Model Question Paper

Botany-Cell Biology and genetics-Part III

12th Standard

Biology

Reg.No. : | | | | | | |

I.Answer all the questions.

II.Use blue pen only.

Time : 01:00:00 Hrs

Total Marks : 55

Part-A

5 x 1 = 5

1) A bacterium mainly involued in transfer of foreign genes to plants

(a) Neurospora (b) Agrobacterium (c) Yeast (d) Bacteriophage

2) The explant is induced to form callus due to the activity of

(a) Auxin and Gibberellin (b) Ethylene and eytokinin (c) Auxin and Cytokinin (d) Gibberellin and Abscisic acid

3) Mycoproteins are present in larger quantites in

(a) Chlorella (b) Pseudomonas (c) Spirulina (d) Yeast

4) The process by which the source DNA and host DNA are joined is called

(a) cloning (b) splicing (c) Hardening (d) formation

5) Pseudomonas putida is a engineered bacterium that was developed by

(a) Anand Mohan Chakrabarthy (b) Anand Viswanathan (c) Waston and Crick (d) Prof. Narayanasamy

Part-B

5 x 3 = 15

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 Alage 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?

Part-C

3 x 5 = 15

11) Write a short account of the origin of tissue culture.

12) Give an account of SCP.

13) Explain the enzymatic method of isolation of protoplast.

Part-D

2X10=20

14) a) Mention some of the practical applications of protoplasmic fusion.

b) Write about the use of genetically engineered bacterial strain by Anand Mohan Charkrawarthy.

15) a) Write the benefits from release of genetically modified micro organism into the environment.

b) SCP - Define. List out any three uses of SCP.

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