Winds, storms and cyclones

Q.1 Fill the missing word in the blank spaces in the following statements:

- (a) Wind is _____
- (b) Winds are generated due to ______ heating.
 (c) Near the earth's surface _____ air rises up whereas _____ air comes down.
- (d) Air moves from a region of _____ pressure to a region of ____ pressure.

Sol: Fill the missing word in the blank spaces in the following statements:

- (a) Wind is **moving** air.
- (b) Winds are generated due to **uneven** heating.
- (c) Near the earth's surface warm air rises up whereas cooler air comes down.
- (d) Air moves from a region of **high** pressure to a region of **Low** pressure.

0.2 Suggest two methods to find out wind direction at given place.

Sol: The two methods to find out wind direction at given place are:

- (a) Take the some soil in your hand and allow it to fall from your hand. It will flow in the direction in which wind is blowing.
- (b) You can also see the direction of the leaves of the tree during a strong wind.

Q.3 State two experiences that made you think that air exerts pressure (other than given in the text).

Sol:

- (i) As we blow air in a balloon or ball make it expand due to excessive air pressure.
- (ii) Blowing air can move curtains on doors and windows and dust particles etc. due to air pressure.

0.4 You want to buy a house. Would you like to buy a house having windows but not ventilators? Explain

Sol: No, We would not like to buy a house with no ventilation. It is not advisable. The air circulation is of there in such a house. Warm air rises up and goes out through ventilators and windows will allow the cool air to come. So, ventilation is must for the new house.

Q.5 Explain why holes are made in hanging banners and hoardings.

Sol: Holes are made in the banner and hoardings because air exert pressure and holes allow air to pass through the banners and hoardings. If there are no holes the air pressure experienced by the banner will be increased and this pressure can tear the banners and hoardings.

Q.6 How will you help your neighbors in case cyclone approaches your village/town?

Sol: I will try to help my neighbors by following ways:

- (a) By giving warning to everyone about the coming danger of cyclone.
- (b) Moving to safe shelter.
- (c) By keeping storage of water and food.
- (d) Keeping emergency kit.
- (e) Help the neighbors to shift domestic animals, essential things and children etc. to safe place.

Q.7 What planning is required in advance to deal with the situation created by a cyclone?

Sol: Advance preparation to deal with the situation created by a cyclone are:

- (a) Listen all the warnings transmitted by govt. on T.V and radio.
- (b) Moving to safer shelter.
- (c) Store the food in waterproof bags in advance.
- (d) Setting up first aid facility, well in advance.
- (e) Keeping all the emergency numbers.

Q.8 Which one of the following places is unlikely to be affected by a cyclone?

(a) Chennai

(b) Mangalore

(c) Amritsar

(d) Puri

Sol: (c) Amritsar

Q.9 Which of the statements given below is correct?

- (i) In winter the winds flow from the land to the ocean.
- (ii) In summer the winds flow from the land towards the ocean.
- (iii) A cyclone is formed by a very high-speed winds revolving around it.
- (iv) The coastline of India is not vulnerable to cyclones.

Sol: (i) In winter the winds flow from the land to the ocean.