

AU-393

M.Sc. (Part-II) Semester-III (CBCS) Examination
BOTANY
(Angiosperm Taxonomy, Phytochemistry and Pharmacognosy-I)
Paper-XI

Time : Three Hours]

[Maximum Marks : 80

N.B. :- (1) All questions are compulsory and carry equal marks.
 (2) Draw well labelled diagrams wherever necessary.

1. Explain :

(a) HPLC	6
(b) Gel electrophoresis	5
(c) NMR.	5

OR

(d) UV Visible spectroscopy	6
(e) GLC	5
(f) TLC.	5
2. Explain :

(g) Flavonoids	6
(h) Phenolic Glycosides	5
(i) Tannin.	5

OR

(j) Anthocyanin and betacyanin.	6
(k) Resins and Gums	5
(l) Saponins.	5
3. Explain :

(m) Monophyly and Polyphyly	6
(n) Types of keys	5
(o) Concepts of characters.	5

OR

(p) Homology and analogy	6
(q) Basic aims and concepts of taxonomy	5
(r) Monographs and icons.	5

4. Explain in detail salient features of ICBN. 16

OR

What are probable ancestors of Angiosperms ? Explain origin of angiosperm with different theories.

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5. Explain in detail Pharmacognostic studies of *Zingiber officinale*. Add note on its uses and Adulterants.

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OR

Explain morphology, anatomy and chemistry of *Gloriosa superba*.

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(s) Ethnobotany.

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