

06.11.2019 [FN]

Std:VIII

Time : 2 hours

I. Choose the best answer.

1. a) Solid
2. c) Thermal
3. c) Freezing
4. d) All the above
5. b) Water
6. d) Supports burning
7. b) Nitrogen
8. c) Carbondioxide
9. a) Blue litmus to red
10. d) Acid rain

II. Fill in the blanks.

11. Heat capacity of water
12. Deposition
13. Decrease
14. Dryice
15. Oxygen
16. rusting
17. solar

III. True or False.

18. False
19. False
20. True
21. True
22. True
23. True
24. False

Marks :75  
(10× 1 = 10)

(7× 1 = 7)

(7× 1 = 7)

IV. Match the following.

(7× 1 = 7)

25. Gas
26. Liquid
27. Fertilizer
28. Fire extinguisher
29. Solid to gas
30. Solid
31. Gas to liquid

V. Reason and Assertion.

(2× 1 = 2)

32. Option (B)
33. Option (A)

VI. Short answers. (Any 10)

(10× 2½ = 25)

(Question No. 40 is compulsory)

34. Conduction, convection, Radiation
35. The process of heat transfer in solids from the region of higher temperature to the region of lower temperature without the actual movement of atoms or molecules is called as conduction
36. One calorie is t amount of heat energy required to raise the temperature of 1 gram of water 1°C
37. The form of heat transfer from places of high temperature to places of low temperature by the actual movement of molecules is called convection.
38.
  - Expansion
  - Increase in temperature
  - Change in state

39.

- When we iron dresses heat is transferred from the Iron to the cloth
- Handles of cooking utensils are made up of plastic or wood because utensils are made up of plastic or wood because they are poor conductors of heat.
- The temperature inside (igloo) (Snow house) is warm because snow is a poor conductor of heat
- We cook food in vessels made up of metals. When the vessel is heated, heat is transferred from the metal to the food.

40. i) Summer

ii) Heat

41.

- Atmospheric air, water
- Plants and animals
- Minerals in the form of silicates, carbonates, oxides.

42.

- Liquid nitrogen is used as a refrigerant
- It provides an inert atmosphere for conducting certain chemical reactions.
- It is used to prepare Am,monia by Haber's process which is then converted in to fertilizers and Nitric acid.
- It is used for inflating types of vehicles.

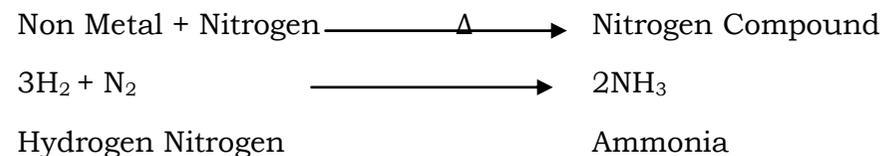
43.

- Oxygen is clourless, odourless and tasteless gas.
- It is a poor conductor readily in coldwater
- It can be made into liquid (liquefied) at high pressure and low temperature

- It is denser than air
- It supports combustion

44. The increased green house effect is caused due to increase in the air pollutatnts and it results in the average increase of temperature of t atmosphere. This is called as global warming.

45. Nitrogen reacts with non- metals like hydrogen, oxygen etc. At high temperature to form their corresponding Nitrogen compounds



46.

- Solid carbondioxide called as dyice is used as a refrigerant
- The gas is so cold that moistures in the air condenses on it, creating a dense fog which is uded in stage shows and movie effects.

47. Reduction in the use of Fossil fuels

Controlling deforestation

Restricting the use of CFCS

Planting more trees.

Reducing, Reusing and recycling resources.

VII. Answer in detail. (Any 3)

(3 × 5 = 15)

48. Refer Pg.No. 6 and 7

49. Refer Pg.No. 31

50. Refer Pg.No. 7

51. Refer class work

52. Refer Pg.No. 7 & 8

53. Refer Pg.No. 33

VIII. Solve 'any one' of the following numerical problems.

(1 × 2 = 2)

54. Heat capacity  $c' = \frac{Q}{\Delta t}$

$$Q = c' \times \Delta t$$

$$T = 20K$$

$$C' = 500JK^{-1}$$

$$Q = 500 \times 20$$

$$Q = 10,000J$$

55. Heat capacity  $c' = \frac{Q}{\Delta t}$

$$Q = 3000J$$

$$\Delta t = 40^\circ C - 30^\circ C$$

$$\Delta t = 10^\circ C - 10K$$

$$c' = \frac{3000J}{10K}$$

$$C' = 300JK^{-1}$$