

QP Code: 103327

Reg No:

First Year M.Pharm Degree Supplementary Examinations-July 2013
(2010 Scheme)

(PHARMACEUTICS)

Paper III- Industrial Microbiology and Biotechnology

Time: 3 hrs

Maximum Marks: 100

- *Answer all questions*
- *Draw diagrams wherever necessary*

Essays:

(2x20 =40)

1. Discuss the vaccine design strategies in relation to immune response and explain the production of diphtheria toxoid.
2. Enlist the methods of strain improvement of industrial microorganisms and discuss any two. Add a note on ethanol production.

Short Essays:

(6x10=60)

3. Define recombinant DNA technology and describe briefly about restrictive endonucleases.
4. Define KM and explain the factors influencing enzyme activity.
5. Describe PCR technology and mention its applications.
6. Define the term fermentation. Describe the production of lactic acid.
7. Enumerate the measures to be taken to maintain aseptic environment and mention the method of testing the efficiency of HEPA filters.
8. Explain the recent advances in diagnostic techniques for infectious diseases and outline the procedure for the diagnosis of HIV infection.
