

M.Sc. (Micro) Semester - 3 (CBCS) Examination**Oct/Nov-2021 (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. Discuss pathogenesis, diagnosis, and treatment of *Streptococcus*. **07**
B. Explain disease caused by Shigella and discuss its diagnosis and treatment. **07**

OR

- Q.1** Describe the epidemiology, diagnosis, and prevention of corona virus. **14**

Q.2 Answer the following

- A. How would you identify target for drug? Explain with suitable example. **07**
B. Write a note on pharmacokinetics in drug discovery. **07**

OR

- Q.2** Explain the larger molecular drug discovery with suitable examples. **14**

Q.3 Do as direct (any seven out of eight questions each of one marks) **07**

1. Give an example of virulence factors produced by *Staphylococci*.
2. What are the virulence factors?
3. Explain the adjuvant in brief.
4. Explain γ haemolysis.
5. Describe the role of bioinformatics in drug discovery.
6. Define the term pharmacodynamics.
7. Describe the zoonotic disease in brief.
8. Define the various phases of drug molecule in clinical trial.

SECTION-II

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

OR**Q.1 Answer the following**

- A. Write in detail on transplantation immunity. **07**
B. Write a note on immune response against viral diseases. **07**

- Q.2** Define immunochromatography and discuss its principle & application based rapid test. **14**

OR**Q.2 Answer the following**

- A. Explain immunoblotting techniques. **07**
B. Describe the mechanism and detection of multidrug resistance. **07**

Q.3 Do as direct (any seven out of eight questions each of one marks) **07**

1. Define the AFLP in brief
2. Explain the polyclonal antibody.
3. Explain HLA typing.
4. Define the first line drug.
5. What are cytokines?
6. Write importance of adoptive cell therapy.
7. Enlist the symptoms of HIV.
8. Give an example of oncogenes.
