

Code: A-B616113-M

I SEMESTER EXAM – 2025-26

3 x 445

Std.: XI

Sub: BIOLOGY

Marks: 50

Date:

Roll No.: _____

Time: 2½ Hrs.

General Instructions :

The question paper is divided into four sections.

- Section A :** Q.No. 1 contains **Seven multiple choice** type of questions carrying one mark each. In case of MCQ, evaluation will be done for first attempt only.
Q.No. 2 contains **Seven very short** answers type of questions carrying one mark each.
- Section B :** Q.No.3 to Q.No. 13 are short answer type of questions carrying two marks each.
- Section C :** Q.No. 14 to Q.No. 19 are short answer type of questions carrying three marks each.
- Section D :** Q.No.20 to Q.No.23 are long answer type of questions carrying four marks each.
- Begin the answer of each section on a new page.

SECTION-A**Q1. Select and write the correct answer for the following multiple choice type of questions: (7)**

- When all the sepals are united, the condition is called as _____.
a) Polysepalous b) Gamosepalous c) Polypetalous d) Gamopetalous
- Mesosome is produced by the infoldings of _____.
a) Mitochondria b) Chloroplast c) Golgi complex d) Cell membrane
- Nissl's granules are found in _____.
a) Cartilage cells b) Muscle cells c) Nerve cells d) Osteoblasts
- The vascular bundles in a dicot stem are _____.
a) Collateral and open b) Collateral and closed
c) Radial d) Radial and closed
- In which of the following phase of mitosis chromosomes are arranged at equatorial plane ?
a) Prophase b) Metaphase c) Anaphase d) Telophase
- Blood filled cavity in cockroach is called _____.
a) Spongocoel b) Paracoel c) Metacoel d) Haemocoel
- Which RNA is present in more amount in the cell ?
a) mRNA b) tRNA c) rRNA d) All of the above

Q2. Answer the following questions :**(7)**

- What is polyarch condition of root?
- What are neuroglial cells?
- What are lysosomes commonly known as?
- What is the role of chitin in trachea of cockroach?
- Name the functional unit of skeletal muscles.
- Define Inflorescence.
- How many haploid daughter cells are produced at the end of meiosis-II ?

SECTION - B**Attempt any Eight of the following questions.****(16)**

- Write a note on racemose inflorescence.
- What is cell cycle? Name the phase of cell cycle in which DNA replication takes place.
- Classify the following examples of flowers into hypogynous and epigynous.
a) Mustard
b) Guava.

P.T.O

Q6. Match the column I with column II .

Column I	Column II
i) Mitochondria	a) Synthesis of protein
ii) Nucleolus	b) Photosynthesis
iii) Chloroplast	c) Respiration
iv) Ribosomes	d) Ribosome biogenesis

Q7. Name the following :

- A collection of dried plant specimen that are pressed, treated and mounted on a standard size sheet in order to preserve it.
- Taxonomical aid used for classification of plants and animals which is based on contrasting characters.

Q8. Give the location of skeletal muscles and cardiac muscles.

Q9. Cockroaches are nocturnal and cursorial. Give reason.

Q10. Define the following terminologies related to flower,

- Complete flower
- Neuter flower

Q11. Sketch and label: mRNA.

Q12. Name any two common species of cockroach found in India.

Q13. Complete the following table with respect to meiosis.

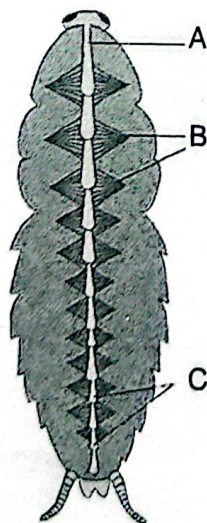
Phases	Their events
a) Zygotene	_____
b) _____	Crossing over

SECTION - C

Attempt any Four of the following questions:

(12)

Q14. Identify labels A, B and C in the given figure of circulatory system of Cockroach.



Q15. Distinguish between dicot and monocot leaf on the basis of following characters:

- Stomata
- Type of leaf
- Mesophyll cells

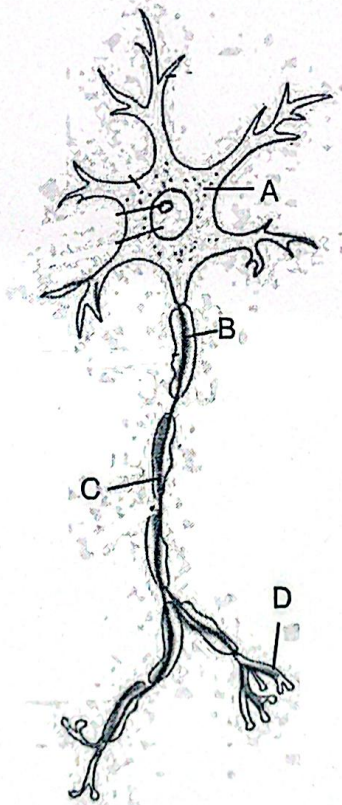
- Q16. Write a note on the significance of mitosis.
- Q17. Enlist any three basic principles of life.
- Q18. What is aestivation? Enlist the different types of aestivation.
- Q19. Distinguish between Plant cell and animal cell.

SECTION - D

Attempt any Two of the following questions:

(8)

- Q20. Explain the anatomy of monocot stem.
- Q21. Label the parts A,B,C,D in the given diagram of multipolar neuron.



- Q22. a) Define flower,
b) Draw a neat labelled diagram of a typical flower.
- Q23. Distinguish between DNA and RNA.
-