Heat

(2 and 3 marks)

Q 1 Give scientific reasons

- 1. The temperature of boiling water does not increase even if it is heated further.
- 2. The wounds caused by steam are more severe and painful than those caused by boiling water even though both have the same temperature
- 3. In places having cold weather, there are chances of water pipes getting burst during the winter season.
- 4. Ball of ice or gola is formed when small particles of ice or shredded ice is pressed between palms and then released.
- 5. In cold regions, fish can stay alive even after the lakes get frozen
- 6. Water droplets are formed on the outer surface of a bottle filled with cold drink when it is kept at room temperature.
- 7. Dew drops are formed at night during the winter season.
- 8. During the winter season, your spectacles become foggy when early in the morning, you enter a warm place after being out in the fog.

Q. 2 Explain

- 1. The specific latent heat of melting is 80 cal/g. Explain this statement.
- 2. Explain the role of anomalous expansion of water in keeping the aquatic plants and creatures of cold regions alive in the frozen lakes.
- 3. Rocks crack into pieces due to the anomalous expansion of water.
- 4. During winters sometimes a white band can be seen in clear sky behind an aeroplane flying high up.