

N (Printed Pages 3)

(20517) Roll No.

B.Sc. (Micro)

3491

B.Sc. (Microbiology) Examination, May 2017

Analytical Techniques

(B-108)

Time : Three Hours] [Maximum Marks : 50

Note : Attempt any five questions. All questions carry equal marks.

- 1. Define Chromatography. Also discuss its principle and different types. 10
- 2. Describe in detail the paper chromatography technique for the separation of different plant pigments. 10

P.T.O.

3. Write short notes on: 5+5

- (a) Karyotyping
- (b) Cell growth determination.

State the underlying principle of electrophoresis. Also discuss about SDS-PAGE. 10

Describe the principle and application of immunoelectrophoresis. 10

6. Comment on the following (any two):

(a) TLC and its uses 5+5

(b) Bioindicator

What is centrifugation? Draw a neat labelled diagram of centrifuge and its different parts in detail. 10

Write note on cell fractionation.

34912

9. Explain the following: 5+5

- (a) Types of fermenters
- (b) Equipments and supporting media of electrophoresis.

10. Comments briefly on any two: 5+5

- (a) Auto-radiography
- (b) Applications of radioisotope tracer techniques
- (c) Down stream processing.