

1. Discuss with a suitable diagram “Types of Monsoon” as experienced on Indian sub continent. (10)
2. (a) Define “Gyre” of ocean current circulation? (4)

 (b) Explain Four different types of Gyre as formed over oceans across the world. (6)
3. a) Define “Depression” and explain the weather associated with it. (5)

 b) Analyse the origin, life and movement of frontal depressions, with neat diagrams. (5)
4. a) Explain prevailing weather conditions in the “Eye”, “Eye wall”, and “Outer Storm Area”, of a cyclone in Arabian Sea. (5)

 b) Write down the practical rules for safety of navigation in the vicinity of TRS in both the hemispheres. (5)
5. Draw the typical cross section of TRS showing following:

 Track, Vortex, Vertex, Path, Dangerous Quadrant, Dangerous Semi-circle and the navigable semi-circle, in a TRS region in Northern and Southern Hemispheres. (10)
6. a) Compare and contrast Tropical revolving storm with temperate latitude depression. (6)

 b) Explain at least four factors for the formation of a TRS. (4)
7. a) Explain the term “Weather Routing” and “Climatological Routeing”. (4)

 b) Enunciate factors for deriving optimal route plan. (6)
8. Write short notes (Weather Routing) :- (10)

 (i) Least Time Track (ii) Weather Routing Chart
9. a) Explain weather associated with Isobaric patterns such as (i) Col (ii) Ridge (4)

 b) Describe different types of Fog and three patterns of cloud. (6)
