

**SEMESTER – III**  
**METABOLISM OF BIOMOLECULES**  
**PRACTICAL**

**Programme: B.Sc.**  
**Course Code: U20/BIC/DSC/301/P**  
**Course Type: DSC - 3**  
**No. of credits: 1**

**Max. Hours: 45**  
**Hours per week: 3**  
**Max. Marks: 50**

**Course objective:**

Inculcate the importance of quantitative estimations into students for the field of Biochemistry.

**Course Outcomes:**

**CO1:** Enhance the skills for quantitative estimation of biomolecules.

**CO2:** Isolate different enzymes and apply the knowledge of quantitative estimation to check the activity of the same.

**PRACTICAL SESSIONS**

1. Verification of Beer – Lambert's Law
2. Absorption Maxima of coloured substances.
3. Estimation of Reducing sugar by DNS
4. Estimation of Fructose by Roe's Resorcinol Method
5. Estimation of Total Sugars by Anthrone Method
6. Estimation of Protein by FolinCiocalteau Method
7. Estimation of Protein by Biuret Method
8. Enzyme Assay of Amylase
9. Enzyme Assay of Catalase
10. Enzyme Assay of Urease

**MODEL QUESTION PAPER****PRACTICAL**

**Course Code: U20/BIC/DSC/101/P**  
**Credits: 1**

**Max Time: 2 Hrs**  
**Max. Marks: 50**

**Answer the following**

1. Write the principles for the given experiments. 2 x 5 = 10 M
  - a)
  - b)
2. Quantitatively estimate the given sample using the appropriate method. 20 M  
Plot the calibration curve for the standard. Identify the concentration for the given unknown sample.
3. Estimate the activity of the given enzyme sample. 10 M
4. Viva 5 M
5. Record 5 M