

20E

Total No. of Printed Pages: 4

Question Booklet Sl. No.

6458343

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

(6×1=6)

Note: 1) Answer all the questions.

2) Each question carries 1 mark.

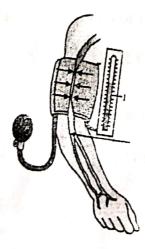


Which phenomenon acts as a driving force to pull water from the root xylem cells to leaf cells in the plant, during the day time?

2. Write a slogan to "Save our Earth".



3. Identify the instrument used in the given picture.







- 4. Define the term 'Heredity'.
- 5. What happens, if variations do not occur in a species?
- 6. Read the paragraph and answer the given question.

Ozone at the higher levels of the atmosphere, protects us from the ultraviolet radiation from the Sun. This radiation is one of the cause of skin cancer in the human beings.

i) Which rays cause skin cancer to us?

SECTION - II

 $(4 \times 2 = 8)$

Note: 1) Answer all the questions.

- 2) Each question carries 2 marks.
- 7. Write the differences between biodegradable and non-biodegradable wastes.
- . If haemoglobin level may decreases in our blood, what happens?



9/Read the given table and answer the following questions.

| Sl. No. | Plant Hormone Name | Function |
|---------|--------------------|--------------------------------|
| 1. | Auxins | Stimulate cells to grow longer |
| 2. | Cytokinins | Promote cell division |
| 3. | Abscisic Acid | Inhibits growth |



- i) Which hormone promotes the cell division?
 - ii) Write the growth inhibiting hormone in plants.
- What questions will you ask your teacher to know more about ecological systems?



SECTION - III

 $(5 \times 4 = 20)$

Note: 1) Answer all the questions.

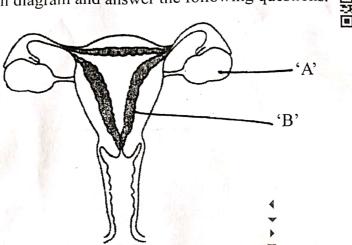
- 2) Each question carries 4 marks.
- Write the differences between arteries and veins.
- 12 Answer any one of the following.
 - A) Draw a neat labelled diagram of neuron.



OR

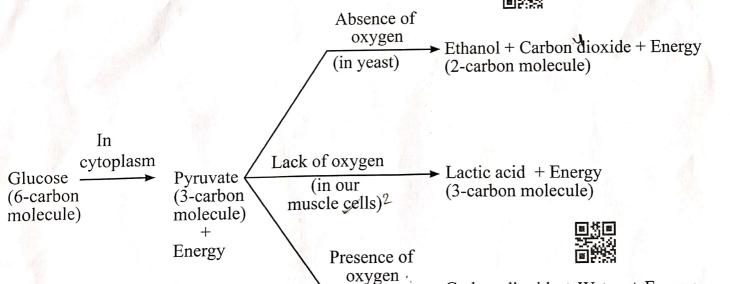


B) Observe the given diagram and answer the following questions.





- i) Identify the Parts 'A' and 'B'.
- ii) Fertilization of the egg cell occurs in which part?
- iii) Implantation of the embryo occurs in which part?
- 12. Write the different types of contraceptive methods.
- 14. Suggest some environment-friendly practices to protect our nature.
- 13. Observe the given chart and answer the following questions.



- i) What is the first step occurs in the respiration of the cell?
- ii) In which cells, lactic acid formation occurs?
- iii) Aerobic respiration occurs in which organelle of the cell?
- iv) What are the end products released in the anaerobic respiration of yeast cells?



P.T.O.

(in mitochondria)

Carbon dioxide + Water + Energy



SECTION - IV



 $(2 \times 8 = 16)$

Note: 1) Answer all the questions.

- 2) Each question carries 8 marks.
- 3) Each question has an internal choice.



Describe the experiment to prove that carbon dioxide is essential for photosynthesis in plants.

OR



- B) Describe the experiment you conduct to show the response of plant to the direction of light.
- 17. A) Explain the process of sexual reproduction in flowering plants briefly.

OR

B) How is the sex of a child determined in human beings?



M - 25