

# CBCS SCHEME

USN

--	--	--	--	--	--	--	--	--	--

15BT73

Seventh Semester B.E. Degree Examination, Dec.2018/Jan.2019

## Plant BT

Time: 3 hrs.

Max. Marks: 80

Note: Answer any FIVE full questions, choosing ONE full question from each module.

### Module-1

- 1 a. Discuss about mass propagation of plants through somatic embryogenesis and highlight its applications. (10 Marks)  
b. What are Cybrids? Write about the methods for cybrid selection. (06 Marks)

OR

- 2 a. Give an account on different types of Agrobacterium based plant vectors. (10 Marks)  
b. Write a note on screening and selection of transformed plants. (06 Marks)

### Module-2

- 3 a. Brief on biotic stresses faced by plants and elaborate about transgenic plants with BT genes. (10 Marks)  
b. Comment on application of plant transformation with Protease inhibitors and alpha amylase inhibitors. (06 Marks)

OR

- 4 a. Brief on drought stress in plants and the transgenic strategies for development of drought resistance in plants. (10 Marks)  
b. Write a note on development of transgenic plants for bacterial resistance. (06 Marks)

### Module-3

- 5 Comment on the following :  
a. Plant transgenics for male sterility. (08 Marks)  
b. Plant transgenics for Herbicide resistance. (08 Marks)

OR

- 6 Discuss about engineering of plants for :  
a. Biodegradable biopolymer production. (08 Marks)  
b. Carotenoid biosynthesis pathway. (08 Marks)

### Module-4

- 7 a. Give an account on diazotrophic micro organisms as biofertilizers. (08 Marks)  
b. Write about the importance of nif genes and the genetic engineering efforts undertaken. (08 Marks)

OR

- 8 Explain the signaling pathways of Gibberlins and Cytokinins in plants and their importance. (16 Marks)

Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.  
2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8 = 50, will be treated as malpractice.

Module-5

- 9 a. Discuss about Azolla and its importance in agriculture and add a note on its mass cultivation. (10 Marks)  
b. Write a note on algae as a source of biofertilizers. (06 Marks)

OR

- 10 a. Write about the different types of mass cultivation methods of Marine micro algae for agar agar and alginates. (10 Marks)  
b. Brief about the different types of Open pond systems used for mass cultivation of micro algae. (06 Marks)

\*\*\*\*\*