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BG—11—2016

FACULTY OF SCIENCE

B.Sc. (Third Year) (Fifth Semester) EXAMINATION

OCTOBER/NOVEMBER, 2016

(Revised Course)

BIOTECHNOLOGY (Integrated)

Paper (BTT-5.2)

(Agriculture Biotechnology)

(Monday, 21-11-2016)

Time : 10.00 a.m. to 1.00 p.m.

Time—3 Hours

Maximum Marks—80

N.B. :— (i) All questions are compulsory.

(ii) Draw well diagram wherever necessary.

1. (a) Describe in detail non-symbiotic N_2 fixation with an example. 10
- (b) Describe in detail sulphur and phosphate solubilizing bacteria as a Biofertilizer. 10

2. (a) What are Phytohormones ? Describe in detail physiological effects and functions of cytokinins. 8
- (b) Explain in brief blue-green algae as a biofertilizer. 7

Or

- (a) Explain in brief pathogenesis mechanisms. 8
- (b) Describe in detail whip smut of sugar-cane. 7
3. (a) Describe in detail classification of plant diseases based on symptoms. 8
- (b) Explain in brief application of Biofertilizer. 7

Or

- (a) Explain symptoms, mechanism and control of powdery mildew of wheat. 8
- (b) Explain in brief function of Gibberellin. 7

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4. (a) Describe in brief advantages of Biopesticides over chemical pesticide. 8
(b) What is Biomass ? Explain in brief Biomass as energy source. 7
Or
(a) Describe in detail SCP and its nutritive value. 8
(b) Write a note on Biofuel. 7
5. Write short notes on (any *three*) : 5×3=15
(a) Nitrogenase complex
(b) Auxin
(c) Citrus canker
(d) Mushroom Production
(e) Azospirillum.

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