

Ts8S

**Tenkasi District Common Examinations**  
**Common Half Yearly Examination - December 2022**



21.12.2022

**Standard 8****SCIENCE**

Marks: 100

Time: 2.30 Hrs.

**12×1=12****I. Choose the best answer:**

- 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      | 5×1=5 |
| ii) Increasing area of contact  | - atmospheric pressure |       |
| iii) Decreasing area of contact | - cause of friction    |       |
| iv) Lubricants                  | - increases friction   |       |
| v) Irregular surface            | - decreases friction   |       |

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

10×2=20

- 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.

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## VI. Answer any 8 of the following:

8×4=32

- 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.

## VII. Answer all the questions in detail:

3×7=21

- 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.

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