

**SSC PUBLIC EXAMINATIONS 2024 - 25**  
**GENERAL SCIENCE -PAPER-II**  
**BIOLOGICAL SCIENCE**  
**(ENGLISH VERSION)**

Time : 2 Hours

Max. Marks : 50

**Instructions :**

1. Question paper consists of 4 sections and 17 Questions.
2. Internal Choice is available only for Q.No. 12 in Section-III and for all the Questions in Section-IV.
3. In the duration of 2 hours, 15 minutes of time is allotted to read the Question paper.
4. All answers should be written in the answer booklet only.
5. Answer should be written neatly and legibly.

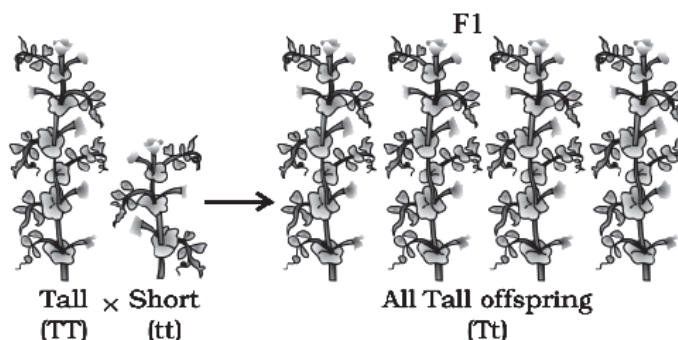
**SECTION-I**

**Note :** 1) Answer all the Questions.

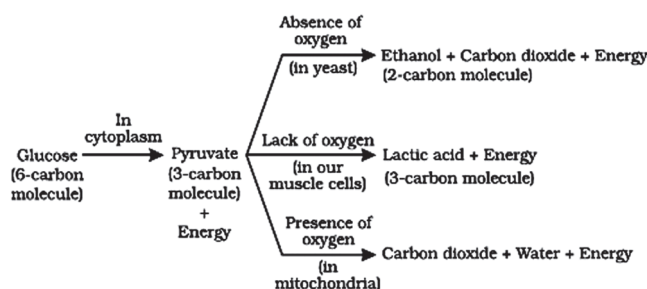
2) Each question carries 1 mark.

**(6 × 1 = 6 M)**

1. What is the basic filtration unit in the kidneys ?
2. Write a slogan on waste management.
3. Observe the given picture and identify the dominant trait in these plants.



4. Expand UNEP.
5. If 'A' trait exists in 10% of a population of an asexually reproducing species and a trait 'B' exists in 60% of the same population. Guess the trait that have arisen earlier.
6. **Read the given flowchart and find out, where does aerobic respiration take place in the cell.**



*Break-down of glucose by various pathways*

**SECTION-II****Note :** 1) Answer all the Questions.

2) Each question carries 2 marks.

**(4 × 2 = 8 M)**

7. Why is the use of Iodised salt advisable ?
8. What questions will you ask, if you have a chance to meet a gastro enterologist ?
9. **Read the paragraph.**

'Ozone ( $O_3$ ) is a molecule formed by three atoms of oxygen. While  $O_2$ , which we normally refer to as oxygen, is essential for all aerobic forms of life. Ozone, is a deadly poison. However, at the higher levels of the atmosphere, Ozone performs an essential function. It shields the surface of the earth from ultraviolet (UV) radiation from the Sun. This radiation is highly damaging to organisms, for example, it is known to cause skin cancer in humanbeings'.

**Answer the following questions.**

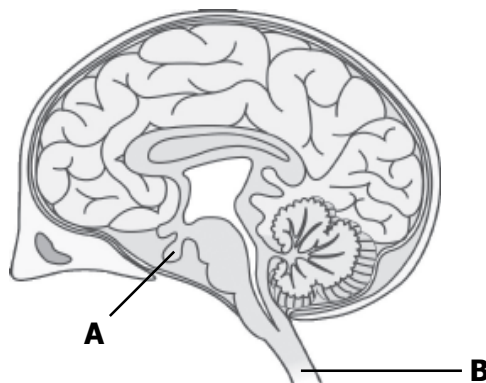
- 1) How do Ozone ( $O_3$ ) layer protects us ?
- 2) What is the effect of ultraviolet rays on human health ?
10. What will happen if we kill all the organisms in one trophic level ?

**SECTION-III****Note :** 1) Answer all the Questions.

2) Each question carries 4 marks.

**(5 × 4 = 20 M)**

11. Write differences between single circulation and double circulation.
12. **Answer anyone of the following.**
- A) Observe the diagram and answer the following.



- 1) Identify the parts A and B.
- 2) How many major regions are present in Human brain ?
- 3) Which part of the hind brain controls involuntary actions such as blood pressure, salivation etc.

(or)

Draw a neat labelled diagram of Human female reproductive system. (Label any four parts).

13. What are the problems caused by the non-biodegradable wastes that we generate ?
14. Give suggestions to your friend to aware about reproductive health.

15. Read the following table.

S.No.	Name of the Enzyme	Secreted at	Acts on
1.	Salivary amylase	Buccal Cavity	Carbohydrates
2.	Pepsin	Stomach	Proteins
3.	Trypsin	Pancreas	Proteins
4.	Lipase	Pancreas	Fats

**Answer the following questions.**

1. Name the enzymes which acts on proteins.
2. Where does salivary amylase secreted ?
3. What are the enzymes secreted by pancreas ?
4. To which life process this tabel belongs ?

**SECTION-IV**

- Note :**
- 1) Answer all the Questions.
  - 2) Each question carries 8 marks.
  - 3) Each question has an internal choice.

**(2 × 8 = 16 M)**

16 A) What experiment do you conduct to prove the action of saliva on starch ?

(OR)

B) What is the reproductive process by which yeast reproduces ? Which type of reproduction is it ? Write an activity to observe it.

17 A) Contrast nervous and hormonal mechanisms for control and coordination in animals.

(OR)

B) How do Mendel's experiments show that traits are inherited independently.

