19P354	(Pages: 1)	Name
		Reg. No

## THIRD SEMESTER M.Sc. DEGREE EXAMINATION, NOVEMBER 2020 (CBCSS-PG)

## CC19P GEL3 E01a - CLIMATOLOGY

(Applied Geology)
(2019 Admission Regular)

Time: Three Hours

Maximum: 30 Weightage

- I. Short answer type questions. Answer any *four* questions. Each question carries 2 weightage.
  - 1. What is Dew Point?
  - 2. Comment on the formation of polar jet streams.
  - 3. Elucidate how are tropical cyclones formed.
  - 4. Why all clouds do not cause precipitation?
  - 5. Discuss the effect of friction on wind movement.
  - 6. State the ellipticity of earth's orbit around the sun.
  - 7. What are geostrophic winds?

 $(4 \times 2 = 8 \text{ Weightage})$ 

- II. Short essay questions. Answer any *four* questions. Each question carries 3 weightage.
  - 8. Describe the ionosphere. Explain the factors affecting escape velocity of a gas.
  - 9. Discuss the formation of Ferrel circulation.
  - 10. Differentiate between thermally direct and indirect circulation cells.
  - 11. Explain insolation.
  - 12. Types of Fronts.
  - 13. Discuss any two types of fog and their genesis.
  - 14. Assess the driving mechanism of jet streams.

 $(4 \times 3 = 12 \text{ Weightage})$ 

- III. Long essay. Answer any two questions. Each question carries 5 weightage.
  - 15. Examine the formation of ozone in the atmosphere. Appraise the effect of ozone in troposphere and stratosphere.
  - 16. Elucidate the formation of ITCZ and global belts of high and low pressure.
  - 17. Analyse the conditions that give rise to any two types of fog. Differentiate between wet adiabatic and environmental lapse rates.
  - 18. Explain classification of Climate.

 $(2 \times 5 = 10 \text{ Weightage})$