

Roll No. ....

054

Total No. of Questions : 26]

[Total No. of Printed Pages : 3

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 serialised 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

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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