BACHELOR OF SCIENCE (CBCS-2018 COURSE) F. Y. B. Sc. Sem-II : WINTER- 2022 SUBJECT : BOTANY : INDUSTRIAL BOTANY-I

Time: 02:00 PM-J5:00 PM Day: Monday Max. Marks: 60 Date: 19-12-2022 W-18326-2022 N.B. All questions are COMPULSORY. 1) 2) Figures to the right indicate FULL marks. Draw neat and labelled diagram WHEREVER necessary. 3) Attempt ANY TWO of the following: **(12)** Q.1 a) Describe advantages and disadvantages of chemical fertilizers. b) Explain the scope in commercial cultivation of mushroom. c) Describe plant base chemical products pheromones and *Trichoderma*. Attempt ANY TWO of the following: (12)**Q.2** a) Explain edible and poisonous mushroom with suitable examples. b) Describe steps involved in the production of *Rhizobium* biofertilizer. Explain health hazards due to pesticides and fungicides. Q.3 Attempt ANY TWO of the following: (12)What is biofertilizers? Give its application in agriculture with reference to blue green algae. b) Describe various steps of tissue culture method. Explain industrial waste used for production of bioenergy. **Q.4** Attempt ANY THREE of the following: (12)a) Describe scope and importance of industrial botany. b) Comment on nonconventional food with reference to fungi and bacteria. c) Define bionenergy. Describe importance of bioenergy plantation. d) Explain cultivation method of *Spirulina* and give its role in human life. Q.5 Attempt ANY FOUR of the following: (12)a) Give an outline in cultivation of Agaricus bisporus. **b)** What is spawn? c) Give nutritive value of mushroom. **d)** What is biopesticide? e) Explain importance of Callus in tissue culture. What is neem cake?