

# COMMON HALF YEARLY EXAMINATION - 2023

## B Standard - VIII

Time : 2.30 hrs

SCIENCE

Marks: 100

15×1=15

I. Choose the best answer:-

- 1) Electric current is a \_\_\_\_\_ quantity  
a) base      b) supplementary      c) derived      d) professional
- 2) Pressure exerted by a liquid increased by  
a) the density of the liquid      b) the height of the liquid column  
c) Both a and b      d) None of the above
- 3) The spherical mirror with a reflecting surface curved inward is called  
a) convex mirror      b) concave mirror      c) curved mirror      d) None of the above
- 4) The process of converting a liquid into a solid is called \_\_\_\_\_  
a) sublimation      b) condensation      c) freezing      d) deposition
- 5) Which of the following a simple circuit must have?  
a) Energy source, Battery, Load      b) Energy source, Wire, Load  
c) Energy source, Wire, Switch      d) Battery, Wire, Switch
- 6) Sound waves travel very fast in  
a) air      b) metals      c) vacuum      d) liquid
- 7) The liquid metal used in thermometers is  
a) copper      b) mercury      c) silver      d) gold
- 8) Burning of paper is a \_\_\_\_\_ change  
a) physical      b) chemical      c) physical and chemical      d) neutral
- 9) Which of the following is true about oxygen?  
a) Completely burning gas      b) Partially burning gas  
c) Doesn't support burning      d) Supports burning
- 10) The gas collected at the cathode on electrolysis of water is  
a) oxygen      b) hydrogen      c) nitrogen      d) carbon dioxide
- 11) Microorganisms are measured in \_\_\_\_\_  
a) cm      b) mm      c) micron      d) meter
- 12) Solanum trilobatum is the binomial name of Thoothuvalai. The word "Solanum" refers to  
a) Species      b) Genus      c) Class      d) Orders
- 13) \_\_\_\_\_ is tough and thick white sheath that protects the inner parts of the eye  
a) Sclera      b) Conjunctiva      c) Cornea      d) Iris
- 14) Cockroach moves with the help of its \_\_\_\_\_  
a) leg      b) bone      c) muscular foot      d) whole body
- 15) 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:-

5×1=5

- 16) The solid angle is measured in \_\_\_\_\_
- 17) The pressure of a liquid column \_\_\_\_\_ with the depth of the column.
- 18) The element which possess the character of both metals and non metals are called \_\_\_\_\_
- 19) Photosynthesis is a chemical reaction that takes place in the presence of \_\_\_\_\_
- 20) \_\_\_\_\_ is prepared from a mould called penicillium.

5×1=5

III. State only True or False.

- 21) The charge acquired by an ebonite rod rubbed with a piece of flannel is negative. **T**
- 22) The applied heat energy can be realised as an increase in the average kinetic energy of the molecules. **T**
- 23) Sewage should be treated well before being discharged it into water bodies. **T**
- 24) In hypotonic condition, concentration of the external and the internal solution of the organism are same. **F**
- 25) Skull in humans consists of 22 bones. **T**

5×1=5

## IV. Match the following:-

- |                         |   |                               |
|-------------------------|---|-------------------------------|
| 26) Conduction          | - | Iron                          |
| 27) Dispersion of light | - | Solid                         |
| 28) Oxygen              | - | Rainbow                       |
| 29) Rusting             | - | Sexual maturity               |
| 30) Puberty             | - | Respiration in living animals |

1×5=5

## V. Draw and label the parts:-

- 31) Structure of Yeast

15×2=30

## VI. Answer briefly:-

- 32) What is measurement?  
 33) Give two examples to verify that a force changes the shape of a body  
 34) Define focal length.  
 35) What are the applications of conduction in our daily life?  
 36) What is earthing?  
 37) What is vibration?  
 38) Give an example to show that light travels faster than sound?  
 39) Can you store pickle in an aluminium utensil? Give reason.  
 40) Tabulate the differences between metals and non-metals.  
 41) Define a chemical reaction.  
 42) Mention the physical properties of oxygen.  
 43) Write the names of the following compounds.  
 a) CO      b) N<sub>2</sub>O      c) NO<sub>2</sub>      d) PCl<sub>5</sub>  
 44) Name the gas evolved at cathode and anode when water is electrolyzed.  
 45) Write the four types of bacteria, based on their shape.  
 46) Match the following:-
- |                  |                               |
|------------------|-------------------------------|
| A. Cyanophyceae  | Green algae <sub>2</sub>      |
| B. Chlorophyceae | Blue green algae <sub>1</sub> |
| C. Phaeophyceae  | Red algae <sub>4</sub>        |
| D. Rhodophyceae  | Brown algae <sub>3</sub>      |
- 47) Define - Prokaryotic cell  
 48) Differentiate between the following:- a) Movement and Locomotion  
 49) What is adolescence?  
 50) Define - Metabolism.

7×5=35

## VII. Answer any seven of the following:-

- 51) List out the base quantities with their units.  
 52) Friction is a necessary evil - Explain  
 53) Explain the images formed by, a concave mirror.  
 54) Give reason.  
 a) Aluminum foils are used to wrap food items  
 b) Immersion rods for heating liquids are made up of metallic substances.  
 55) Adithya wants to classify the following changes as physical or chemical. Can you help him?  
 1. Melting of ice      2. Ripening of fruits      3. Rusting of iron      4. Spoilage of food  
 5. Burning of wood      6. Bursting crackers      7. Burning of camphor

Physical Changes	Chemical changes

- 56) What happens when carbon dioxide is passed through lime water? Write the equation for this reaction.  
 57) Write a short note on bacteria and its structure.  
 58) Draw the outline of Bentham and Hooker's system of classification.  
 59) Draw the structure of human eye and label its parts.  
 60) Name the different types of joints? Give one example for each type.  
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