



## Standard 8

## SCIENCE

Marks: 100

Time: 2.30 Hrs.

## I. Choose the best answer:

12×1=12

- 1) Electric current is a \_\_\_\_\_ quantity.
  - a) base
  - b) supplementary
  - c) derived
  - d) professional
- 2) Which of the following liquids has more viscosity?
  - a) Grease
  - b) Water
  - c) Coconut oil
  - d) Ghee
- 3) The distance from the pole to the focus is called \_\_\_\_\_.
  - a) pole length
  - b) focal length
  - c) principal axis
  - d) None of the above
- 4) Conduction is the way of heat transfer which takes place in a \_\_\_\_\_.
  - a) solid
  - b) liquid
  - c) gas
  - d) all of them
- 5) The liquid metal used in thermometers is \_\_\_\_\_.
  - a) copper
  - b) mercury
  - c) silver
  - d) gold
- 6) \_\_\_\_\_ undergoes rusting.
  - a) Tin
  - b) Sodium
  - c) Copper
  - d) Iron
- 7) Aerated water contains \_\_\_\_\_.
  - a) air
  - b) oxygen
  - c) carbon dioxide
  - d) nitrogen
- 8) 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
- 9) \_\_\_\_\_ shows both living and non-living characteristics.
  - a) Protozoa
  - b) Virus
  - c) Bacteria
  - d) Fungi
- 10) Penicillin is an antibiotic which is extracted from \_\_\_\_\_.
  - a) algae
  - b) fungi
  - c) bryophytes
  - d) pteridophytes
- 11) The process of air passing in and out the lungs is called \_\_\_\_\_.
  - a) inhalation
  - b) exhalation
  - c) breathing
  - d) None of these
- 12) Cockroach moves with the help of its \_\_\_\_\_.
  - a) leg
  - b) bone
  - c) muscular foot
  - d) whole body

## II. Fill in the blanks:

5×1=5

- 13) \_\_\_\_\_ takes place by rubbing objects together.
- 14) If the thickness of a vibrating string is increased, its pitch \_\_\_\_\_.
- 15) The boiling point of water is \_\_\_\_\_.
- 16) Bases are \_\_\_\_\_ in taste.
- 17) Iron deficiency leads to \_\_\_\_\_.

## III. State True or False. If false correct the statement:

5×1=5

- 18) Amount of substances gives the number of particles present in a substance.
- 19) A body will sink if the weight of the body is greater than the buoyant force.
- 20) A chemical reaction is a temporary reaction.
- 21) Nitrogen is lighter than air.
- 22) Human beings are warm blooded in nature.

**IV. Match the following:**

- |                                 |   |                      |
|---------------------------------|---|----------------------|
| 23) i) Barometer                | - | reduce friction,     |
| ii) Increasing area of contact  | - | atmospheric pressure |
| iii) Decreasing area of contact | - | cause of friction    |
| iv) Lubricants                  | - | increases friction   |
| v) Irregular surface            | - | decreases friction   |

5×1=5

**V. Answer any 10 of the following. Q.No. 28 is compulsory:**

- 24) What is measurement?
- 25) Why is a ball bearing used in cycle hub?
- 26) Define the refractive index of a medium.
- 27) Define specific heat capacity.
- 28) Name the metals that are used in jewellery.
- 29) What is pollution?
- 30) What is global warming?
- 31) Write the names of the following compounds:  
(a) CO (b) NO<sub>2</sub>
- 32) What are pathogens?
- 33) Define Thallus.
- 34) State different types of tissues.
- 35) The radius of curvature of a spherical mirror is 25 cm. Find its focal length.

10×2=20

**VI. Answer any 8 of the following:**

- 36) List out the base quantities with their units.
- 37) Give the different types of friction and explain each with example.
- 38) What are the applications of conduction in our daily life?
- 39) Tabulate the differences between metals and non-metals.
- 40) a) What is tarnishing? Give an example.  
b) What is the role of a catalyst in a chemical reaction?
- 41) Name the compounds produced when the following substances burn in oxygen.  
(a) Carbon (b) Sulphur (c) Phosphorous (d) Magnesium
- 42) Write the properties of anode rays.
- 43) Write any four characteristics of pteridophytes.
- 44) Tabulate the differences between aerobic and anaerobic respiration.
- 45) Speed of light in air is  $3 \times 10^8 \text{ ms}^{-1}$  and the refractive index of a medium is 1.5. Find the speed of light in the medium.

8×4=32

**VII. Answer all the questions in detail:**

- 46) a) What is electroscope? Explain how it works.
- (OR)
- b) What are the properties of sound.
- 47) a) What is permanent hardness of water? How can it be removed?
- (OR)
- b) What are the uses of acids?
- 48) a) What are the functions of skeleton in human body?
- (OR)
- b) Explain the nutritional needs of adolescence in brief.

3×7=21