

## M.Sc. Sem.-1 Examination

403

## Geoinformatics

March 2022

Time : 2-00 Hours]

[Max. Marks : 50

Instructions: All questions in Section –I carry equal marks.  
 Attempt any Three questions in Section-I.  
 Questions I in Section-II is COMPULSORY.

## Section-i

Q-I	A Define the Nature of Climatology	7
	B What do you know about the Scope of Climatology	7
Q-II	A Evolution of Earth's Atmosphere	7
	B Explain the Structure and Composition of Earth Atmosphere	7
Q-III	A Explain the Climate affecting factors the climatic parameters such as Solar Insolation, temperature	7
	B How the pressure and wind are affecting the Climate.	7
Q-IV	A Explain the concept and characteristics of Jet stream and Air masses.	7
	B Define the Fronts, characteristics, movements, frontogenesis	7
Q-V	A Given the Physical properties of sea water	7
	B Explain the chemical properties of sea water	7
Q-VI	A What are the main Factors affecting the distribution of temperature	7
	B Explain the Factors which are affecting the distribution of Salinity	7
Q-VII	A Define Marine Ecosystem and biozones, Plankton, Nekton and Benthos.	7
	B Explain the concept and characteristics of ocean deposits and coral reef.	7

PTO

N 285-2

Q-VIII	A Impacts of Humans on the Marine Environment.	7
	B Assessing changes in ice-caps and coastal zone by RESOURCESAT Satellite.	7

**SectionII**

MCOs	8
------	---

1. Which type of climate consists of high humidity throughout the year and even in the dry season with variations in day and night temperatures?

- a) Hot wet
- b) Hot dry
- c) Cool dry
- d) Rainy

2. Which one of the following is correct descending order (% composition) of permanent gases of Atmosphere?

- a) Argon > Carbon dioxide > Neon > Helium
- b) Carbon dioxide > Argon > Neon > Helium
- c) Carbon dioxide > Argon > Helium > Neon
- d) Argon > Carbon dioxide > Helium > Neon

3. Consider the following statement (s) related to the Climatology

- a) Climate variability describes short-term changes in climate caused by naturally occurring events like El Niño or volcanic activity.
- b) Climate change is a warming or cooling in long-term weather patterns, at different places around the world.
- c) Both A and B
- d) Neither A nor B

4. Which one of the following is correct about Water Vapor?

- 1. Water vapor in atmosphere increases with altitude.
- 2. Water vapor decreases from the equator towards the pole.

Select the correct options:

- a) 1only
- b) 2 only
- c) Both
- d) None of the above

N 285-3

5. Which one of the following ocean currents is different from others?

- a) Labrador
- b) North Atlantic Drift
- c) Gulf stream
- d) Kuroshio

6. The formation of the Mid-Atlantic Ridge is a typical example of the process of

- a) Convergence
- b) Divergence
- c) Shear
- d) Seafloor spreading

Select the correct answer from the following codes:

- a) 1 and 3
- b) 2 and 4
- c) 1 and 2
- d) 2 and 3

7. The Sargasso sea is a part of the

- a) Arctic ocean
- b) Indian ocean
- c) North Atlantic ocean
- d) South Atlantic ocean

8. Consider the following statements.

1. On the planet Earth, the fresh water available for use amounts to about less than 1% of the total water found.
2. Of the total fresh water found on the planet Earth 95% is bound up in polar ice caps and glaciers.

Which of the statements given above is/are correct?

- a) Neither 1 nor 2
- b) Both 1 and 2
- c) Only 1
- d) Only 2