

QP CODE: 202326

Reg. No: .....

**Second Year Pharm D Degree Regular/Supplementary Examinations  
January 2021**

**Pharmaceutical Microbiology**

**Time: 3 Hours**

**Total Marks: 70**

- *Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together • Leave sufficient space between answers*
- *Draw table/diagrams/flow charts wherever necessary*

**Essays**

**(3x10=30)**

1. Define immunity. Write in detail about general principles of natural immunity.
2. Explain AIDS. Mention the causative organism, mode of transmission, signs and symptoms, diagnosis and treatment of HIV.
3. Define prokaryotes. Draw neat labelled diagram of bacteria and explain various parts of bacteria

**Short notes**

**(8x5=40)**

4. Explain biochemical test of bacteria.
5. Differentiate bacterial exotoxins and endotoxins
6. Reproduction of fungi.
7. Define sterilization. Explain the sterility testing of pharmaceutical products.
8. Explain PCR.
9. How the vaccines and sera are standardized. Explain.
10. Explain gaseous method of sterilization with examples.
11. Differentiate Gram's staining and acid fast staining.

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