

HALF YEARLY EXAMINATION - 2022

9 - STD

TIME : 2.30 Hrs

SCIENCE

MARKS : 75

I. Choose the correct Answer

12 x 1 = 12

- Which among the following is not a device to measure mass?
(a) Spring balance (b) Beam balance (c) Physical balance (d) Digital balance
- Clouds float in atmosphere because of their low _____.
(a) density (b) pressure (c) velocity (d) mass
- Resistance of a wire depends on,
(a) temperature (b) geometry (c) nature of metal (d) all the above
- We can create enlarged, virtual images with
(a) concave mirror (b) plane mirror (c) convex mirror
- When we mix a drop of ink in water we get a _____.
(a) Heterogeneous mixture (b) Compound
(c) Homogeneous mixture (d) Suspension
- 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
- Covalent bond is formed by _____.
(a) transfer of electrons (b) sharing of electrons
(c) sharing a pair of electrons
- Poikilothermic organisms are
(a) Fish, frog, lizard, man (b) Fish, frog, lizard, cow
(c) Fish, frog, lizard, snake (d) Fish, frog, lizard, crow
- Which of the following is a complex tissue?
(a) parenchyma (b) collenchyma (c) xylem (d) sclerenchyma
- Which one of the following substance is not a constituent of sweat?
(a) urea (b) protein (c) water (d) salt
- The primary organ infacted during tuberculosis is
(a) bone marrow (b) intestine (c) spleen (d) lungs
- The slides are grouped together in a sequence to form _____.
(a) slide show (b) charts (c) page (d) messages

II. Answer any 7 questions. Note: (question number 22 Compulsory) 7 x 2 = 14

- Define least count of any device.
- Compare Speed and velocity.
- state Fleming's Left Hand Rule.
- Fill in the blanks:
a) Example for liquid metal is _____
b) Noble gases belong to _____ group of the periodic table.
- Define aquaregia
- a) $6\text{CO}_2 + \text{?} \xrightarrow[\text{Chlorophy}]{\text{Sunlight}} \text{?} + 6\text{O}_2 \uparrow$
b) The solar tracking of sunflower in accordance with the path of sun is due to _____

19. Match :
- | | | |
|------------|---|-----------------|
| 1. Calcium | - | Anaemia |
| 2. Sodium | - | osteoporosis |
| 3. Iron | - | Goitre |
| 4. Iodine | - | Muscular cramps |
20. state whether true or false. If false Correct the statement.
- Archimedes principle Can also be applied to gases
 - The shape of an object helps to determine whether the object will float or not.
21. Differentiate the following:-
Incisors and Canines.
22. you have just won a medal of 22 carat gold. Have you just produced a pure substance or impure substance?
- III. Answer any seven questions. Note: (question Number 32 Compulsory)**
23. Differentiate mass and weight 7 x 4 = 28
24. a) state pascal's Law.
b) A bird sitting on a high power electric line is still safe. How?
25. Draw the structure of oxygen and Sulphur.
26. a) Sulphuric acid is called "king of chemicals" why is it Called so?
b) What are the uses of plaster of Paris?
27. State any 5 features of Modern periodic table.
28. a) Define "taxonomy"
b) How are the limbs of the birds adapted for avian Life?
29. Mention the differences between stomatal and Lenticular transpiration.
30. Expand the following!
a) ORS _____ b) HIV _____ c) WHO _____ d) BCG _____
31. Differentiate:-
a) kwashiorkar from Marasmus
b) macro nutrients from micronutrients.
32. Light enter from air into a glass plate having refractive index 1.5. what is the speed of light in glass. (speed of the light in Vacuum is 3×10^8 m/s)
- IV. Answer the following questions.** 3 x 7 = 21
33. a) Explain different types of motion
b) Find the mass of an object weighing 98N. (OR)
a) Draw and Label the Diagram of an Ac generator.
b) what are the electric lines of force?
c) Concave mirrors are used by dentists to Examine teeth. why?
34. List down the differences between Ionic and Covalent compounds? (OR)
a) Explain Tyndall effect and Brownian movement with Suitable diagram.
b) What are the nucleons?
35. List out the differences between mitosis and Meiosis. (OR)
Explain the structure of kidney and steps involved in the formation of urine.