

**3 SEM TDC GGR M 1**

**2 0 1 6**

( November )

**GEOGRAPHY**

( Major )

Course : 301

( **Climatology** )

*Full Marks : 48*

*Pass Marks : 19 (Backlog) / 14 (2014 onwards)*

*Time : 2 hours*

*The figures in the margin indicate full marks  
for the questions*

1. Answer the following as directed : 1×5=5

(a) \_\_\_\_\_ are commonly used to show the horizontal distribution of temperature on maps.

( Fill in the blank )

(b) All the hot deserts of the world are located in the subtropical high pressure belt.

( Write True or False )

- (c) \_\_\_\_\_ is a general term referring to the water vapour content of air at any one time and place.

( Fill in the blank )

- (d) What is the full form of CT air mass?
- (e) In Koppen's climatic classification, there is only one category of climatic groups which is based on precipitation characteristics. Name that category.

2. Write short answers (**within 150 words** each) :

4×3=12

- (a) State briefly about radiation, conduction and convection—the three processes of heat energy transfer.
- (b) Describe briefly the concept of hydrological cycle.
- (c) Show how climatic changes affect human activities.

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

UNIT—I

( **Atmosphere** )

3. Describe the composition of the atmosphere. What do you mean by the structure of the atmosphere?

8+2=10

( 3 )

Or

What is meant by heat budget of the earth?  
Discuss the mechanism of the heat budget of  
the earth with the help of a suitable diagram.

2+8=10

UNIT—II

( Humidity and Precipitation )

4. What is air mass? What is an air mass source region? Classify the air masses into different types. 1+2+7=10

Or

What is cyclone? Distinguish between the tropical cyclone and the temperate cyclone.

2+8=10

UNIT—III

( Classification of Climates )

5. Describe the Thornthwaite's climatic classification of *either* 1931 *or* 1948. Mention any one limitation of that particular classification. 10+1=11

Or

Who was Koppen? Examine the advantages and limitations of Koppen's climatic classification. 1+10=11

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