



Time: 2.30 Hours

Standard 8 SCIENCE

 Marks: 100
 12x1=12

I. Choose the correct answer.

- 1) The S.I. unit of temperature is
 a) celsius b) Farenheit c) Kelvin d) ampere
- 2) If the focal length of a spherical mirror is 10cm. What is the value of its radius of curvature
 a) 10 cm b) 5 cm c) 20 cm d) 15 cm
- 3) The process of converting a liquid into a solid is called
 a) Sublimation b) Condensation c) freezing d) deposition
- 4) 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 20000 Hz d) 200 Hz to 20000 Hz
- 5) The pigment responsible for browning of apples is
 a) hydrated iron (II) Oxide b) Melanin
 c) Starch d) Ozone
- 6) 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
- 7) Red and sting contains
 a) acetic acid b) Sulphuric acid c) Oxalic acid d) formic acid
- 8) is a prokaryotic microorganisms .
 a) Virus b) Algae c) fungi d) Bacteria
- 9) Plants that prevent soil erosion are
 a) algae b) fungi
 c) bryophytes d) Pteridophytes
- 10) External ear (Pinna) is supported by
 a) bone b) cartilage c) tendon d) capsule
- 11) The process of placing seeds in the soil is called as
 a) Ploughing b) sowing c) crop production d) crop rotation
- 12) The function returns the smallest value in a set of values
 a) average b) sum c) min d) max

II. Fill in the blanks.

5x1=5

- 13) Hydraulic lift works under the principle of
- 14) The boiling point of water is
- 15) is known as marsh gas
- 16) is the structural and functional unit of living organisms
- 17) Iron deficiency leads to

III. State true or False. If false correct the statement

5x1=5

- 18) Water can conduct electricity
- 19) PSLV and GSLV are India's popular satellites
- 20) Tungsten is used as semiconductor
- 21) Aerated water contains carbondioxide
- 22) March 3 is observed as World Wild life Day

IV. Match the following:

5x1=5

- | | |
|--------------------------|--------------------------|
| 23) a) Magnetite | - Magnetic line |
| b) A tiny pivoted magnet | - Natural magnet |
| c) Cobalt | - Compass box |
| d) Closed curves | - Ferromagnetic material |
| e) Bismuth | - Diamagnetic material |

V. Answer any 10 of the following (Q.No. 35 is compulsory)

2

10x2=20

- 24) Give two examples to verify that a force changes the shape of a body?
- 25) State the laws of reflection
- 26) What is an Ultrasonic sound
- 27) Define Galaxy
- 28) What is the role of a catalyst in a chemical reaction?
- 29) What is global warming?
- 30) State the law of conservation of Mass
- 31) Name the places in Tamilnadu harnessing wind energy from wind mills
- 32) Write the names of any three protozoans
- 33) Differentiate tendons and ligaments
- 34) What is fertilization?
- 35) An iron ball requires 1000J of heat to raise its temperature by 20°C. Calculate the heat capacity of the ball

VI. Answer any 8 of the following :

8x4=32

- 36) State Pascal's law and mention its application
- 37) a) Name three types of heat transfer,
b) Define one calorie
- 38) Give reason for the following
a) When a glass rod is rubbed with silk cloth both get charged
b) When a comb is rubbed with dry hair it attracts small bits of paper
- 39) List any four uses of magnets
- 40) Mention any four compounds and their uses
- 41) Balance the following equation
i) $\text{Na} + \text{O}_2 \rightarrow \text{Na}_2\text{O}$
ii) $\text{Ca} + \text{N}_2 \rightarrow \text{Ca}_3\text{N}_2$
iii) $\text{N}_2 + \text{H}_2 \rightarrow \text{NH}_3$
iv) $\text{CaCO}_3 + \text{HCl} \rightarrow \text{CaCl}_2 + \text{CO}_2 + \text{H}_2\text{O}$
- 42) What is neutralization reaction
- 43) Write any four characters of pteridophytes
- 44) Differentiate between inhalation and exhalation
- 45) Explain the agricultural practices

3x7=21

VII. Answer in Detail :

- 46) a) List out the base quantities with the units
(OR)
b) What are the achievements of Chandrayaan - I?
- 47) a) What are the effects of acid rain? How can we prevent them?
(OR)
b) Explain the different types of Coal?
- 48) a) What can you suggest to your class mates to keep clean and healthy?
(OR)
b) What is deforestation? Explain the causes and effects of deforestation?
