

2020

BOTANY — HONOURS

Paper : CC-7

Full Marks : 50

The figures in the margin indicate full marks.

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

1. Answer **any five** of the following :

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|---|------|
| (a) Define Holotype. | 2 |
| (b) Define taxon and nothotaxon. | 1+1 |
| (c) Name the largest herbarium in the World. Mention its acronym. | 1+1 |
| (d) Distinguish between phenetics and cladistics. | 2 |
| (e) What do you mean by OTU? Give one example. | 1½+½ |
| (f) What is virtual herbarium? | 2 |
| (g) What is basionym? Cite one example. | 1+1 |

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

5×2

- (a) Rules of Priority.
- (b) Palynology in relation to taxonomy.
- (c) Conditions of valid publications.
- (d) Role of herbaria in teaching and research.

3. Answer **any three** of the following :

- (a) What do you mean by natural system of classification? Give an outline of Bentham and Hooker's System of Classification (1862-1883) up to Series. Mention two merits and two demerits of this system. 1+5+(2+2)
- (b) Briefly describe the floral morphology of Apiaceae (Umbelliferae) with floral diagram. State the primitive features of the family Magnoliaceae. Give one example of each of these two families. 4+4+1+1
- (c) Distinguish between Musaceae, Cannaceae and Zingiberaceae based on floral characters. Name any one economically important plant each from Musaceae and Zingiberaceae. 8+(1+1)
- (d) Compare the androecium characters of Asteraceae, Euphorbiaceae and Cucurbitaceae. Name one economically important plant of each family. 7+3

Please Turn Over

(e) Answer **any two** of the following :

- | | |
|---|-------|
| (i) Comment on the Biosystematics and the Encyclopedic phase of taxonomy. | 2½+2½ |
| (ii) What is neotype? Distinguish it from isotype. | 2½+2½ |
| (iii) Role of secondary metabolites in angiosperm taxonomy citing two examples. | 2½+2½ |
| (iv) State the Principles of ICN. | 5 |
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