

Bankura University
B.Sc 4th Semester (Honours) Examination, 2021
SUB: Microbiology

Course ID: 42215

Course Code: SHMCB/ 405/SEC-2

Course Title: Microbial diagnosis in health clinics

Full Marks: 40

Time: 2 hour

The figures in the margin indicate full marks

Answer all the questions.

1. Answer any five of the following questions: (2x5=10)

- i) What is nosocomial infection? Give one example.
- ii) Name one transport media and one storage media.
- iii) Mention one use of Blood agar medium.
- iv) What do you understand by Rapid antigen test?
- v) What is therapeutic index of a drug?
- vi) What is meant by MBC?
- vii) What is WIDAL test?
- viii) Give one example of viral and protozoan disease.

2. Answer any four of the following questions: (5x4=20)

- i) Write a short note on detection method of Dengue. Name the causative organism. (4+1=5)
- ii) State the principle of Immunofluorescence method. Write down the steps of Immunofluorescence method. (1+4=5)
- iii) Discuss in short about the DAC ELISA.
- iv) What is a serological test? What is the principle of Ziehl Neelson staining? 2+3=5
- v) What are the components of PCR mixture? What is the role of Mg⁺⁺ ion in PCR? 4+1=5
- vi) Mention different types of clinical samples. Add a short note on different methods for storage of clinical samples. (2+3=5)

3. Answer any one of the following questions: (10x1=10)

- i) Briefly describe the determination of MIC of Penicillin. What are semisynthetic drugs? (8+2=10)
- ii) Write out the various methods for transport of clinical samples for diagnosis purpose. Name two detection methods for HIV. Write two reasons for emergence of antibiotic resistance. (6+2+2=10)