3 SEM TDC GGR M 1

2014

(November)

GEOGRAPHY

(Major)

Course: 301

(Climatology)

Full Marks: 48 Pass Marks: 19

Time: 2 hours

The figures in the margin indicate full marks for the questions

1. Answer the following as directed: $1 \times 5 = 5$

- In which layer of the atmosphere the (a) ionization begins to occur?
- (b) Name the process of transmission of energy from one body to another without the aid of a material medium.
- (c) The equatorial belt of calms and variable winds is known as ---. (Fill up the gap)

- (d) What was the concept developed by Vilhelm Bjerknes and Jacob Bjerknes?
- (e) Hurricane is a tropical cyclone.(Write True or False)
- 2. Write short answers of the following (within 150 words each): 4×3=12
 - (a) State about the composition of the atmosphere.
 - (b) Write a note on the weather associated with a warm front.
 - (c) Write about the recent trends of climate change.

UNIT-I

(Atmosphere)

(To be answered within 450 words)

Mentioning the different layers of the atmosphere, discuss the characteristics of each of them.

Or

Give an account of the pressure belts of the earth and their relation to the planetary wind system. Draw a suitable diagram. 8+2=10

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UNIT-II

(Humidity and Precipitation)

(To be answered within 450 words)

 Define air mass. Classify air masses into different types.

Or

What is temperate cyclone? Describe with diagrams the life cycle of a temperate cyclone. 1+9=10

UNIT-III

(Classification of Climates)

(To be answered within 450 words)

5. Discuss the Thornthwaite's 1931 classification of climates.

Or

Mentioning the five principal categories of climates as recognized by Koppen, discuss the advantages and limitations of his classification.

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