

M.Sc. (Micro) Semester - 3 (CBCS) Examination**Oct/Nov-2022 (NEW COURSE)****Pharmaceutical and Medical Microbiology (Core (New))****Time: 2:30 Hours****Marks: 70****Instructions:**

1. All questions are compulsory.
2. Figures to the right indicate marks.

SECTION-I**Q.1 Answer the following**

- A. Explain the pathogenesis, diagnosis, and treatments of Neisseria. **07**
B. Explain epidemiology and possible diagnosis of bird flu. **07**

OR

- Q.1 Discuss Mycobacteria pathogenesis, diagnosis, and possible treatments. **14**

Q.2 Answer the following

- A. Explain in detail computer aided drug discovery. **07**
B. Explain the pharmacokinetics and pharmacodynamics. **07**

OR

- Q.2 Describe large molecule drugs discovery and explain its target. **14**

Q.3 Do as direct (any seven) **07**

1. What is the major virulence factor of Shigella?
2. Define the QSAR and mentioned the its role pharmaceuticals.
3. Enlist detection methods for SARS.
4. Define virulence factors?
5. Explain the importance of bioinformatics in drug discovery.
6. Define α , and γ haemolysis.
7. Explain the role of receptors in drug discovery.
8. Discuss the symptoms of swine flu and possible diagnosis.

SECTION-II

- Q.1 Explain primary and secondary immunodeficiency in detail. **14**

OR**Q.1 Answer the following**

- A. Explain cancer immunotherapy. **07**
B. Write a note on immune response against viral disease. **07**

- Q.2 Write a note on any two molecular techniques used in diagnosis of diseases. **14**

OR**Q.2 Answer the following**

- A. Explain the basic principle and application of hybridoma technology. **07**
B. Write a note on immunoblotting. **07**

Q.3 Do as direct (any seven) **07**

1. Define the uses of RFLP in medical sciences.
2. What is lateral flow assay? Give the suitable example.
3. Define the role of hypoxanthine aminopterin thymidine.
4. Define adjuvant in brief.
5. Discriminate the allograft and autograft.
6. Define the oncogene and give its suitable example.
7. Explain second line drug and give any two examples.
8. Explain the role of cytokines.
