



বিদ্যাসাগর বিশ্ববিদ্যালয়

**VIDYASAGAR UNIVERSITY**

**B.F.Sc. 1st Semester Examination 2021**

**PAPER—BFSC-102**

**METEOROLOGY, CLIMATOLOGY AND GEOGRAPHY**

*Full Marks : 70*

*Time : 3 Hours*

*The figures in the right-hand margin indicate full marks.*

*Candidates are required to give their answers in their own words as far as practicable.*

*Illustrate the answers wherever necessary.*

**THEORY**

1. Answer any *ten* questions.

10×2

- (a) State the difference between relative humidity and specific humidity.
- (b) Define the bidirectional pattern of monsoon wind in India.
- (c) Give the basic descriptions of ionosphere.
- (d) Define the different process of heat transformation.

- (e) What is horse latitude?
- (f) Why is distribution of rainfall uneven in India?
- (g) How temperature effects on specific humidity?
- (h) What are the characteristics of severe tropical cyclone?
- (i) What is the difference between land breeze and sea breeze?
- (j) Explain the term burst of the Monsoon.
- (k) Define the Inter Tropical Convergence Zone (ITCZ).
- (l) How do you separate the drizzle from precipitation?
- (m) What is Coriolis force?
- (n) How does topography affect the climate of a place?
- (o) What is Typhoon?

**2.** Answer any six questions.

6×5

- (a) Discuss the mode of Indian monsoon.
- (b) Describe the effect of western disturbances on the Indian climate.
- (c) Describe with examples how distance from the sea influences the climate of a place.
- (d) Why do the Western Ghats receive more rainfall than the Eastern Ghats?
- (e) Write a short note on different stage of thunderstorm development.

- (f) Briefly describe the different forms of precipitation.
- (g) Where do tropical cyclone form and briefly describe the horizontal structure of tropical cyclone?
- (h) Illustrate the different factor of wind motion.
- (i) Briefly discuss the vertical temperature gradient of the atmosphere.
- (j) Why most of the world's tropical deserts located on the Western margins of continents?

### PRACTICAL

Answer any *two* questions. 2×10

1. Draw and describe diagrammatic representation of Atmospheric structure. 10
2. Draw and label the structure of Six's Max-Min Thermometer. 5+5
3. Draw and label the structure of the following clouds 5×2
  - (a) Cumulo-nimbus
  - (b) Nimbo-stratus
  - (c) Strato-cumulus
  - (d) Alto-stratus
  - (e) Cirro-cumulus.
4. Explain weather forecasting and discuss the role of satellite in weather forecasting. 10

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