

10 RRegister No. **First Mid-Term Test - 2024**

Time : 1.30 Hour

SCIENCE

Marks : 50

I. Write the correct answer with notation:**10x1=10**

1. If the Earth shrinks to 50% of its real radius its mass remaining the same, the weight of a body on the Earth will
a) decrease by 50% b) increase by 50% c) decrease by 25% d) increase by 300%
2. Where should an object be placed so that a real and inverted image of same size is obtained by a convex lens
a) f b) 2f c) infinity d) between f and 2f
3. Power of a lens is -4D, then its focal length is
a) 4m b) -40m c) -0.25 m d) -2.5 m
4. The grain molecular mass of oxygen molecule is
a) 16 g b) 18 g c) 32 g d) 17g
5. _____ group contains the member of halogen family
a) 17th b) 15th c) 18th d) 16th
6. The endarch condition is the characteristic feature of
a) root b) stem c) leaves d) flower
7. Which is formed during anaerobic respiration
a) Carbohydrate b) Ethyl alcohol c) Acetyl CoA d) Pyruvate
8. The body of leech has
a) 23 segments b) 33 segments c) 38 segments d) 30 segments
9. The wall of human heart is made of
a) Endocardium b) Epicardium c) Myocardium d) All of the above
10. Vomiting centre is located in
a) medulla oblongata b) stomach c) cerebrum d) hypothalamus

SECTION - 2**II. Answer any seven questions.****7x2=14**

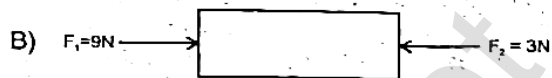
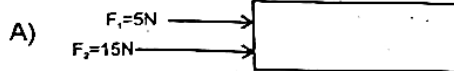
11. Classify the types of force based on their application.
12. Fill in the blanks.
a) Amount of light entering into the eye is controlled by _____
b) The path of the light is called as _____
13. Define dispersion of light
14. Define : Atomicity and find the atomicity of phosphorus.
15. Fill in the blanks
a) _____ is the longest period in the periodical table.
b) The chemical name of rust is _____
16. What is photosynthesis and where in a cell does it occur?
17. Draw and label the structure of oxysomes.
18. Identify whether the statements are True or False. Correct the false statement
a. An anticoagulant present in saliva of leech is called heparin.
b. The vas deferens serves to transport the ovum.

10 Science - 1

19. Match the following.

- | | | |
|-----------------------|---|-------------------|
| 1. Symplastic pathway | - | Leaf |
| 2. Transpiration | - | Plasmodesmata |
| 3. Osmosis | - | Pressure in xylem |
| 4. Root Pressure | - | Pressure gradient |

20. Find the resultant force of the following.



SECTION - 3

III Answer for any three questions.

3x4=12

21. a. Differentiate mass and weight.
b. If the mass of a person on earth is 50 kg, then what is his mass on the moon?
22. Give any four salient features of "Modern atomic theory".
23. a. Why should the light dependent reaction occur before the light independent reaction?
b. Write the reaction for photosynthesis?
24. a. Which organ acts as a suction pump in leech?
b. Why is the teeth of rabbit called heterodont?
25. Match the following.

1. Leukemia	-	Thrombocytes
2. Platelets	-	Phagocyte
3. Monocytes	-	Decrease in leucocytes
4. Leucopenia	-	Blood Cancer
5. AB blood group	-	Allergic condition
6. O blood group	-	Inflammation
7. Eosinophil	-	Absence of antigen
8. Neutrophils	-	Absence Of antibody

SECTION - 4

IV. Answer for the following

2x7=14

26. A. 1. Describe rocket propulsion.
2. Differentiate (Any two Points) Myopia and Hypermetropia
(or)
B. 1. Derive the relationship between Relative molecular mass and Vapour density.
2. a) Identify the bond between H and F in the HF molecule.
b) What property forms the basis of identification?
c) How does the property vary in periods and in groups?
27. A. 1. Describe and name three stages of cellular respiration that aerobic organisms use it to obtain energy from glucose.
2. How does locomotion take place in leech?
(or)
B. 1. Classify neurons based on its structure.
2. Draw neat labelled diagram of a neuron.