

Bankura University
B.Sc 4th Semester (Honours) Examination, 2022
SUB: Microbiology

Course ID: 42215

Code: SHMCB/ 405/SEC-2

Course Title: Microbial diagnosis in health clinics

FM 40

Time: 2 h

The figures in the margin indicate full marks

Answer all the questions.

UNIT I

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

- i) Give examples of one fungal and one protozoan disease with responsible pathogen.
- ii) What is cryopreservation? Name one cryoprotectant.
- iii) Write the name of primary stain of acid fast staining. Name one acid fast bacterium.
- iv) What is agglutination?
- v) What is DAC-ELISA? Write one application for this technique.
- vi) What is meant by MBC? Write its utility.
- vii) State the name of two transport media.
- viii) Why MacConkey Agar is known as selective and differential media?

UNIT II

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

- i) What is Tridot method of diagnosis? Discuss the detection methods for Dengue fever. (1+4=5)
- ii) Write a short note on immunofluorescence method.
- iii) What is meant by clinical sample? Add a note on various type of clinical samples associated with disease. (1+4=5)
- iv) Write down the steps of PCR.
- v) Write down the basic principle for rapid detection of HIV and typhoid. 2.5+2.5
- vi) Write short note on Gram staining method. Write one application of this method.

UNIT III

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

- i) What do you mean by antibiotic sensitivity? Mention the different reasons for antibiotic resistance. Write down one method for determining MIC of a drug. (2+4+4=10)
- ii) Mention different bacterial and viral diseases of human body systems with respective causal organisms. (5+5)