

2014

M.Sc.

2nd Semester Examination

BOTANY

PAPER—BOT-201

Full Marks : 40

Time : 2 Hours

The figures in the right-hand margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Illustrate the answers wherever necessary.

Answer all questions.

1. Answer any ten of the following : 1×10

- (a) Define systematics.
- (b) What is the full form of ICN ? From which year it has been introduced ?
- (c) Define dendogram and cladogram.
- (d) Define 'eudicots'. Give an example.

(Turn Over)

- (e) What is the full form of NBPGR and where is it situated ?
- (f) Which day is observe the "International Biodiversity Day."
- (g) What is a 'Paleoherb'? Give an example.
- (h) Name the author of the book — "An Integrated System of classification of Flowering Plants"? Mention the year of its publication ?
- (i) Mention one key character of the subclass 'Alismatidae'.
- (j) What are the basic differences between 'Massula' and 'Pollinia'? Give an example of each.
- (k) Define macromolecule. Give an example.

2. Write notes on any *two* of the following : 2×5

- (a) Electrophoresis techniques in chemotaxonomic study.
- (b) Megadiversity centre.
- (c) NPC - system.
- (d) Basal angiosperms.
- (e) Validity of the taxon Leguminosae and its present nomenclature treatments.

3. Answer any *two* of the following : 10×2

(a) What is APG system of classification? Who first established this classification? Give an out line of this classification. Write the merits and demerits of this system of classification.

2+1+5)+(1+1)

(b) Characterize the subclass 'Rosidae'. Mention the putative evolutionary relationships among the orders of this subclasses. What are the basic differences between Rosidae and Asteridae.

4+4+2

(c) Define chemotaxonomy. Mention the phytochemical characters and its taxonomi significance. Why are the proteins serve as the most important character in chemotaxonomic study? Mention the merits and demerits of chemotaxonomy.

1+3+4+2

(d) (i) Define biosystematics. What are the steps of biosystematics investigation? Mention the categories of biosystematics studies?

1+2+3

(ii) Comment on ethnobotanical wisdom and human health.

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