



Gurukul Global School
Class - X
Science (086)



Date: 11-05-2023

M.M. 30

Time: 1 hr.

General Instructions:

- (i) This question paper consists of 15 questions in 5 sections.
- (ii) All questions are compulsory. However, an internal choice is provided in some questions. A student is expected to attempt only one of these questions.
- (iii) Section A consists of 08 objective type questions carrying 1 mark each.
- (iv) Section B consists of 02 Very Short questions carrying 02 marks each. Answers to these questions should be in the range of 30 to 50 words.
- (v) Section C consists of 03 Short Answer type questions carrying 03 marks each. Answers to these questions should be in the range of 50 to 80 words.
- (vi) Section D consists of 01 Long Answer type questions carrying 05 marks each. Answer to these questions should be in the range of 80 to 120 words.
- (vii) Section E consists of 01 source-based/case-based units of assessment of 04 marks each with sub-parts.

SECTION-A

1. Which is the correct sequence of body parts in the human alimentary canal? (1)
 - a) Mouth → stomach → small intestine → large intestine → oesophagus
 - b) Mouth → oesophagus → stomach → small intestine → large intestine
 - c) Mouth → stomach → oesophagus → small intestine → large intestine
 - d) Mouth → oesophagus → stomach → large intestine → small intestine
2. The contraction and expansion movement of the walls of the food pipe is called: (1)
 - a) Translocation
 - b) Transpiration
 - c) Peristaltic movement
 - d) Digestion
3. The breakdown of pyruvate to give carbon dioxide, water and energy takes place in (1)
 - a) Cytoplasm
 - b) Mitochondria
 - c) Chloroplast
 - d) Nucleus
4. In which mode of nutrition an organism derives its food from the body of another living organism without killing it? (1)
 - a) Saprotrophic nutrition
 - b) Parasitic nutrition
 - c) Holozoic nutrition
 - d) Autotrophic nutrition
5. Trachea does not collapse when there is not much air because: (1)
 - a) It is thick and muscular
 - b) It has cartilaginous rings
 - c) It has valves
 - d) It is supported by larynx.
6. The laws of reflection hold good for. (1)
 - a) Plane mirror only
 - b) Concave mirror only
 - c) Convex mirror only
 - d) All mirror irrespective of their shape
7. A concave mirror gives real, inverted and same size image if the object is placed (1)
 - a) At F
 - b) At infinity
 - c) At C
 - d) Beyond C

8. Two statements – Assertion (A) and Reason (R) are given below. Answer the question by selecting the appropriate option:

Assertion (A): All the chemical reactions in nature need to be balanced.

Reason (R): The balancing of chemical reactions is done to satisfy the Law of Conservation of Mass.

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

SECTION-B

9. Why is it necessary to separate oxygenated & deoxygenated blood in mammals & birds? B (2)
10. A teacher took a few crystals of sugar in a dry test tube and heated the test tube over flame. The color of the sugar turned black. Explain why. C (2)

SECTION-C

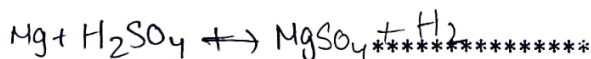
11. You are given sulphuric acid and magnesium wire. They are made to react with each other. Identify the type of reaction that take place when the two are mixed together. Write the reaction involved. C (3)
12. Leaves of a healthy potted plant were coated with petroleum jelly. How will it affect the plant? Will this plant remain healthy for long? State two reasons. B (3)
13. Draw the ray diagram and state the position, the relative size and the nature of image formed by a convex mirror when the object is placed anywhere? P (3)

SECTION-D

14. Define Reflection of Light. State the Laws of Reflection of Light. An object 5 cm in length is held 25 cm away from a converging mirror of focal length 10 cm. Draw the ray diagram and find the position, size and the nature of the image formed. $(1+2+2=5)$

SECTION-E

15. A chemical reaction is a change which occurs when the reactants are subjected to changes such as temperature change, pressure change and then they get converted to products. They are of various types and classified depending on the nature of reactants and the changes it is made to undergo. Read the paragraph given above and answer the following questions -
- a) What is a precipitation reaction? (1)
 - b) Give an example of an Exothermic reaction. (1)
 - c) State the meaning of Displacement reaction (1)
 - d) Give any two characteristics of a chemical reaction with an example (1)



186
3500
- 21
20
- 12
20

Carbon dioxide