

A

Standard - IX

Time : 3.00 hrs

SCIENCE

Marks: 75

Part - I

Choose the correct option given below the each questions:- 12x1=12

- 1) Which among the following is not a device to measure mass?
 a) Spring balance b) Beam balance c) Physical balance d) digital balance
- 2) Which of the following is most likely not a case of uniform circular motion?
 a) motion of the Earth around the Sun
 b) motion of a toy train on a circular track
 c) motion of a racing car on a circular track
 d) motion of hours hand on the dial of the clock
- 3) The size of an air bubble rising up in water
 a) decreases b) increases c) remains same d) may increase or decrease
- 4) Among the following _____ is a mixture
 a) Common salt b) Juice c) Carbon dioxide d) Pure Silver
- 5) The correct electronic configuration of potassium is
 a) 2, 8, 9 b) 2, 8, 1 c) 2, 8, 8, 1 d) 2, 8, 8, 3
- 6) Elements in the modern periodic table are arranged in _____ groups and _____ periods.
 a) 7, 18 b) 18, 7 c) 17, 8 d) 8, 17
- 7) Identify the animal having four chambered heart
 a) Lizard b) Snake c) Crocodile d) Calotes
- 8) Smooth muscles occur in
 a) uterus b) artery c) vein d) All of the above
- 9) The fibres consists of
 a) parenchyma b) sclerenchyma c) collenchymas d) None of above
- 10) The bending of root of a plant in response to water is called _____
 a) Thigmonasty b) Phototropism c) Hydrotropism d) Photonasty
- 11) Transpiration takes place through _____
 a) fruit b) seed c) flower d) stomata
- 12) Which key should be pressed to run a slide show?
 a) F1 b) Tab c) F5 d) F2

Part - II

Answer any 7 questions. Q.No.22 is compulsory:-

7x2=14

- 13) What is the full form of SI system?
- 14) Define Velocity.
- 15) Match the following:-

a) Density	-	hpg
b) Pascal's law	-	Milk
c) Pressure exerted by a fluid	-	Mass/Volume
d) Lactometer	-	Pressure

- 16) Define Sublimation.
- 17) A few drops of 'Dettol' when added to water the mixture turns turbid. Why?
- 18) State whether true or false. If false, correct the statement.
- Alloys bear the characteristics of both metals and nonmetals
 - Group 17 elements are named as Halogens.
- 19) List the respiratory organs of amphibians.
- 20) Fill in the blanks:-
- _____ tissues provide mechanical support to organs.
 - The green pigment present in the plant is _____
- 21) Complete the equation: $6\text{CO}_2 + \text{_____} \xrightarrow{\text{Sunlight/Chlorophyll}} \text{_____} + 6\text{O}_2 + 6\text{H}_2\text{O}$
- 22) Write the steps to view the slide show.

Part - III

Answer any 7 questions. (Q.No.32 is compulsory)

7×4=28

23) Match the following:

Physical Size		SI Unit
1) Length	-	a) Kelvin
2) Mass	-	b) metre
3) Time	-	c) Kilogram
4) Temperature	-	d) second

- 24) Explain different types of motion
- 25) Why does a boat with a hole in the bottom would eventually sink?
- 26) Which of the following are pure substances?
Ice, Milk, Iron, Hydrochloric acid, Mercury, Brick and Water
- 27) Draw the structure of oxygen and sulphur atoms.
- 28) State any five features of modern periodic table.
- 29) How are the limbs of the birds adapted for avian life?
- 30) How will you differentiate the different types of transpiration?
- 31) What is a Presentation?
- 32) A racing car has a uniform acceleration of 4ms^{-2} . What distance it covers in 10s after the start?

Part - IV

Answer briefly (If need draw diagram)

3×7=21

- 33) How will you find the thickness of a one rupee coin?
[or]
Explain the construction and working of a hydrometer with diagram.
- 34) Explain Tyndall effect and Brownian movement with suitable diagram. [or]
What conclusions were made from the observations of Gold foil experiment?
- 35) a) What is Chlorophyll?
b) Name the part of plant which shows positive geotropism. Why? [or]
Write the characteristic features of fishes.