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BG—15—2016

FACULTY OF SCIENCE

B.Sc. (BT) (Fourth Semester) EXAMINATION

OCTOBER/NOVEMBER, 2016

(Revised Course)

BIOTECHNOLOGY

(Applied Medical Microbiology)

(Tuesday, 22-11-2016)

Time : 2.00 p.m. to 5.00 p.m.

Time—3 Hours

Maximum Marks—80

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

(ii) Draw neat well-labelled diagrams wherever necessary.

1. (a) Describe in detail dinitrogen fixation in symbiotic and non-symbiotic microorganism. 10
- (b) Explain significance of microorganisms in air. 10
2. (a) Give an account of IMVIC test. 8
- (b) Describe in detail preservation of food by physical techniques. 7

Or

- (a) Give an account of indicator of fecal pollution. 8
- (b) Discuss in brief the scope of food microbiology. 7
3. (a) Give an account of Normal flora and commensals. 8
- (b) Describe in detail the concept of air borne infections. 7

Or

- (a) Discuss about pathogenicity, virulence and toxins. 8
- (b) Describe in detail water borne infections. 7

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4. (a) Explain morphology, pathogenesis and symptoms of malaria. 8
- (b) Give an account of Host-parasite relationships in plants. 7
- Or*
- (a) Discuss in detail laboratory diagnosis, preventive measures and chemotherapy for AIDS. 8
- (b) Describe in detail morphology, pathogenesis and symptoms of tuberculosis. 7
5. Write short notes on (any *three*) : 15
- (a) Sulphur cycle
- (b) Oxidation and reduction of phosphorus
- (c) MPN
- (d) Chemical food preservatives
- (e) Epidemiology.