

(20518)

Roll No. 1

B. Sc. (Micro.)-I Year

3490

B. Sc. (Micro.) Examination, May 2018

Instrumentation and Culture Tech.

(B-107)

Time : Three Hours]

[Maximum Marks : 50

Note : Answer any Five questions. All questions carry equal marks.

1. What do you understand by transmission electron microscope (TEM) ? Discuss its principle, design and applications. 10

2. Describe in detail the procedure to prepare most commonly used media for bacteria. 10

3. Write short notes on the following : 5x2=10

- (a) Different sterilization techniques used in culture media
- (b) Confocal microscopy.

4. Define spectrophotometry. Give a detailed account of visible spectrophotometer. 10

5. Explain briefly : 4+3+3=10

- (a) Electromagnetic radiation
- (b) Absorption spectrum
- (c) Emission spectrum.

6. Define X-ray crystallography. Give a detailed account of X-ray diffraction. 10

7. Define enrichment. Explain in detail enrichment techniques for microbial culture. 10

8. A typical bacterial growth curve can be divided into how many distinct phases ? Explain. 10