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BG—08—2016

FACULTY OF SCIENCE

B.Sc. (Second Year) (Fourth Semester) EXAMINATION

OCTOBER/NOVEMBER, 2016

(Revised Course)

BIOTECHNOLOGY

Paper BTT-4.1

(Metabolism-II)

(Saturday, 19-11-2016)

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

Time—Three Hours

Maximum Marks—80

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

(ii) Draw well labelled diagrams wherever necessary.

1. (a) Write in detail about cholesterol biosynthesis. 10

(b) Write in detail about biosynthesis of Tryptophan. 10

2. (a) Add a note on denovo biosynthesis of purines. 8

(b) Give a comment on significance of K_m and V_{max} . 7

Or

(c) Write in brief about gluconeogenesis. 8

(d) Add a note on Flavonoid synthesis. 7

3. (a) Add a note on Michaelis-Menton equation. 8

(b) Give a comment on peptidoglycan. 7

Or

(c) Add a note on biosynthesis of salvage pathway. 8

(d) Write in brief about unsaturated fatty acid. 7

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4. (a) Elaborate about nomenclature and classification of enzymes. 8
- (b) Add a note on C-4 pathway. 7
- Or*
- (c) Add a note on biosynthesis of Arginine. 8
- (d) Write in detail about IAA synthesis. 7
5. Write short notes on (any *three*) : 5×3=15
 - (a) Enzyme units
 - (b) C-2 cycle
 - (c) Deoxynucleotides
 - (d) Chain elongation
 - (e) Macrolides.

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