

20P354

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Name.....

Reg. No.....

THIRD SEMESTER M.Sc. DEGREE EXAMINATION, NOVEMBER 2021

(CBCSS-PG)

(Regular/Supplementary/Improvement)

CC19P GEL3 E01a - CLIMATOLOGY

(Applied Geology)

(2019 Admission onwards)

Time: Three Hours

Maximum: 30 Weightage

I. Short answer type questions. Answer any *four* questions. Each question carries 2 weightage.

1. List the main contributions to the content of argon in atmosphere.
2. How does ozone layer protects life on earth?
3. Explain prevailing westerlies.
4. Discuss absolutely stable air.
5. Assess how friction affects wind movement.
6. Differentiate between humidity and relative humidity.
7. Examine the conditions necessary to form hail.

(4 × 2 = 8 Weightage)

II. Short essay questions. Answer any *four* questions. Each question carries 3 weightage.

8. Explain the temperature inversion in stratosphere.
9. Forms of condensation.
10. Differentiate between thermally direct and indirect circulation cells.
11. Types of winds.
12. Examine the formation of cumulonimbus clouds.
13. Insolation.
14. Evaluate the source for the enormous amount of energy that powers a tropical cyclone.

(4 × 3 = 12 Weightage)

III. Long essay. Answer *two* questions. Each question carries 5 weightage.

15. Compare and contrast homosphere and heterosphere. Assess the sources of methane in atmosphere.
16. Elucidate the influence of temperature on dew point. Explain the effect of drag and gravity on precipitation.
17. Explain Koppen's and Thornthwaite's classification of climate.
18. Explain the formation of subtropical jet streams. The global high-pressure zones are not in the forms of continuous belts but as isolated cells. Elucidate.

(2 × 5 = 10 Weightage)
