### 3 SEM TDC GGR M 1

2017

( November )

### **GEOGRAPHY**

(Major)

Course: 301

(Climatology)

Full Marks: 48
Pass Marks: 19/14

Time: 2 hours

The figures in the margin indicate full marks for the questions

- 1. Answer the following as directed:  $1 \times 5 = 5$ 
  - (a) Name the layer of the atmosphere which acts as a filter for the ultraviolet rays of the sun.
  - (b) Westerlies/Trade winds in the southern hemisphere are known as roaring forties.

( Choose the correct answer )

(c) \_\_\_\_ precipitation is commonly found on the windward sides of mountain ranges.

(Fill in the blank)



(d) The hurricane is a tropical cyclone/ temperate cyclone.

( Choose the correct answer )

- (e) Thornthwaite's second classification is based on the concept of potential \_\_\_\_\_.
  ( Fill in the blank )
- Write short answers of the following questions (within 150 words each): 4×3=12
  - (a) State briefly about the troposphere.
  - (b) Give a brief description of convectional precipitation.
  - (c) State the limitations of either Köppen's or Thornthwaite's classification of climates.

Each of the following questions is to be answered within 450 words:

### UNIT-I

# ( Atmosphere )

Define weather and climate. Explain how does altitude affect the climate of a place.

2+2+6=10

O

Give a brief description of the Indian monsoon system.

10

#### UNIT-II

## ( Humidity and Precipitation )

4. What do you mean by the terms 'humidity', 'evaporation' and 'condensation'? Mention the different forms of condensation. 6+4=10

Or

Define front. Classify fronts into different types and describe briefly any one of them.

2+4+4=10

#### UNIT-III

# ( Classification of Climates )

5. State the basis of Köppen's climatic classification. Mentioning the five principal categories of climate in the Köppen's climatic classification, give a brief description of any one of them.

5+6=11

Or

Classify Indian climates and give a brief description of any two of them mentioning the related plants.

11

