P.G. 1st Semester-2017 GEOGRAPHY

Paper : MGEOCCT-102

Full Marks : 40 Time : 2 HoursThe figures in the right-hand margin indicate marks.Candidates are required to give their answers in their own words as far as practicable.

Answer four questions, selecting one from each Unit.

#### Unit–I

(Atmospheric Processes)

- Differentiate heat budget from heat balance. Explain energy budget of the earth atmospheric system in the context of global warming. 3+7=10
- 2. Explain vertical distribution of temperature in atmosphere with illustration. Elucidate the mechanism of global circulation of wind.

3+7=10

### Unit-II

### (Condensation and Precipitation)

- Discuss the role of water vapour in atmosphere.
  Write a short note on the process of condensation.
  6+4
- Distinguish between diabatic and adiabatic lapse rate.
  Explain the weather conditions associated with different forms of adiabatic lapse rate. 3+7=10

### Unit–III

(Weather Disturbances and Forecasting)

- State the weather conditions of ITCZ. Illuminate on the mechanism of tropical cyclone formation with suitable illustrations. 2+8=10
- Explain different methods of weather forecasting with suitable examples. Why is short-term forecasting important?
  8+2=10

## Unit-IV

# (Classification and Applied Issues)

- Discuss the world classification of climate according to Thornthwaite, 1948. What is cloud burst? 7+3=10
- Name the main agro-climatic regions of India. Point out the climatic changes occurred during the geological time scale. 3+7=10

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