

Tamil Nadu 2026 Class 12 Biology Public Question Paper (Memory Based)

Time Allowed :3 Hour	Maximum Marks :70	Total Questions :21
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General Instructions

- The total duration of the examination is 3 hours (180 minutes).
- Candidates are allotted 15 minutes for reading the question paper and verifying their particulars.
- The maximum marks for the theory paper is 70.
- Check the question paper for fairness of printing. If there is any lack of fairness, inform the Hall Supervisor immediately.
- Use Blue or Black ink to write and underline, and use a pencil for drawing diagrams.
- The question paper consists of four parts (Part I, II, III, and IV).
- Part I is compulsory and contains multiple-choice questions.
- Internal choices and "answer any x out of y" options are provided in Parts II, III, and IV.
- Diagrams should be drawn wherever necessary and labeled neatly.
- Scientific calculators and other electronic gadgets are strictly not allowed.

1. Explain the process of double fertilisation and its significance in angiosperms.

2. Describe the structure and development of a mature 7-celled, 8-nucleated embryo sac.

3. Explain the basic techniques and applications of plant tissue culture.

4. Write an essay on the steps involved in recombinant DNA (rDNA) technology.

5. Explain Bentham and Hooker's system of classification.

6. Describe the mechanism of crossing over and its significance.

7. Describe the hormonal control of the human menstrual cycle.

8. Differentiate between active and passive immunity with suitable examples.

9. Explain the semi-conservative mode of DNA replication.

10. Describe the mechanism of urine formation, including filtration, reabsorption, and secretion.

11. Explain the production of recombinant insulin and its advantages over conventional insulin.
