

SEMESTER – VI
PLANT BIOCHEMISTRY
PRACTICAL

Programme: B.Sc.
Course Code: U20/BIC/DSE/601
Course Type: DSE – 1
No. of credits: 3

Max. Hours: 45
Hours per week: 3
Max. Marks: 100

Course objective:

Introduce the basic practical knowledge of plant biochemistry.

Course Outcomes:

CO1: Analyse various plant contents like pigments and secondary metabolites.

CO2: Remember the procedure and technique of Plant tissue culture.

PRACTICAL SESSIONS

1. Estimation of Total Soluble Sugar.
2. Estimation of Total phenolic content using Folin-Ciocalteu method
3. Qualitative Analysis of Phytochemicals
4. Estimation of Carotene.
5. Estimation of Lycopene content of tomato.
6. Estimation of Pectin Substances as Calcium Pectate
7. Determination of Antioxidant activity by DPPH method.
8. Separation of Plant pigments by Thin Layer Chromatography
9. Determination of Catalase Enzyme activity
10. Plant tissue culture (Demo)

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. Separate the mixture of plant pigments using Thin layer Chromatography. 10 M
Identify the pigments present in the mixture.
4. Viva 5 M
5. Record 5 M