3 SEM TDC GGR M 1

2018

(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: 1×5=5
 - (a) The difference of pressure between two places is known as pressure _____.
 (Fill in the blank)
 - (b) In which layer of the atmosphere do almost all the weather phenomenon occur?
 - (c) Name the permanent wind that blows from the subtropical high-pressure belt to the equatorial low-pressure belt.

(d) The total weight of moisture content per volume of air at definite temperature and point of time is called absolute / relative / specific humidity.

(Choose the correct answer)

- (e) What type of climate does the capital letter 'B' mean in Köppen's climatic classification?
- Write short answers of the following questions (within 120 words each): 4×3=12
 - (a) Write in brief about the composition of the atmosphere.
 - (b) State briefly the concepts of frontogenesis and frontolysis.
 - (c) Mentioning the climatic zones of India, briefly correlate them to the existing animal lives.

Each of the following questions is to be answered within 350 words:

UNIT-I

(Atmosphere)

 Give an account of the factors controlling the vertical distribution of atmospheric temperature. Write in brief about the phenomenon of inversion of temperature.

6+4=10

Or

Mentioning the general distribution of pressure belts of the earth, show its influence on the wind system. 5+5=10

UNIT-II

(Humidity and Precipitation)

 Discuss the concept of hydrological cycle with a suitable diagram.

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What is a tropical cyclone? How does it originate? Classify it into different types.

2+3+5=10

UNIT-III

(Classification of Climates)

 Give an account of Thornthwaite's scheme of climatic classification. State the reasons why his scheme could not gain popularity. 8+3=11

Or

What is the latest trend in climatic change?
What are its indicators? Discuss its impact
on human activities. 2+4+5=11
