

Rajiv Gandhiw Mriversity of Health Sciences First Year M.Pharm Degree Examination – October 2010

[Time: 3 Hours] [Max. Marks: 100]

PHARMACEUTICAL BIOTECHNOLOGY - II

(Revised Scheme 2)

Q.P. CODE: 9314

Your answers should be specific to the questions asked. Draw neat labeled diagrams wherever necessary. Answer all questions

LONG ESSAY (Answer any FOUR)

 $4 \times 25 = 100 \text{ Marks}$

- 1. Discuss:
 - a) Design and operation of immobilized enzyme reactors.
 - b) Kinetics of immobilized enzymes
 - c) Diagnostic tests

(10+10+5=25)

- 2. Discuss:
 - a) Optimisation of fermentation parameters
 - b) Glutamic acid biosynthesis

(10+15=25)

- 3. Discuss: Fermentative production of streptokinase and cellulase
- 4. Broadly discuss techniques and application of genetic engineering
- 5. Write short notes on
 - a) Monoclonal antibody production and applications
 - b) Importance of databases in biology

(12+13=25)

- 6. Write short notes on:
 - a) HIV (b) VDRL
- (c) VACCINE
- (d) BIOINFORMATICS (E) IMMUNOCLONES

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