

TNQ

QUARTERLY EXAMINATION - 2025

SCIENCE

9 - Std

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Time: 2-30 Hours

Marks: 75

(PART - A)**I Choose the correct answer.**

12 x 1 = 12

- Which among the following is not a device to weight?
a) Spring balance b) Beam balance c) Physical balance d) Digital balance
- The centrifugal force is
a) a real image b) the force of reaction of centripetal force
c) a virtual force d) directional towards the center of the circular path
- The size of an air bubbles rising up in water
a) decreases b) increases c) remains same d) may increase or decrease
- The separation of denser particles from lighter particles done by rotation of high speed is called—
a) filtration b) sedimentation c) decantation d) centrifugation
- The term nucleons refer to
a) protons and neutrons b) only neutrons
c) electrons and neutrons d) protons and neutrons
- Elements in the modern periodic table are arranged in ____ groups and ____ periods.
a) 7,18 b) 18,7 c) 17,8 d) 8,17
- Excretory organ of tape worm is ____
a) flame cell b) nephridia c) body surface d) solenocytes
- Aerenchyma is found in ____
a) epiphytes b) hydrophytes c) halophytes d) xerophytes
- Roots growing downwards into soil is
a) positive phototropism b) Negative geotropism
c) Negative phototropism d) Positive geotropism
- Chlorophyll in a leaf required for ____
a) photosynthesis b) tropic movement
c) transpiration d) nastic movement
- Nerve cell does not contains
a) axon b) nerve endings c) tendons d) dendrites
- Air sacs and pneumatic bones are seen in
a) fish b) frog c) bird d) bat

(PART -B)**II. Answer any seven of the following (question No 22 is compulsory)**

- Define least count of any device. 7 x 2 = 14
- Distinguish distance and displacement.
- State Pascal law.
- Fill in the blanks.
a) Noble gases belongs to ____ group of the periodic table.
b) Example for liquid metal is ____.

17. Name the components in each of the following mixture i) Ice cream ii) Air
18. Match the following
- | | | |
|---------------|---|-----------------------|
| a. Dalton | - | Hydrogen atom model |
| b. Chadwick | - | Discovery of nucleus |
| c. Rutherford | - | First atomic theory |
| d. Neils Bohr | - | Plum pudding model |
| | - | Discovery of neutrons |
19. Why are frogs said to be amphibians?
20. Define transpiration
21. Fill in the blank. $6\text{CO}_2 + \text{-----} \xrightarrow[\text{Chlorophyll}]{\text{sunlight}} \text{-----} + 6\text{O}_2$

22. Why should gametes are produced by meiosis during sexual reproduction?

PART -C

III. Answer any seven of the following (question no 32 is compulsory)

23. a) Differentiate mass and weight. 7X4=28
b) What is fundamental quantities? Give examples.
24. a) Why it is easy to swim in sea water than in river water?
b) What is meant by atmospheric pressure.
25. Draw the structure of oxygen and sulphur atoms.
26. What are nucleons? How many nucleons are present in Phosphorus? Draw its structure.
27. What is valency? Write the electronic configuration of K and Cl.
28. a) What is nematocyst? b) state true or false. If false correct the statement.
i) Bipinnaria is the larva of mollusca. ii) meiosis occurs in germ cells
29. Differentiate :xylem and phloem.
30. i) What is complex tissue?
ii) Name the various kinds of complex tissues.
31. List the five characteristic features of fishes.
32. a) Calculate the number of neutrons, protons and electrons
1. $^{190}_{76}\text{Os}$ 2. $^{31}_{15}\text{P}$
b) what are metalloids? Give an example.

(PART-D)

IV. Answer all Questions.

7 x 3 =21

33. a) Explain different types of motion with example.
b) Compare speed and velocity. (OR)
a) State the laws of reflection.
b) How does a fish manage to rise up and move down in water?
34. Explain the postulates of Bohr's atomic model. (OR)
Write the differences between elements and compounds and give an example for each.
35. Give an account on phylum Arthropoda. (OR)
a) List out the differences between mitosis and meiosis.
b) State the significance of Meiosis.