

(LN 4266) **AUGUST 2018** Sub. Code: 4266

## B.PHARM. DEGREE EXAMINATION (Common to Regulations 2004 – IV year candidates) THIRD YEAR PAPER VI - PHARMACEUTICAL BIOTECHNOLOGY

O.P. Code: 564266

Time: Three hours Maximum: 100 Marks

I. Elaborate on:  $(2 \times 20 = 40)$ 

1. Define monoclonal antibody. Discuss production and applications of monoclonal antibodies.

- 2. a) Discuss production of penicillin by fermentation process.
  - b) Define disinfectant. Describe factors affecting the choice of disinfectant.

II. Write notes on:  $(8 \times 5 = 40)$ 

- 1. Discuss selective and differential medium with example.
- 2. Discuss microbiological assay of antibiotic by using disc diffusion method.
- 3. Describe production of interferon by genetic engineering method.
- 4. Explain acid fast staining.
- 5. Discuss active immunity.
- 6. Describe gaseous sterilization.
- 7. Describe commonly employed techniques for immobilization of enzyme.
- 8. What is flagella? Describe classification of bacteria based on flagella.

III. Short answers on:  $(10 \times 2 = 20)$ 

- 1. Define Immunoblotting.
- 2. Define transformation.
- 3. Application of southern blotting.
- 4. Bacterial counting methods.
- 5. Storage temperature of poliomyelitis vaccine and small pox vaccine.
- 6. What is biological indicators?
- 7. Define Fermentation.
- 8. What is capsid?
- 9. Give culture media used for animal cells.
- 10. Define immuno-suppression.

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