

# HALF YEARLY EXAMINATION - 2023

## 8 - STD

## SCIENCE

Marks : 100

TIME: 2.30 Hrs

### I. Choose the correct answer.

10 x 1 = 10

- The unit of Pressure is .....  
 a) Pascal      b) Poise      c) Newton      d) Metre
- Conduction is the way of heat transfer which takes place in a .....  
 a) liquid      b) Solid      c) gas      d) All of them
- ..... revolve around the nucleus in different paths called orbits.  
 a) Protons      b) Electrons      c) Neutrons
- The range of audible frequency for the human ear is  
 a) 2 Hz to 2000 Hz      b) 20 Hz to 2000 Hz      c) 20 Hz to 20,000 Hz      d) 200 Hz to 20,000 Hz
- In water hydrogen and oxygen are combined in the ratio of ..... by mass.  
 a) 1 : 8      b) 8 : 1      c) 2 : 3      d) 1 : 3
- In acidic solutions blue litmus changes into ..... colour.  
 a) blue      b) green      c) red      d) white
- The boiling point of water is .....  
 a) 0°C      b) 100°C      c) 4°C      d) 38°C
- Micro organisms are measured in .....  
 a) cm      b) mm      c) micron      d) meter
- External ear is supported by  
 a) bone      b) Cartilage      c) tendon      d) capsule
- Adolescence is the period of life between ..... years of age.  
 a) 10 to 16      b) 11 to 17      c) 11 to 19      d) 11 to 20

### II. Fill in the blanks

10 x 1 = 10

- ..... is used to measure electric current. *ammeter*
- The spherical mirror used as a rear view mirror in the vehicle is *convex mirror*
- The body which has lost electrons becomes *positive*
- Sound is produced by *vibration*
- ..... is the enzyme responsible for browning of vegetables and fruits. *polyphenol oxidase*
- Proton is deflected towards the ..... charged. *NP*
- The chemical name of water is *Dihydrogen oxide*
- The first true land plant is *pteridophyte*
- The largest cell is egg of an *ostrich*
- ..... helps to prevent thyroid gland related diseases. *iodine*

### III. State True or False. If false give the correct answer.

5 x 1 = 5

- In parallel circuit, *current* remains the same in all components. *F*
- The process of converting a substance from solid state to gaseous state is called *sublimation* condensation.
- Acids are corrosive in nature. *T*
- Hinge joint is slightly movable joint. *T*
- Human beings are warm blooded in nature. *T*

6 x 1 = 6

**IV. Match the following**

26. Sound propagation - liquid 27  
 27. Convection - Needs material medium 26  
 28. Universal solvent - Amino acid 31  
 29. Neutrons - Edward Jenner 30  
 30. Vaccine - Water 28  
 31. Protein - James Chadwick 29

3 x 3 = 9

**V. Give reason**

32. Why lightning is seen before the thunder is heard.  
 33. Aquatic animals can breathe in water.  
 34. Human eye is compared with camera.

15 x 2 = 30

**VI. Answer any 15 of the following questions.**

35. Define One atmosphere.  
 36. State Snell's law of refraction.  
 37. Name three types of heat transfer.  
 38. What is earthing?  
 39. What is electroplating?  
 40. Give two differences between music and noise.  
 41. What is an ultrasonic sound?  
 42. What is pollution?  
 43. What is dry ice? What are its uses?  
 44. State the law of conservation of mass.  
 45. What are the methods of removing hardness of water?  
 46. Pressure cooker cooks food faster. Why?  
 47. Write the physical properties of acids.  
 48. What is an indicator?  
 49. What is meant by binomial nomenclature?  
 50. Mention the function of Alveoli?  
 51. Tabulate the difference between aerobic and anaerobic respiration?  
 52. What is skeleton?  
 53. Define Muscle.  
 54. What is adolescence?

6 x 5 = 30

**VII. Answer in detail. Answer any six of the following questions.**

55. List out the base quantities with their units.  
 56. How lightning takes place?  
 57. Describe an experiment to show that sound cannot travel through vacuum.  
 58. Is rusting good for Iron materials? Explain.  
 59. Explain the different ways by which water gets polluted.  
 60. Explain the neutralization reactions in our daily life.  
 61. Explain osmosis with an example.  
 62. Explain the nutritional needs of adolescence in brief.  
 63. Write the names of medicinal plants and explain their uses.