

SEMESTER – III & IV

CORE BIOCHEMISTRY PRACTICAL – III

Instructional Hrs: 90 Hrs.

Sub. Code: 17BCUCP03

Max. Marks: CIA -40; ESE -60

Credits: 4

I. ENZYME KINETICS

1. Preparation of Buffer solution – Phosphate and citrate buffer.
2. Determination of pH of buffer solution using pH meter.

A. TITRIMETRY

1. Effect of pH on the activity of Catalase.
2. Effect of substrate concentration on the activity of Catalase.
3. Effect of temperature on the activity of Catalase.
4. Effect of enzyme concentration on the activity of Catalase.

B. COLORIMETRY/ SPECTROPHOTOMETRY

1. Effect of pH on the activity of Acid phosphatase.
2. Effect of substrate concentration on the activity of Acid phosphatase.
3. Effect of temperature on the activity of Acid phosphatase.
4. Effect of enzyme concentration on the activity of Acid phosphatase.
5. Effect of pH on the activity of Salivary amylase.
6. Effect of substrate concentration on the activity of Salivary amylase.
7. Effect of temperature on the activity of Salivary amylase.
8. Effect of enzyme concentration on the activity of Salivary amylase.

II. GROUP EXPERIMENTS

1. Circular chromatography – (Amino acids)
2. TLC - (Lipids)
3. Phytochemical analysis of plant extract.

III. KIT METHOD (GROUP EXPERIMENTS)

1. SGOT 2. SGPT 3. ALP

DISTRIBUTION OF MARKS

Internal evaluation: 40 marks

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| a) CIA | : 20 marks |
| b) Model | : 15 marks |
| c) Record | : 05 marks |

External evaluation: 60 marks

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| a) Analysis I | : 25 marks |
| b) Analysis II | : 25 marks |
| c) Record | : 7 marks |
| d) Viva-voce | : 3 marks |