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BG—7—2016

FACULTY OF SCIENCE

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

OCTOBER/NOVEMBER, 2016

(Revised Course)

BIOTECHNOLOGY

Paper (BTT-6.1)

(Pharmaceutical Biotechnology)

(Saturday, 19-11-2016)

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 labelled diagrams whenever necessary.

1. (a) Write in detail about classification and general characteristics of an antimicrobial drug. 10
- (b) Write in detail about production of secondary metabolites through hairy root culture. 10
2. (a) Explain the effect of parameters over production of secondary metabolites. 8
- (b) Explain principle and methods of microbial assay. 7

Or

- (c) Write structure, mechanism and application of antibacterial drugs. 8
- (d) Add a note on process of drug designing. 7
3. (a) Explain in brief about protein engineering. 8
- (b) Add a note on microbial resistance for cell-wall inhibiting antibiotics. 7

Or

- (c) Explain in brief about antiviral drug. 8
- (d) Explain pharmacopoeia. 7

P.T.O.

4. (a) Explain the concept of pharmacokinetics and pharmacodynamics. 8
(b) Explain in short about antifungal drugs. 7
Or
(c) Explain liposome as a drug deliver. 8
(d) Explain about blood clotting factor. 7
5. Write short notes on (any *three*) : 3×5=15
(a) Chemoinformatics
(b) Insulin
(c) Tetracycline
(d) Rational drug designing
(e) Antibiotics.