

# Rajiv Gandhi University of Health Sciences, Karnataka II Year B.Pharm Degree Examination - NOV 2016

Time: Three Hours Max. Marks: 80 Marks

# PHARMACEUTICAL MICROBIOLOGY & BIOTECHNOLOGY (Revised Scheme - 2)

Q.P. CODE: 1957

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

## LONG ESSAYS (Answer any Two)

 $2 \times 10 = 20 \text{ Marks}$ 

- 1. Classify Viruses. Explain the morphology and replication of viruses.
- 2. Explain the principle and procedure for microbiological assay of penicillin.
- 3. Write the production and applications of monoclonal antibodies.

#### SHORT ESSAYS (Answer any Eight)

 $8 \times 5 = 40 \text{ Marks}$ 

- 4. Write the production of riboflavin.
- 5. Explain the cultivation of anaerobic microorganisms.
- 6. Explain bacterial growth curve.
- 7. What are sterilization monitors and explain their uses.
- 8. Write the enzymes involved in recombinant DNA technology.
- 9. Explain principle and procedure of acid fast staining.
- 10. Write the production of Hepatitis B vaccine.
- 11. Legislation concerning use of recombinant DNA based drugs.
- 12. Bacterial recombination
- 13. Filtration sterilization

### **SHORT ANSWERS**

 $10 \times 2 = 20 \text{ Marks}$ 

- Southern blot test
- 15. Cosmids
- 16. Enriched media
- 17. Rickettsia
- 18. Mutations
- 19. Toxin and Toxoid
- 20. Widal test
- 21. Classify antibodies.
- 22. Application of animal cell culture
- 23. Immuno-deficinecy disorder

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