

Roll No. ....

[Total No. of Printed Pages : 3]

Total No. of Questions : 26]

SS

2117

## ANNUAL EXAMINATION SYSTEM

## BIOLOGY (Theory)

## (English Version)

Time allowed : Three hours

Maximum marks : 70

**Note :** (i) You must write the subject-code/paper-code **054** in the box provided on the title page of your answer-book.

- (ii) Make sure that the answer-book contains 30 pages (including title page) and are properly serialied as soon as you receive it.
- (iii) Question/s attempted after leaving blank page/s in the answer-book would not be evaluated.
- (iv) Draw well labelled diagrams, wherever necessary.
- (v) The paper comprises of 26 questions.
- (vi) Question Nos. 1 to 8 are of one mark each. All questions are compulsory.
- (vii) Question Nos. 9 to 16 are of two marks each. All questions are compulsory.
- (viii) Question Nos. 17 to 23 are of four marks each. All questions are compulsory however there is internal choice only in Question no. 22 and 23.
- (ix) Question Nos. 24 to 26 are of six marks each. There will be internal choice in them.

**Attempt all questions.**

- |    |  |   |
|----|--|---|
| 1. | What do you mean by food chain ?                           | 1 |
| 2. | What do you mean by co-dominance ? Give its example.       | 1 |
| 3. | What is Mutation ?   | 1 |
| 4. | What is double fertilization ?                             | 1 |
| 5. | Polyembryony.  | 1 |
| 6. | What is genetic code ?                                     | 1 |
| 7. | What is tissue culture technique ? Write its applications. | 1 |

[Turn over

(2)

8. Write the structure of DNA. 1
9. Habitat and niche. 2
10. What is global warming ? Write some methods of its reduction. 2
11. Draw labelled diagram of male reproductive system. (Diagram only). 2
12. What are Transgenic Animals ? Explain it with some examples. 2
13. What is Biological Evolution ? Explain Evidences for biological evolution on Palaeontological basis. 2
14. Methods used for Birth control. 2
15. How Pollination helps variation and evolution ? 2
16. Give concept of Biodiversity. Write about importance of Biodiversity. 2
17. Why human genome project is called a Mega Project ? 4
18. Write about Menstrual cycle. Explain it with help of diagram. 4
19. What is Transcription ? Explain it in detail. 4
20. What are Genetically modified organism ? Give some examples. 4
21. Mendel's law of independent assortment. Prove its Genotype ratio. 4
22. Application of Biotechnology in health and agriculture.
- or
- What is Nutrient cycling ? Explain Carbon and Phosphorous cycle. 4
23. What is Air-Pollution ? Give its reasons, cause and control.
- or
- Explain female reproductive system. Explain with labelled diagrams. 4

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24. What is Vegetative Propagation ? Give various Natural methods of vegetative Propagation.

or

Explain following terms :

- (a) Solid waste management.
- (b) Deforestation.

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25. (a) Define crossing over. Give its significance.

- (b) Genetic code.

or

- (a) What do you mean by disease ? Explain Parasites and Pathogens.
- (b) What is sexual dimorphism ? Give one example of it.

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26. Describe HIV.

or

- (a) Difference between a Cancerous cell and Normal cell.
- (b) What is Food Web ?

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