmosphere
6. Climatology
   - 6.1 Scope and content of climatology
   - 6.2 Solar and Terrestrial Radiation
   - 6.3 Pressure-wind distribution at the surface and upper air
   - 6.4 Climatic classification
7. Forecasting
   - 7.1 Graphical methods and their application in weather progress
   - 7.2 Kinematics of wind and pressure fields
   - 7.3 Synoptic weather forecasting
   - 7.4 Interaction of tropical and extratropical system
   - 7.5 Mountain Meteorology
   - 7.6 Weather forecasting with special reference to Nepal
8. Tropical Meteorology
   - 8.1 Circulation in the troposphere
   - 8.2 Synoptic disturbances
   - 8.3 Diurnal and local effects
   - 8.4 Jet stream phenomena in tropics
   - 8.5 Ocean and atmosphere interaction
   - 8.6 Quasi - biennial Oscillation