2018

M.Sc. 2nd Semester Examination

BOTANY

PAPER—BOT-201

Subject Code—23

Full Marks : 40

Time : 2 Hours

The figures in the margin indicate full marks.

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

Illustrate the answers wherever necessary.

Use separate Answer-scripts for Unit-I & Unit-II

Unit–I

(Taxonomy)

[20 Marks]

1. Answer any *four* of the following : 1×4

(a) What are the full form of 'ICBN' & 'ICN' ?

(b) What is 'cryptic species' ? Give an example.

(c) Define "Mes-angiosperms". Give an example.

(d) Are angiosperms 'monophyletic' or 'polyphyletic' ?

(e) What are 'eudicots' ? Give an example.

(f) What is 'phylocode' ? Give an example.

(g) What is 'palaeoherb' ? Give an example.

2. Write the differences of the following : (any *two*) 3×2

(a) Plesiomorphic & Apomorphic ;

(b) Homology & Homoplasy ;

(c) Monographs & Revisions ;

(d) Paraphyly & Polyphyly.

3. Answer any *one* of the following : 10×1

(a) What is basal angiosperms ? Mention its important features and significance in the evolutionary history of angiosperms. What do mean by "ANITA" or 'ANY grade'.

2+6(4+2)+2

(b) What is the full form of APG ? Who are the first propose of this system ? What are the basic differences between APG and integrated phylogenetic system of lassification ? Mention the merits and demerits of APG-II & APG-III system of classification. 2+1+4+3

Unit–II

(Biosystematics)

[20 Marks]

4. Answer any *four* of the following : 1×4

(a) Define classical taxonomy.

(b) Define Numerical taxonomy.

(c) What is OTU ?

(d) What is Ethnobiology ?

(e) Define sementide.

(f) What is eco-species ?

(g) What is biodiversity hot-spot ?

5. Write short notes on the following : (any *two*) 3×2

(a) Phenetics and cladistics ;

(b) Economic value of biodiversity ;

(c) Role of palynology in taxonomic study ;

(d) Sacred grove.

6. Answer any *one* of the following : 10×1

(a) What is chemotaxonomy ? Comment on the roles of plant chemicals in solving taxonomic debates. 3+7

(b) Define biodiversity upto various levels. Discuss the relevance of taxonomic study in biodiversity management. 4+6

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