PRISM WORLD

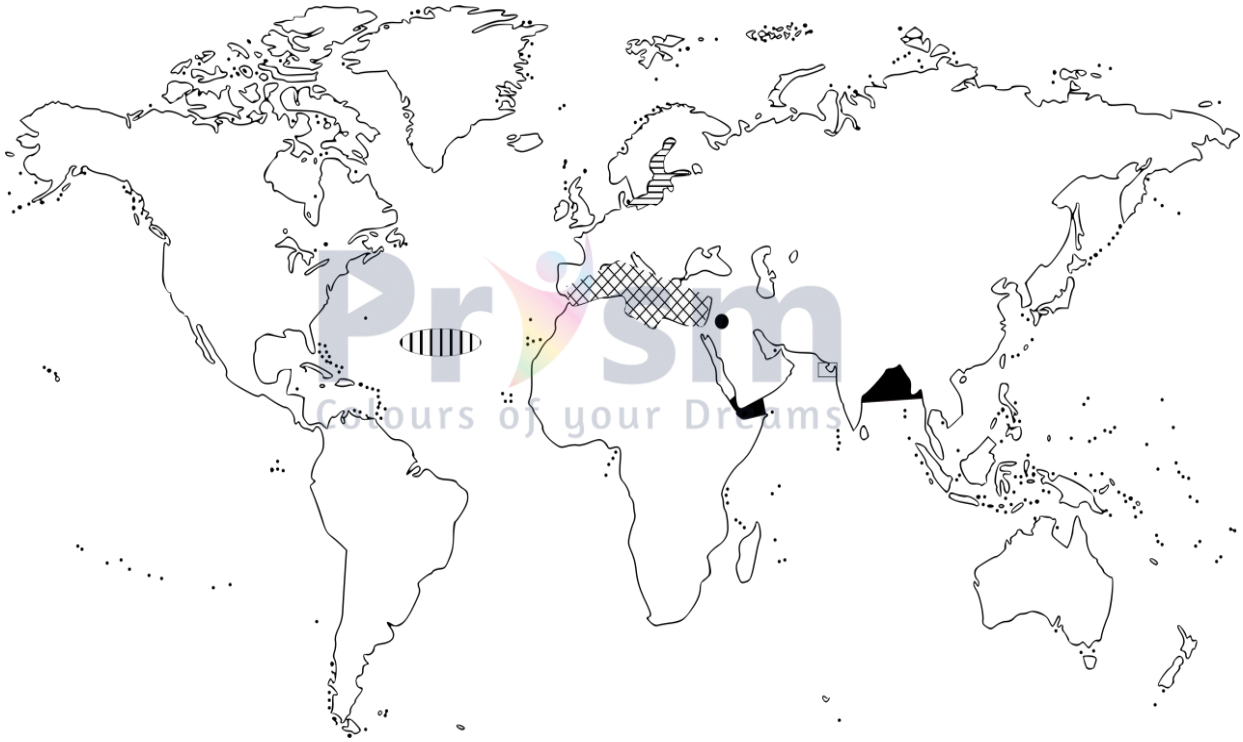
Std.: 9 (English) **Geography.**

Chapter: 6:

Q.1 **Mark the following in the outline map** **4**

1
i. Area of high salinity in Atlantic ocean.
ii. Dead sea.
iii. Part of Red sea having less salinity.
iv. Area of less salinity near India.
v. Baltic sea.
vi. Saltpan in India.
vii. Mediterranean sea.

Ans



i. Area of high salinity in Atlantic ocean.
ii. Dead sea.
iii. Part of Red sea having less salinity.
iv. Area of less salinity near India.
v. Baltic sea.
vi. Slat pan in India.
vii. Mediterranean sea.

Q.2 **Tick (✓) the correct option** **5**

1

	High	Medium	Low
Clear skies for the most part perpendicular sunrise			

Ans

	High	Medium	Low
Clear skies for the most part perpendicular sunrise	✓		

2

	High	Medium	Low
Less supply of fresh water desert area around			

Ans

	High	Medium	Low
Less supply of fresh water desert area around	✓		

3

	High	Medium	Low
Cloudy sky rainfall throughout the year			

Ans

	High	Medium	Low
Cloudy sky rainfall throughout the year		✓	

4

	High	Medium	Low
Slanting sunrays, melting snow			

Ans

	High	Medium	Low
Slanting sunrays, melting snow			✓

5

	High	Medium	Low
Continental location desert around low temperature low rainfall			

Ans

	High	Medium	Low
Continental location desert around low temperature low rainfall	✓		

Q.3 **Answer in one sentence..** **1**

1 The factors affecting the temperature of sea water are:

Ans
i. Latitudinal location of the sea
ii. Cyclones
iii. Rainfall
iv. Sea-waves
v. Ocean waves
vi. Salinity
vii. Pollution
viii. Conventional currents and the seasons

Q.4 **Give Geographical Reasons** **15**

1 There are more salt pans on western coast of India than its eastern coast.

Ans
i. Arabian sea lies on the western part of India. It lies in tropical belt where the temperature is high.
ii. Very few rivers meet the Arabian sea. So supply of fresh water is also less that's why salinity is high.
iii. Whereas Bay of Bengal lies on the eastern part of India. It is surrounded by land on three sides.
iv. Thought the Temperature is high but large rivers like Ganga, Brahmaputra, Mahanadi, Godavari empty into Bay of Bengal which provide great amount of fresh water. So salinity is low in Bay of Bengal.

2 Salinity increases in the mid-latitudnal zone.

Ans
i. The mid-latitudinal belt is between 25°N to 35°N and S.
ii. The rain fall is less and supply of fresh water in the farm of rivers is also low.
iii. This belt has major deserts of the world. Hence the temperature is depth in these zones and rate of evaporation is also high.
iv. These reasons are responsible for the increase in salinity in the mid latitude zones.

3 There is high salinity in the northern Red sea while lower in the Southern.

Ans i. Red sea is a narrow strip of sea surrounded by land on both the sides.
ii. It is weated between North East Africa and Arabian Peninsula.
iii. Northern part experiences high rate of evaporation due to high temperature, less supply of fresh water so the salinity is high i.e 41%
iv. Where as Southern part touches the result of Aden, a longer water body so the salinity is low i.e 36%.

4 With increasing depth, the temperature of sea water decreases to a certain limit.

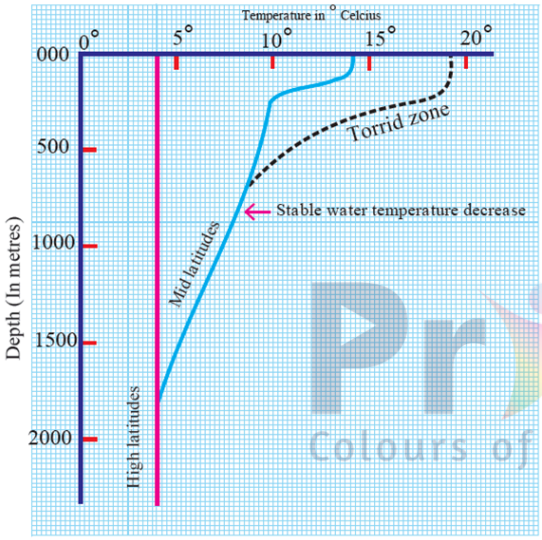
Ans i. Most of the sunrays radiate back from the surface of the sea, some of them penetrate to certain extent.
ii. As a result the intensity of sunrays decreases with increasing depth. Hence with increasing depth, the temperature of the sea water decreases to a certain limit.

5 Salinity is low in the land locked Baltic sea.

Ans i. Baltic sea is located in Europe in temperate region.
ii. Temperature remains low most of the year so the rate of evaporation is low.
iii. Though it is surrounding land but many rivers empty into the sea. So the supply of fresh water is quite high that's why the salinity is low.

Q.5 **Question related to graph / diagram:** **12**

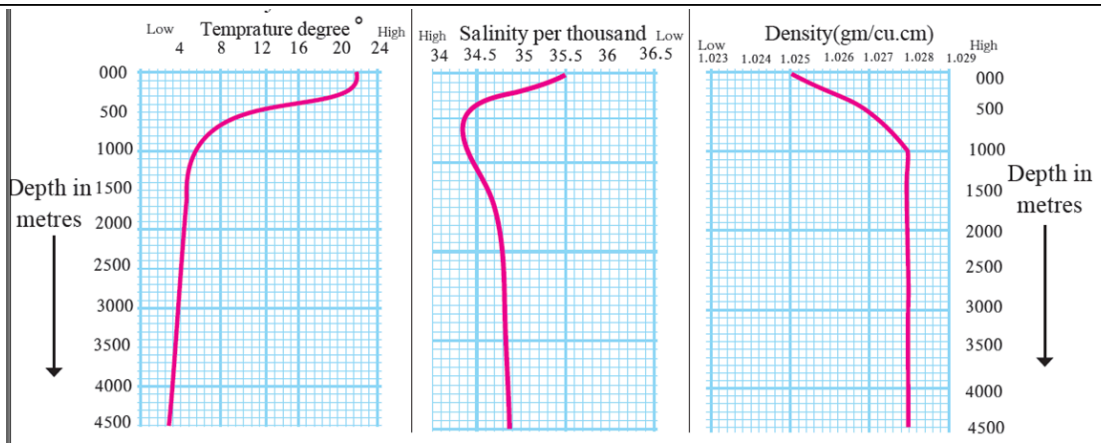
1 Answer the following questions based on the given diagram: (any 4)



i. After what depth the sea water temperature remains stable every where?
ii. What is the maximum Temperature of sea water in equatorial areas? How much temperature at the depth of 500m.
iii. What is the temperature of sea water at the sea level in the mid-latitude?
iv. How much has this temperature changed at 1500m depth.
v. What does the thermal graph for the high latitude say? What is the temperature at 500, 1000 and 1500m depth.

Ans i. After 2000m where?
ii. 18°C, at 500m depth it is 10°C
iii. Less than 10°C approximately.
iv. 5°C approximately.
v. The thermal graph tells us that Temperature in the high latitude is 4°C. temperature at 500m is 10°C. At 1000m its 7.5°C and at 1500m its is 5°C.

2

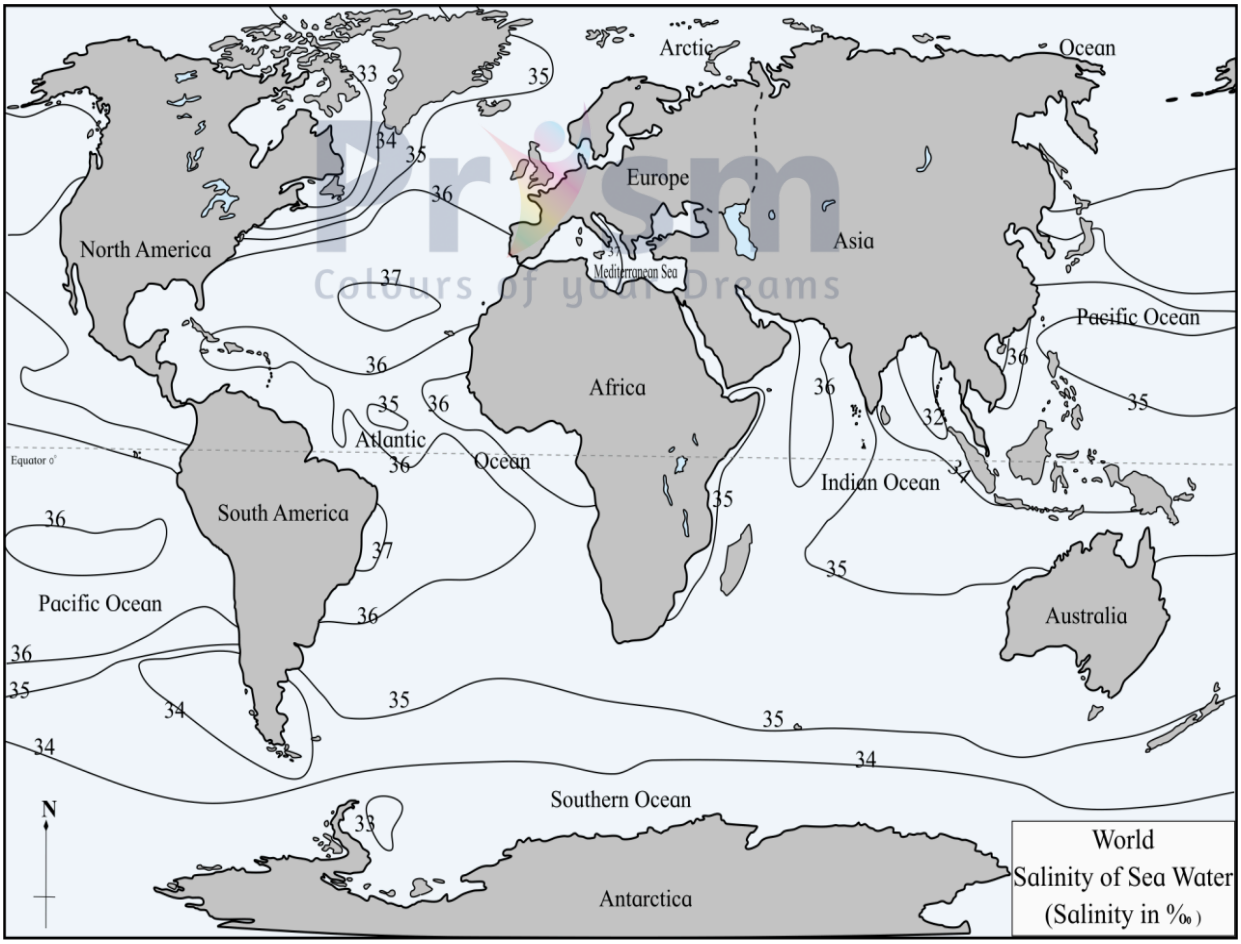


Answer the following questions based on the given diagram:

1. With increasing depth, what decreases: Temperature, salinity, density.
2. After what depth does the change in these factors became almost zero.
3. Till what depth is the change in this factor higher?
4. Explain the co-relation between all the three factors?

Ans 1. Temperature and salinity.
2. After 2000m depth..
3. 500m depth.
4. If the temperature is less, density is more. If the salinity is less, density is also less.

3 Answer the following questions based on the given map:



i. What is the salinity around the tropics?
ii. Which region has the least salinity?
iii. Which ocean has salinity more than 37‰ ?
iv. What are the reasons of differences in salinity on a global level? Discuss.

Ans i. 36‰
ii. Polar/Arctic region
iii. Atlantic ocean.
iv. The reasons of differences in salinity on global level are.

a. Supply of fresh water and Temperature.
b. Rate of evaporation.
c. Latitudinal difference.

Q.6 Answer in detail/ brief **16**

1 Explain the distribution of salinity around the Tropic of Cancer and Tropic of Capricorn.

Ans i. The salinity of the sea around tropic of cancer is about 36% High temperature, high rate of evaporation, land locked nature of the seas, low rainfall less fresh water supply cause more salinity.
ii. In comparison, the salinity of the sea around tropic of Capricorn is about 35% the proportion of land is less in southern hemisphere As a result ocean currents central the salinity.

2 Explain the changes occurring in the temperature of the sea water according to the depth.

Ans i. The temperature of sea water changes from the surface to its depth.
ii. The temperature of sea water from the surface upto 500m depth is high because the sunrays penetrate into the water.
iii. The temperature drops constantly soon after 500m. depth.
iv. As the intensity of sunrays decreases the temperature also decreases upto 2000m depth.
v. After 200m depth the temperature of sea water is uniform every where i.e around 4°C.

3 Name the factors affecting Salinity.

Ans i. Factors like temperature, evaporation, supply of fresh water, landlocked or open nature of sea decide salinity of the sea water.
ii. More is the temperature of the sea water, more is the rate of evaporation, and hence salinity is also more.
iii. E.g., salinity of sea water around tropical region.
iv. In temperate region the temperature is less due to oblique sun rays and hence the rate of evaporation is also less, resulting in less salinity.
v. Fresh water supply either by rivers meeting sea like in Bay of Bengal, or melting ice caps like in Arctic Ocean result in lesser salinity.
vi. Ocean currents get obstructed in landlocked seas and hence salinity of the sea remains high in compared to open oceans.
vii. Mixing of water takes place easily in open seas and hence salinity remains controlled by ocean currents.

4 What are the factors affecting the salinity of the sea water?

Ans Difference in temperature with latitude from equator to pole, different rate of evaporation, the supply of fresh water by the rivers and open or landlocked nature of sea are various factors responsible for difference in salinity on a global level.