

B.Sc. 6th Semester (Honours) Examination, 2020 (CBCS)

Subject : Botany

Paper : CC-14

(Plant Biotechnology)

Time : 2 Hours

Full Marks : 40

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

- A. Answer any eight questions from the following** **8×5=40**
1. Describe: cryopreservation, germplasm conservation. **5**
 2. Classify the types of restriction endonucleases. **5**
 3. Give an account on plant tissue culture media **5**
 4. Define genomic and cDNA libraries. **(2.5+2.5)**
 5. Illustrate the procedure of PCR with proper diagrams. **5**
 6. State the application of plant biotechnology in human welfare. **5**
 7. Mention the role of selectable marker and reporter genes, with one example for each. **5**
 8. Briefly describe the applications and limitations of PCR. **5**
 9. Provide an outline of *Agrobacterium*-mediated gene transfer. **5**
 10. Write short notes on (i) Bt cotton and (ii) Golden rice. **5**