

M.Sc. - II (Botany) (NEP Pattern) - Semester-III
03MSCBOT03 - Paper-III : Plant Biochemistry

P. Pages : 1

Time : Three Hours



GUG/W/24/15954

Max. Marks : 80

- Notes : 1. All questions are compulsory and carry equal marks.
2. Draw well labelled diagram wherever necessary.

1. Define Carbohydrates & classify them with suitable examples. 16

OR

Write notes on:

- a) Define Polysaccharides. Describe the structure of starch. **8**
b) Properties and role of Carbohydrates. **8**

2. Define Lipids and classify them with suitable example. 16

OR

Write notes on:

- a) Explain in details derived lipids. **8**
b) Structure and uses of fatty acids. **8**

3. Define Nucleic acid. Describe the composition of Nucleic acid in detail. 16

OR

Write notes on:

- a) Explain primary and secondary structure of proteins. **8**
b) Describe structure of DNA According to Watson-Crick Model. **8**

4. What are Enzymes? Describe nomenclature and classification based on IUB system. 16

OR

Write notes on:

- a) Describe the factors affecting enzyme activity. **8**
b) Give the mechanism of enzyme catalyzed reaction. **8**

5. Write short note on:

- a) Biological significance of Carbohydrates. **4**
b) Conjugated Lipids. **4**
c) Biological importance of proteins. **4**
d) Lock and key model. **4**
