

Reg.No.....

Third B.Pharm(Ayurveda) Degree Supplementary Examinations, April 2014
Pharmaceutical Microbiology & Biotechnology

Time : 3 Hours

Total Marks:100

- **Answer all questions**

QP CODE:304008

Section A- Microbiology

Marks:50

Essay:

(1x10=10)

1. Define disinfectants. Explain the properties of an ideal disinfectant and classify it

Short notes:

(5x5=25)

2. Classify different culture media with its importance.
3. General characteristics of viruses.
4. Stability of a disinfectant after dilution be tested.
5. Nutritional requirements of bacteria.
6. Microbiological assay of antibiotics.

Answer briefly:

(5x3=15)

7. Chemical sterilizing agents.
8. Important contributions of Pasteur to microbiology.
9. Spirochaetes.
10. Viral enumeration.
11. Transduction.

QP CODE:308008

Section B - Biotechnology

Marks:50

Essay:

(1x10=10)

1. Describe microbial transformation and add a note on the process with special reference to steroids.

Short notes:

(5x5=25)

2. Define bioreactor and explain any two fermentors.
3. Method of preparation of monoclonal antibodies.
4. Fermentation procedure for vitamin B₁₂.
5. Antibiotic production of streptomycin.
6. Method of extraction of the fermented product in the production of antibiotics.

Answer briefly:

(5x3=15)

7. Cellular immunity.
8. Transformation.
9. Storage of vaccines.
10. Immunization.
11. Mutation.
