

Model Question Paper
Botany-Biotechnology-Part-III

12th Standard

Biology

Reg.No. :

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I. Answer all the questions.

II. Use blue pen only.

Time : 01:00:00 Hrs

Total Marks : 75

5 x 1 = 5

Part-A

- 1) Large scale production of SCP are made through huge vessels called
(a) laminar air flow chamber (b) autoclave (c) bio-reactor (d) incubator
- 2) The vector used in genetic engineering to carry genes into bacteria
(a) Velemen (b) E.coli (c) Plasmid (d) Bacillus
- 3) The toxin gene present in Bacillus thuringiensis
(a) Bt₂ (b) Nif (c) Ti (d) Dt
- 4) The cell wall of bacterium is made permeable to the entry of altered plasmids by exposing it to
(a) DNA ligase (b) cellulase (c) polymerase (d) helicase
- 5) A bacteria which digests crude oil slick
(a) Pseudomonas putida (b) Streptomyces hygroscopicus (c) Bacillus thuringiensis (d) Agrobacterium tumefaciens

Part-B

- 6) What are the substrates studied for SCP production?
- 7) List the important Tissue culture centres in India.
- 8) Mention the names of any three Algae and Bacteria used for SCP production.
- 9) Write the materials used for the enzymatic method of isolation of protoplast.
- 10) What is Morphogenesis? Describe the types?

5 x 3 = 15

Part-C

- 11) Explain the enzymatic method of isolation of protoplast.
- 12) Mention some of the practical applications of protoplasmic fusion.
- 13) Write about the use of genetically engineered bacterial strain by Anand Mohan Charkrwarthy.
- 14) Write the benefits from release of genetically modified micro organism into the environment.
- 15) SCP - Define. List out any three uses of SCP.

5 x 5 = 25

