

SET-01

PART – A

[5]

1. Fill in the blanks: [0.5]

- a) The Upper part of the earth's crust is known as _____.
- b) _____ hemisphere is known as land hemisphere.
- c) _____ tide occurs when there is right angle between sun and moon
- d) When ice is formed salinity of surrounding water _____.
- e) _____ is the largest ocean of the world.

2. Matching Table: [0.5]

- a) Continental shelf - well-lit layer
- b) Aphotic - 2⁰
- c) Euphotic - twilight zone
- d) Dysphotic - 4⁰
- e) Continental rise - little or no sunlight

PART – B

[10]

3. Choose the correct answer or True/ False statement: (1 mark)

- a) Tides are horizontal movements of ocean water.
- b) Earth's rotation(Coriolis force) is a factor influencing Ocean currents.
- c) Wind energy is the primary force behind ocean wave formation.
- d) Temperature is determined by measuring electrical conductivity of seawater
- e) T-S diagram is useful in identifying water masses.

4. Differentiation or define or abbreviations or statement: (1 mark)

- a) SIAL
- b) PPT
- c) Thermocline
- d) Tidal Amplitude
- e) Sea ice

PART – C

[5 marks]

- 5. Describe in detail about the different layers of Earth's Interior with neatly labeled diagram.
- 6. What is wave? What are the forces behind wave formation? Explain about Tsunami.
- 7. Describe diurnal, semi-diurnal and mixed tide. Explain the process of tide formation in brief.

8. What are ocean currents? Explain Coriolis Force and its effect on ocean current. What is Ekman Spiral ?
9. Write short notes on any **One**:-
- a) Pacific Ocean,
 - b) Indian Ocean

SET-02

PART – A

2. Fill in the blanks: [0.5]

- a) The Inner Solid Core of earth consists of _____.
- g) _____ hemisphere is known as Marine hemisphere.
- h) _____ tide occurs during full moon and new moon.
- i) Number of gms of dissolved salts in 1000 gms of sea water is expressed as _____
- j) El Niño is a climate pattern observed in _____ ocean.

10. Matching Table: [0.5]

- a) El Niño - Goa
- b) NIO - Little girl
- c) La Nina - Chennai
- d) Mariana Trench - Little Boy
- e) NIOT - Pacific Ocean

PART – B

[10]

11. Choose the correct answer or True/ False statement: [1]

- a) Currents are vertical movements of ocean water.
- b) River flowing into the sea influences ocean salinity.
- c) Lunar gravitational pull is the main force behind tide formation.
- d) Freezing point of saltwater is -1.9°C .
- e) Thermocline is nonexistent in tropical ocean-water.

12. Differentiation or define or abbreviations or statement: [1]

- a) SIMA
- b) NIO
- c) Halocline
- d) Tidal Range
- e) Colligative property

PART – C (Answer any Three)

[5]

- 13. Describe the different features of Ocean floor with neatly labelled diagram.
- 14. Explain Wave Height, Wave Length, Wave Crest, trough and Wave period With suitable diagram.
- 15. What is tide? Describe the Tide producing forces. Write the difference between Spring tide and Neap tide.
- 16. Discuss in Brief about the physical properties of Ocean water.
- 17. Write short notes on any **One**:-
 - A) El Nino
 - B) Upwelling and Downwelling

