

# FIRST MID TERM EXAMINATION - 2022

9 - STD

SCIENCE

Time : 1.30 Hrs

Marks : 50

## I Choose the correct answer.

10 X 1 = 10

1. 1 metric ton is equal to .....  
 a) 100 quintals                      b) 10 quintals  
 c) 1/10 quintals                      d) 1/100 quintals
2. Which of the following is not a device to measure mass?  
 a) spring balance                      b) beam balance  
 c) physical balance                      d) digital balance
3. The centrifugal force is .....  
 a) real force                      b) the force of reaction of centripetal force  
 c) virtual force                      d) directed towards the centre of circular path
4. When we mix a drop of ink in water, we get a .....  
 a) heterogeneous mixture                      b) compound                      c) homogeneous mixture  
 d) suspension
5. Change in number of neutrons in an atom changes it to .....  
 a) an ion                      b) an isotope                      c) an isobar                      d) another element
6. Identify the animal having four chambered heart  
 a) lizard                      b) snake                      c) crocodile                      d) calotes
7. Air sacs and pneumatic bones are seen in  
 a) fish                      b) frog                      c) bird                      d) bat
8. Poikilothermic organisms are .....  
 a) fish, frog, lizard, man                      b) fish, frog, lizard, cow  
 c) fish, frog, lizard, snake                      d) fish, frog, lizard, crow
9. The fibres consist of .....  
 a) parenchyma                      b) sclerenchyma  
 c) collenchyma                      d) none of above
10. Smooth muscles occur in .....  
 a) uterus                      b) artery                      c) vein                      d) all the above

## II Answer in one or two sentences. (Any seven). (Question No. 20 is compulsory)

7 X 2 = 14

11. Define least count of any device.
12. i) Speed is a ..... quantity whereas.  
 ii) Velocity is a ..... quantity.

13. Match the following.

- |                    |   |              |
|--------------------|---|--------------|
| 1) sclereids       | - | chlorenchyma |
| 2) chloroplast     | - | sclerenchyma |
| 3) simple tissue   | - | phloem       |
| 4) companion cells | - | collenchyma  |

14. Find the proton, neutron and electron number.

15. Name the apparatus that you used to separate two :

- i) miscible liquids    ii) immiscible liquids.

16. Define sublimation.

17. Say true / false.

- i) Larva of amphibian is tadpole.  
ii) Canal system seen is in coelenterata.

18. What is nematocysts?

19. Draw neuron cell diagram and mark any two parts.

20. If a man has a mass 50kg on the earth then what is his weight?

**III Answer in brief. (Any three)**

3 X 4 = 12

21. Write four rules that are followed in writing the symbols of units in SI system.

22. i) What is Brownian movement.

ii) Write about Tyndall effect.

23. Differentiate between flatworm and round worms.

24. In which stage of mitosis the chromosomes align in an equatorial plate?  
How?

**IV Answer in detail. (Any two)**

2 X 7 = 14

25. Explain a method to find the thickness of a hollow tea cup. (7)

26. a) Draw the structure of oxygen and sulphur atoms. write its electronic configuration. (5)

b) Match the following. (2)

- |                 |   |                       |
|-----------------|---|-----------------------|
| 1) Dalton       | - | Plum pudding model    |
| 2) Chadwick     | - | Discovery of nucleus  |
| 3) Rutherford   | - | First atomic theory   |
| 4) J.J. Thomson | - | Discovery of neutrons |

27. Write about phylum arthropoda.

28. Distinguish between xylem and phloem.