

**2022****GEOGRAPHY****[HONOURS]****Paper : VIII**

Full Marks : 80

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****(Contemporary Issues in Geography)****(Marks: 30)**

1. Answer any **four** from the following:  $1 \times 4 = 4$
- Name a man-made hazard taken place in India.
  - What is agricultural drought?
  - What is *flash flood*?
  - What is landslide?
  - What is bio-diversity hotspot?
  - What is meant by meteorological drought?

2. Answer any **two** from the following:  $2 \times 2 = 4$
- What do you understand by *habitat loss*?
  - What is inversion of temperature?
  - Differentiate hazard from disaster.
  - What do you mean by quasi-natural hazard?
3. Answer any **two** from the following:  $6 \times 2 = 12$
- Assess *dams* as a flood control measures.
  - Compare the natural and quasi-natural hazards with examples.
  - Highlight the causes of deforestation in India.
  - Bring out the major impacts of drought in India.
4. Answer any **one** from the following:  $10 \times 1 = 10$
- Explain the mechanism and consequences of tornado.
  - Enunciate the major causes of bio-diversity loss and explain the conservation measures.

**GROUP-B**  
**(Remote Sensing and GIS)**  
**(Marks: 50)**

5. Answer any **four** of the following:  $1 \times 4 = 4$

- a) What is meant by Pixel?
- b) Give an Indian example of telecommunication satellite.
- c) What is FCC?
- d) Define 'nadir' in aerial photography.
- e) Define temporal resolution.
- f) What is spectral signature?

6. Answer any **four** from the following:  $2 \times 4 = 8$

- a) Differentiate visual from digital technique of image interpretation.
- b) Distinguish between aerial photo and satellite imagery.
- c) What is SPOT?
- d) What is meant by GPS?
- e) Differentiate raster data from vector data.
- f) Define photogrammetry.

7. Answer any **three** from the following:  $6 \times 3 = 18$

- a) Discuss the type of aerial photographs with their bases.
- b) State the salient characteristics of sensors used in remote sensing.
- c) Differentiate the supervised from unsupervised technique of image interpretation.
- d) State the role of RS and GIS in Digital Cartography.
- e) Highlight the role of shadow, site and association with suitable examples in photo interpretation.

8. Answer any **two** from the following:  $10 \times 2 = 20$

- a) Elucidate the role of photo-interpretation keys in visual image interpretation with necessary examples.
- b) Write an account on the digital techniques of image interpretation.
- c) Explain the application of RS and GIS in managing agriculture, forestry and water resources.