

[LH 4266]

AUGUST 2015

Sub. Code: 4266

B.PHARM. DEGREE EXAMINATION**THIRD YEAR**

(Common to Regulations 2004 – IV year candidates)

PAPER VI - PHARMACEUTICAL BIOTECHNOLOGY*Q.P. Code: 564266***Time : Three Hours****Maximum : 100 marks****Answer All Questions****I. Essay:****(2 x 20 = 40)**

1. a) Explain the methods of production of interferon by rDNA technology.
b) Differentiate moist heat and dry heat sterilization
2. a) Define fermentation. Explain the fermentative production of Penicillin.
b) Explain the production of insulin by genetic engineering technology.

II. Short notes :**(8 x 5 = 40)**

1. Bacterial growth curve.
2. Gram's staining technique.
3. Microbiological assay of antibiotics.
4. Production of single cell protein.
5. BCG Vaccine.
6. Bioprocess of citric acid
7. Techniques in immobilization of enzyme.
8. Production and application of monoclonal antibodies.

III. Short answers:**(10 x 2 = 20)**

1. Bacteriophage.
2. Hepatitis –B.
3. Tyndallization.
4. Plasmids
5. Culture Media.
6. Examples of Motile and non motile bacteria.
7. Define Immobilization.
8. Define Toxoid with examples.
9. Types of flagella.
10. Restriction endonucleases.