



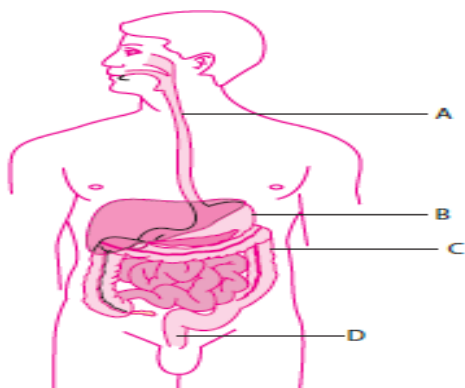
**VELAMMAL BODHI CAMPUS**  
**(A CBSE IIT/NEET Integrated Sr. Sec. School)**  
**2024-25**  
**UNIT TEST -1**

**CLASS: Future X**  
**SUBJECT : SCIENCE**

**MARKS:40**  
**DURATION : 1 1/2 Hrs**  
**DATE: 08.03.2024**

**SECTION A (1X10=10)**

1. The laws of reflection hold true for  
(a) Plane mirror      (b) spherical mirror      (c) diffused reflected mirror      (d) all the above
2. Unit of magnification -----  
(a) metre      (b) centimetre      (c) No unit      (d) None of these
3. The color of  $\text{FeSO}_4$  is  
(a) blue      (b) green      (c) black      (d) none
4. Find out the low reactive metals  
(a) Cu      (b) Ag      (c) Au      (d) All
5. Which of the following help in protecting the inner lining of the stomach from the harmful effect of hydrochloric acid?  
(a) Mucus      (b) Pepsin      (c) Trypsin      (d) Bile
6. From the given picture of the digestive system, identify the part labelled as gastric gland.  
(a) A      (b) B      (c) C      (d) D



7. Name the substances whose build up in the muscles during vigorous physical exercise may cause cramps?  
(a) Ethanol + Carbon dioxide + Energy      (b) Lactic acid + Energy  
(c) Carbon dioxide + Water + Energy      (d) Pyruvate

**Directions:** In the following questions, a statement of assertion (A) is followed by a statement of reason (R). Mark the correct choice as:

- a) Both assertion (A) and reason (R) are true and reason (R) is the correct explanation of assertion (A).
- b) Both assertion (A) and reason (R) are true but reason (R) is not the correct explanation of assertion (A).
- c) Assertion (A) is true but reason (R) is false.
- d) Assertion (A) is false but reason (R) is true.

8. Assertion : A ray passing through the centre of curvature is reflected back along the same path  
Reason : The light rays come back along the same path because the incident rays fall on the mirror along the normal to the reflecting surface

9. Assertion: Zn can displace hydrogen from acids.  
Reason :Zn is more reactive than Hydrogen

10.Assertion :In plants there is no need of specialised respiratory organs.  
Reason :Plants do not have great demands of gaseous exchange.

**SECTION B (3X2=6)**

11. List 4 characteristics of image formed by plane mirror
12. What is double displacement reaction? Give example.
13. What is the role of acid in stomach?

**SECTION C (3X3=9)**

14. Name the type of mirror used in the following situations.
- (a) Headlights of a car                      (b) Mirror used by dentist                      (c) Solar furnace.

Support your answer with reason.

15. What is rancidity? How will you prevent it?
16. (a) In the process of respiration, state the function of alveoli.
- (b) Rate of breathing in aquatic organisms is much faster than that in terrestrial organisms. Give reasons.

**SECTION D (3X5=15)**

17. (i) Define the following terms of a spherical mirror : (a) Pole (b) Centre of curvature
- (ii) A 4.5 cm needle is placed 12 cm away from a convex mirror of focal length 15 cm. Find the position, nature and size of image.
18. A white color substance A on heating gives a yellow color substance B, reddish brown vapour C and a colorless substance D.
- (i) What are A, B, C and D
- (ii) Write the equation of the reaction.
- (iii) Identify the type of reaction and give one more example for the same type.
19. (i) Draw a flow chart showing the three different pathways involved in the breakdown of glucose in different organisms.
- (ii) Name the respiratory pigment present in human beings.
- (iii) State the function of rings of cartilage present in our throat.

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