

**CARMEL COLLEGE OF ARTS, SCIENCE & COMMERCE FOR WOMEN,
NUVEM-GOA
SEMESTER END EXAMINATION (ONLINE MODE), AUGUST 2020**

Semester: **VI B.Sc.** Course name & Code: **BOTANY: BOD104 (Biofertilizers)**

Max. Marks: **30** Date: **10/08/2020** Duration: **2 Hours** Total No. of pages: **01**

Instructions: 1) *All questions are compulsory.*

2) *Figures to the **right** indicate maximum marks assigned to the question.*

Q. 1. Answer **any five** of the following in brief: **(5 x 2 Marks = 10)**

- a. What are PGPRs? Give 2 examples.
- b. Explain any 1 method for identification of *Rhizobium*.
- c. What is neem-coated urea?
- d. List any 4 standard parameters for quality control of biofertilizers.
- e. What are phosphate solubilising microbes? State their mode of action.
- f. Comment on ectomycorrhizal biofertilizers giving examples.
- g. Explain crop rotation giving examples.
- h. What role does the government play in promotion of biofertilizers?

Q. 2. Answer **any four** of the following: **(4 x 5 Marks = 20)**

- i. Give the flow chart for isolation of *Frankia* from root nodules.
- ii. Explain the role of *Azolla* as a green manure-cum-biofertilizer. List the other uses of *Azolla*.
- iii. Explain the process of mass cultivation of BGA by trough method.
- iv. Explain the process of mass cultivation of *Azospirillum* from starter culture. List the carriers used for preparation of *Azospirillum* inoculants.
- v. Describe the field use of *Azotobacter* inoculants and its effect on crops.
- vi. Explain any 1 method for isolation of AM fungi from rhizosphere soil.
