

AV – 2336

Fourth Semester B. Pharm Examination
PHARMACEUTICAL BIOTECHNOLOGY

Paper - T-4.4
(USC – 35158)

P. Pages : 2

Time : Three Hours]

[Max. Marks : 60

- Note :** (1) All questions carry equal marks.
(2) Answer any **Five** questions.
(3) Illustrate your answer wherever necessary with the help of neat sketches.
(4) Use pen of Blue/Black ink/refill only for writing the answer book.

1. (a) Define cell culture, Write detailed note on organ culture. 7
(b) Write detail note on cell. 5
2. (a) What is semiconservative replication. Explain Meselson and stahl experiment. 7
(b) Define replication. Give different modes of replication and proteins enzymes involved in replication. 5
3. (a) Define Transcription. Explain transcription in detail. 7
(b) Define Genetic code. Give its significance and characteristics. 5
4. (a) Define gene therapy. Explain with suitable examples. 7
(b) Give detailed note on Transformation of conjugation. 5
5. (a) Define antibiotics. How antibiotics are standardised ? 7
(b) Define mutation factors affecting rate of mutation. 5

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6. (a) Define Biotransformation. Give biotransformation process in relation with steroids. 7
(b) Write note on different types of reactions mediated by microorganisms. 5
7. (a) Define immobilization. Write note on different methods of enzyme immobilisation. 7
(b) Define enzymes and different factors affecting enzyme kinetics. 5

