136(Sc)NS

UG-II/Geog.-IV(H)/NS/Supple/20

2020

GEOGRAPHY

[HONOURS]

Paper: IV

[NEW SYLLABUS]

[SUPPLEMENTARY]

Full Marks: 75

Time: 4 Hours

The figures in the right-hand margin indicate marks.

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

GROUP-A

(Climatology)

[Marks : 35]

1. Answer any **three** of the following questions:

 $1 \times 3 = 3$

- a) What do you mean by 'hygroscopic nuclei'?
- b) What is 'pressure gradient'?
- c) What is 'Jet maxima'?
- d) What is 'Chinook'?
- e) Define thermal anomaly.
- 2. Answer any **five** of the following questions:

 $2 \times 5 = 10$

a) What is 'occlusion'?

[Turn Over]

- b) Differentiate cyclone from anti-cyclone.
- c) Define 'Coriolis Force'.
- d) What is 'Horse Latitude'?
- e) What is 'Typhoon'?
- f) What do you mean by 'Burst of Monsoon'?
- g) What is 'Adiabatic Lapse Rate'?
- h) Distinguish between 'Katabatic' and 'Anabatic' wind?
- 3. Answer any **two** of the following questions:

 $6 \times 2 = 12$

- a) Explain the influence of jet stream on India.
- b) Bring out the relationship of pressure belts with planetary wind system of the world.
- c) Outline the factors controlling insolation.
- 4. Answer any **one** of the following: $10 \times 1 = 10$
 - a) Classify air masses on the basis of their origin.
 - b) Give an outline of the climatic classification after Koppen mentioning its merits and demerits.

GROUP-B

(Hydrology)

[Marks : 20]

- 5. Answer any **two** of the following questions: $1 \times 2 = 2$
 - a) Define 'hydrograph'.
 - b) What is aquifer?

136(Sc)NS

[2]

- c) What do you mean by 'seepage'?
- d) What is 'evapotranspiration'?
- 6. Answer any **one** question of the following:

 $2\times1=2$

- a) Define 'run off'.
- b) What do you mean by FMD in run off efficiency study?
- c) What do you mean by 'vados'?
- 7. Answer any **one** of the following:

 $6 \times 1 = 6$

- a) Bring out the controlling factors of infiltration.
- b) Analyse the impact of global warming on global hydrological cycle.
- 8. Answer any **one** of the following: $10 \times 1 = 10$
 - a) Explain the processes of storage and movement of ground water.
 - b) Elaborate the content of hydrology with its relevance in geography.

GROUP-C

(Oceanography)

[Marks : 20]

9. Answer any **two** of the following:

 $1 \times 2 = 2$

- a) What is 'Guyot'?
- b) What do you understand by 'Sargasso Sea'?

- c) What is known as OTEG?
- d) What is 'ooze'?
- 10. Answer any **one** of the following:

 $2 \times 1 = 2$

- a) Differentiate 'continental shelf' from 'continental slope'.
- b) What is 'thermocline'?
- c) Mention any two significant features of 'mid Atlantic ridge'.
- 11. Answer any **one** of the following questions:

 $6 \times 1 = 6$

- a) Explain the causes of temperature differentiation of the Arabian Sea and Red Sea.
- b) Illustrate the oceanic trenches of the Indian Ocean.
- 12. Answer any **one** of the following questions:

 $10 \times 1 = 10$

- a) Bring out the similarities and dissimilarities between the topography of Atlantic and the Pacific Ocean floors.
- b) Describe the nature and scope of Oceanography.