

## 9th SCIENCE

## QUARTERLY EXAMINATIONS 2022-2023

Time:3 Hours

Marks:75

## PART I

Answer all the questions

12 X 1 = 12

1. 1 metric ton is equal to
  - a. 100 quintals
  - b. 10 quintals
  - c. 1/10 quintals
  - d. 1/100 quintals
2. The centrifugal force is
  - a) a real force.
  - b) the force of reaction of centripetal force.
  - c) a virtual force.
  - d) directed towards the centre of the circular path.
3. In a pressure cooker, the food is cooked faster because
  - (a) increased pressure lowers the boiling point.
  - (b) increased pressure raises the boiling point.
  - (c) decreased pressure raises the boiling point.
  - (d) increased pressure lowers the melting point.
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. Which one of the following pairs is not a poikilothermic animal?
  - (a) Fishes and Amphibians
  - (b) Amphibians and Aves
  - (c) Aves and Mammals
  - (d) Reptiles and Mammals
8. Nerve cell does not contains
  - a. axon
  - b. nerve endings
  - c. tendons
  - d. dendrites
9. Aerenchyma is found in
  - a. epiphytes
  - b. hydrophytes
  - c. halophytes
  - d. xerophytes
10. A growing seedling is kept in the dark room. A burning candle is placed near it for a few days. The tip part of the seedling bends towards the burning candle. This is an example of \_\_\_\_\_.
  - a) Chemotropism
  - b) Geotropism
  - c) Phototropism
  - d) Thigmotropism
11. The root of the plant is \_\_\_\_\_.
  - i) positively phototropic but negatively geotropic
  - ii) positively geotropic but negatively phototropic
  - iii) negatively phototropic but positively hydrotropic
  - iv) negatively hydrotropic but positively phototropic
  - a) (i) and (ii)
  - b) (ii) and (iii)
  - c) (iii) and (iv)
  - d) (i) and (iv)
12. Data processing involves \_\_\_\_\_ steps.
  - a) seven
  - b) four

c) six

d) eight

**PART II****Answer any 7 questions . Q.No. 22 is Compulsory****7 x 2 = 14**

13. Define least count of any device.

14. Mark the correct choice as:

**Assertion:** The accelerated motion of an object may be due to change in magnitude of velocity or direction or

both of them.

**Reason:** Acceleration can be produced only by change in magnitude of the velocity. It does not depend the

direction.

- If both assertion and reason are true and reason is the correct explanation of assertion.
- If both assertion and reason are true but reason is not the correct explanation of assertion.
- If assertion is true but reason is false.
- If assertion is false but reason is true.

15. Match the following.

- |               |                          |
|---------------|--------------------------|
| a) Compound   | Settles down on standing |
| b) Mixture    | Impure substance         |
| c) Colloid    | Made up of molecules     |
| d) Suspension | Pure substance           |

16. State whether true or false. If false, correct the statement.

- Electrons have negligible mass and charge.
- The maximum number of electron in L Shell is 8.

17. State law of triads',

18. What is nematocyst?

19. Which are not true cells in the blood? Why?

20. Differentiate phototropism from photonasty

21. What is data processing?

22. Calculate the apparent weight of wood floating on water if it weighs 100g in air.

**PART III****Answer any 7 questions . Q.No. 32 is Compulsory****7 x 2 = 14**

23. Differentiate mass and weight

24. Is the uniform circular motion accelerated? Give reasons for your answer.

25. How does a fish manage to rise up and move down in water?

26. You have just won a medal made of 22-carat gold. Have you just procured a pure substance or impure substance?

27. State any four features of modern periodic table

28. How are the limbs of the birds adapted for avian life?

29. What is skeletal connective tissue? How is it helpful in the functioning of our body?

30. Give the technical terms for the following:

- Growth dependent movement in plants.
- Growth independent movement in plants

31. List out the generations of computer.

32. Calculate the number of neutrons, protons and electrons

- (i) atomic number 3 and mass number 7
- (ii) atomic number 92 and mass number 238.

**PART IV**

33. Explain a method to find the thickness of a hollow tea cup.

**OR**

State the laws of flotation

34. How is a mixture of common salt, oil and water separated? You can use a combination of different methods.

**OR**

Explain the postulates of Bohr's atomic model.

35. Describe the characteristic features of different Prochordates.

**OR**

What are permanent tissues? Describe the different types of simple permanent tissues.