

Directorate of Education, GNCT of Delhi
Term – II (Session – 2021-22)
Practice Paper - II
Subject – Biology
Class – 12

MM – 35
Time – 2 Hrs

GENERAL INSTRUCTIONS:

1. All questions are compulsory
2. There are three sections in the question paper, Section A, Section B, Section C. There are 13 questions in the question paper.
3. Section A has 6 questions of 2 marks each, Section B has 6 questions of 3 marks each and Section C has case based questions of 5 marks.
4. There is no overall choice, however internal choices have been provided in some questions.

SECTION- A

Q1) How are the members of the genus glomus useful to organic farmers? (1+1)

Q2) Mention the four steps involved in the isolation of DNA from a bacterial cell for biotechnology experiments. (1/2*4)

OR

Mention the two objectives of setting up the organization GEAC by the Indian Govt. (1+1)

Q3) List the four causes (Evil Quartets) responsible for loss of biodiversity. (1/2*4)

Q4) Name two viral diseases that are transmitted by mosquito vectors? Name the causal organism of typhoid. (1+1)

OR

- a) Write the causative organism of amoebiasis. (1/2)
- b) Mention any three characteristic symptoms of the disease. (1* ½)

Q5) a) Mention the cause of ADA deficiency and its effect on the human body. (1)

b) What can be a possible permanent cause? (1)

Q6) Define Gause competitive release? Give an example where an animal-plant interaction involves co-evolution. (1+1)

SECTION-B

Q7) a) What is insertional inactivation? (2)

b) State the roles of : (1) Ori and (2) Rop gene in E. Coli Cloning Vector pBR322 (1)

Q8) Differentiate between a Normal cell and Cancerous cell? (2)

Q9) Explain life cycle of Malarial parasite. Name its infective stage also? (2.5+.5)

OR

- a) Define Allergy
- b) Name the cells and the chemical responsible for causing allergic reaction in our body. (.5+.5)
- c) Mention any four symptoms of allergy. (2)

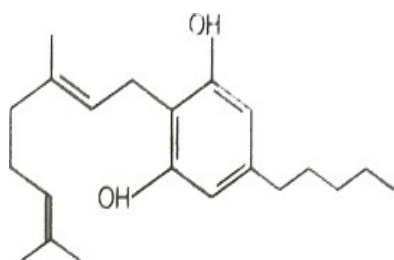
Q10) What is RNAi ? Mention the role of Agrobacterium in the production of Nematode- resistant tobacco plant? (3)

Q11) Give three reasons that account for greater biological diversity in the tropics than in the temperate regions. (3)

Q12) Write the function of (i) statin (ii) cyclosporine-A. (2+1)

Also write the source from where they are obtained.

SECTION-C

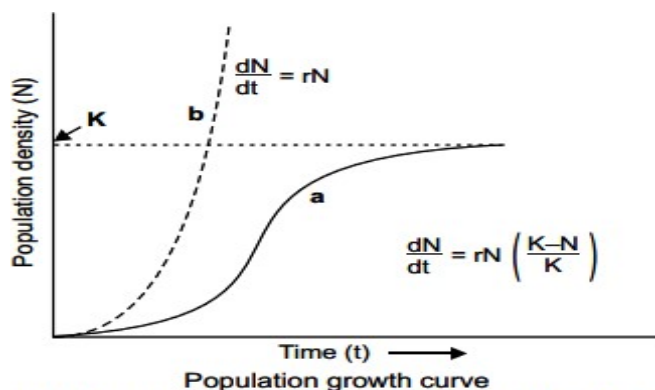


Q13)

Observe the outline/structure of a drug given below and answer the following questions:

- Name of the group of drugs, it represents and write the scientific name of its source plant.
- Write the four forms in which these are consumed.
- Mention the methods in which they are taken.
- Name of the organ system of the body, which it's affected.

OR



Population growth curve
 (a) when responses are limiting the growth, plot is logistic, K is carrying capacity
 (b) when responses are not limiting the growth, plot is exponential.

- Name the type of growth above 'a' and mention when this type of growth curve occurs in the nature.
- Why is the growth curve 'b' said to be logistic?
- Differentiate between the two growth curves 'a' and 'b'.