

## SAMPLE QUESTION PAPER-II

Class: XII

BIOLOGY (Theory)

Time : 3 Hours

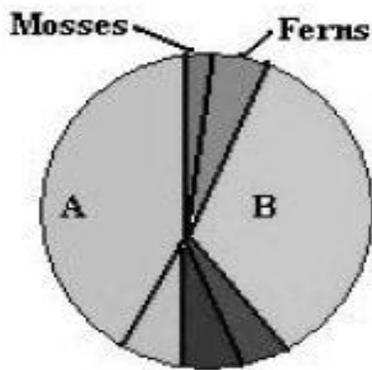
Max. Marks: 70

### GENERAL INSTRUCTIONS:-

- (i) All questions are compulsory.
- (ii) The question paper consists of four sections A, B, C and D. Section-A contains 8 questions of 1 mark each, Section B is of 10 questions of 2 marks each, Section C has 9 questions of 3 marks each whereas Section D is of 3 questions of 5 marks each.
- (iii) There is no overall choice. However, an internal choice has been provided in one question of 2 marks, one question of 3 marks and all the three questions of 5 marks weightage. A student has to attempt only one of the alternatives in such questions.
- (iv) Wherever necessary, the diagrams drawn should be neat and properly labelled.

### SECTION – A

1. Name asexual reproductive structures in Penicillium . 1
2. What is aneuploidy? 1
3. A 30 year old man with a history of no prior immunization steps on a nail while walking barefoot in his courtyard and bleed. Which immunization should he undergo. 1
4. Give the scientific name of baker's yeast. 1
5. What is Rop in cloning vector pBR322 ? 1
6. Which stage is important for the permanent cure of ADA deficiency? 1
7. Which animal extinct within a decade after goats were introduced on the Galapagos Islands? 1
8. The given figures shows the relative plant biodiversity. Identify What is A and B in this given figure below?

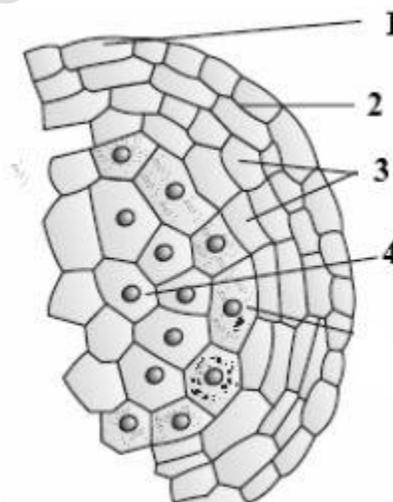


### SECTION – B

9. What is eutrophication? Explain the consequences on the life of plants and animals in such water bodies. 2
10. Name the plant came into India as a contaminant with imported wheat has become ubiquitous in occurrence and causes pollen allergy. What are its other effect on our body? 2
11. Which part of the fallopian tube helps in collection of ova after ovulation and which part is the site of fertilization? 2
12. What is RCH? What are the major task of this programme? 2
13. What are fossils? What they indicate with respect to evolution? 2
14. What are the essential steps for breeding disease resistance plants? 2

OR

- How Maize plant become resistance to stem borer with respect to physiological characters. 2
15. Label the 1, 2, 3 and 4 in given diagram below:- 2



16. Few gaps have been left in the following table showing certain terms and their meanings: 2

Sl.No	Terms	Meanings
1.	-----	First transgenic cow
2.	RNAi	-----
3.	-----	organisations which will make decisions regarding the validity of GM.
4.	Bt	-----

17. Which two core techniques enabled birth of modern biotechnology? 2

18. Give the meaning of following terms:- (i) Detritivores (ii) Decompostion 2

### SECTION – C

19. Name the following:- 3

- (a) Voluntary termination of pregnancy,
- (b) New pills without steroids with very few side effects,
- (c) Widely accepted methods of contraception in India.

20. (i) Which bond link nitrogen base to the sugar? (ii) Which bond link Phosphate group to sugar (iii) Which bond link two nucleotides to form dinucleotide? 3

21. What are the three regions of transcriptional unit in the DNA? Name the enzyme which polymerise the process in one direction. 3

OR

What are the silent features of Genetic code? 3

22. When did the following appears on the geological history?

(i) invertebrates (ii) jawless fish (iii) Sea weeds? 3

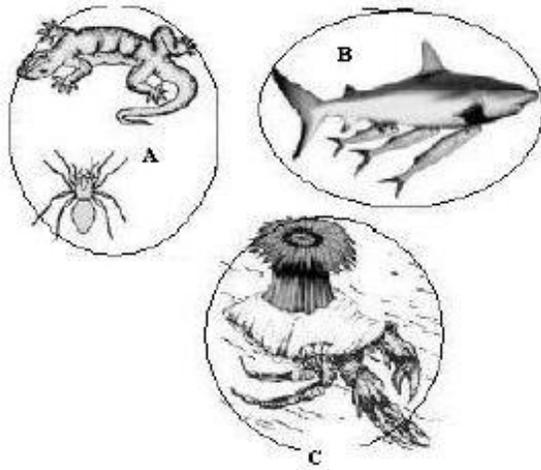
23. Explain the different types of barriers involved in Innate immunity? 3

24. Why did Mendel's work remain unrecognized for many years? 3

25. Draw a labeled diagram showing the transfer of isolated desired gene from human DNA to E.coli bacteria. 3

26. Name the technique used to separate DNA fragments? Explain how it works? 3

27. What kind of interaction is found in following A, B and C groups? 3



### SECTION- D

28. Explain how succession takes place on bare rocks?

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OR

(a) What are ecological pyramids? (b) Name the three types of ecological pyramids (c) In which type of pyramid is always upright? (d) Name one pyramid which shows inverted by giving example? [1+1+1+2]

29. (i) Which type of microbes can be grown easily in laboratories in the form of colonies? (ii) List some microbes used in industries with example. [1+4]

OR

- (i) Name the causative organism of typhoid disease.
- (ii) What are the major symptoms of this disease?
- (iii) Name the test used to confirm this disease
- (iv) State the classic case in medicine with this disease.

[1+2+1+1]

30. Name any three Mendelian disorders. Give the cause and one symptoms of each.

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OR

Explain the experiment designed to prove Oparin - Haldane principle with labeled diagram.

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