# 2020

## **GEOGRAPHY**

[HONOURS]

Paper: V
[OLD 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**

(Oceanography)

(Marks: 25)

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

 $1\times3=3$ 

- a) What is a 'Guyot'?
- b) What do you mean by 'Monsoon Drift'?
- c) Define 'photic zone'.
- d) What is meant by 'cold wall'?
- e) What do you understand by 'coral banks'?

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

 $2\times3=6$ 

- Mention ecological effects of salinity on sea water.
- b) How kinetic energy in the ocean water is generated?
- c) Classify atoll.
- d) What is meant by 'terrigenous deposits'?
- e) What do you understand by 'Pycnocline'?
- 3. Answer any **one** of the following questions:

 $6 \times 1 = 6$ 

- a) Elucidate the factors controlling oceanic salinity.
- b) Explain the origin of the continental shelves.
- 4. Answer any **one** of the following questions:

 $10 \times 1 = 10$ 

- a) Critically evaluate the theories of the origin of coral reefs.
- b) Give an account of the dynamics of ocean currents of the Indian Ocean.

#### **GROUP-B**

### (RS / GIS)

(Marks : 50)

5. Answer any **two** of the following questions:

 $1\times2=2$ 

- a) What is RBV?
- b) What is ERTS?
- c) What is MSS?
- d) What is NRSA?
- 6. Answer any **five** of the following questions:

 $2 \times 5 = 10$ 

- a) Differentiate GIS from CAC.
- b) What is meant by the space segment of GPS?
- c) What do you understand by LISS?
- d) What is the difference between a FCC and standard FCC?
- e) Distinguish between Whisk broom and Push broom scanner.
- f) Justify the requirement for testing stereoscopic vision.
- g) What is a 'diffuse reflector'?
- h) What is 'relief displacement'?

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

 $6 \times 3 = 18$ 

- a) Describe the importance of remote sensing in water resource management.
- b) Elucidate the role of RS and GIS in modern Cartography.
- c) Distinguish between Raster and Vector data structure with necessry illustrations.
- d) Bring out the incidence of parallax in a stereopair of aerial photographs with illustration.
- e) Explain how aerial photographs are taken.
- 8. Answer any **two** of the following questions:

 $10 \times 2 = 20$ 

- Explain data storage and data manipulation in GIS domain.
- b) Analyse the role of RS and GIS in fishing, forestry and agriculture.
- c) Explain Remote Sensing in detail and make a comparison between LANDSAT and SPOT.
- d) Describe the function of any five photo interpretation keys.

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