

**Standard 8**  
**SCIENCE**

Time: 2.30 Hours

Marks: 100

**12x1=12****I. Choose the best answer:**

- 1) SI unit of temperature is .....  
a) Celsius                      b) Fahrenheit                      c) Kelvin                      d) Ampere
- 2) If the image and object distance is same, then the object is placed at  
a) infinity                      b) at F                      c) between F and 2F                      d) at C
- 3) Sound waves travel very fast in  
a) air                      b) metals                      c) vacuum                      d) liquids
- 4) ..... is called as Red planet.  
a) Mercury                      b) Venus                      c) Earth                      d) Mars
- 5) The liquid metal used in thermometers is  
a) Copper                      b) Mercury                      c) Silver                      d) Gold
- 6) The pigment responsible for browning of apples is .....  
a) hydrated iron (II) oxide                      b) Melanin  
c) Starch                      d) Ozone
- 7) Which of the following is known as azote?  
a) Oxygen                      b) Nitrogen  
c) Sulphur                      d) Carbon dioxide
- 8) The main component of natural gas is .....  
a) Methane                      b) Ethane                      c) Propane                      d) Butane
- 9) Pencillin is an antibiotic which is extracted from .....  
a) Algae                      b) Fungi  
c) Bryophytes                      d) Pteridophytes
- 10) In the absence of oxygen, glucose is broken down into .....  
a) Lactic acid                      b) Citric acid                      c) Acetic acid                      d) Nitric acid
- 11) Cockroach moves with the help of its .....  
a) leg                      b) bone                      c) muscular foot                      d) Whole body
- 12) ..... are the chemical substances, secreted by endocrine glands.  
a) Hormones                      b) Enzymes                      c) Proteins                      d) Fatty acids

**II. Fill in the blanks:****5x1=5**

- 13) ..... is defined as the amount of heat required to raise the temperature of 1 kg of a substance by 1°C.
- 14) A magnet has ..... magnetic poles.
- 15) The boiling point of water is .....
- 16) Wasp sting contains .....
- 17) ..... are the infections protein particles.

**III. State True or False. If false correct it:****5x1=5**

- 18) Liquid pressure decreases with the decrease of depth.
- 19) Water can conduct electricity.
- 20) Acids are bitter in taste.
- 21) Cardiac muscle is a voluntary muscle.
- 22) Female anopheles mosquito is a carrier of dengue virus.

**IV. Match the following:****5x1=5**

- 23) Snell's law - Iron
- 24) Ultrasonics - Change in voice

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- 25) Rusting - Testosterone
- 26) Adam's Apple -  $\frac{\sin i}{\sin r} = \mu$
- 27) Androgen - Frequency more than 20000 Hz.

**V. Answer any 10 of the following:****10x2=20**

- 28) Define friction, Give two examples of the utility of friction in day to day life.
- 29) Give any two applications of a concave mirror?
- 30) Write a note on convection.
- 31) Earth acts as a huge bar magnet. Why? Give reasons.
- 32) Define Alchemy
- 33) **Match It:**
- |                |   |                               |
|----------------|---|-------------------------------|
| Nitrogen       | - | Respiration in living animals |
| Oxygen         | - | Fertilizer                    |
| Carbon dioxide | - | Refrigerator                  |
| Dry Ice        | - | Fire extinguisher             |
- 34) 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>
- 35) What is a neutralization reaction?
- 36) Name the places in Tamilnadu harnessing wind energy from wind mills.
- 37) Define - Thallus
- 38) Mention the functions of a 'Alveoli'
- 39) List out the changes which occur during puberty.
- 40) What is crop rotation?

**VI. Answer any 8 of the following:****8x4=32**

- 41) State pascal's law and mention its applications.
- 42) Explain the working of thermos flask?
- 43) List out uses of magnets.
- 44) What are the achievements of Chandrayan I?
- 45) Explain how food items are spoiled by chemical reactions?
- 46) What are the uses of bases?
- 47) Write differences between monocot and dicot plants?
- 48) Draw the structure of human eye and label its parts.
- 49) What are the physical changes that occur in boys and girls during adolescence?
- 50) What are the effects of acid rain? How can we prevent them?

**VII. Answer in detail:****3x7=21**

- 51) Explain the working of a periscope.

**(OR)**

Describe the structure and functions of the human ear?

- 52) a) Tabulate the difference between metals and non-metals  
b) Name the elements with the following symbols.
- |       |        |        |        |
|-------|--------|--------|--------|
| i) Na | ii) Ba | iii) W | iv) Al |
|-------|--------|--------|--------|

**(OR)**

- b) Explain the different ways by which water gets polluted?

- 53) Write a short note on common human diseases caused by micro organisms.

**(OR)**

- a) How is the skeleton of a bird well suited for flying?  
b) What is deforestation? Explain the causes and effects of deforestation?