

OLD
Part-III 3-Tier

2017

BOTANY

(Honours)

PAPER—VII

(PRACTICAL)

Full Marks : 100

Time : 6 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.

Answer all questions.

1. (a) Dissent and display the morphological parts of the specimen 'A' characterize it with suitable labelled sketches. 8

*[Dissection and display—2; Labelled sketches—3;
Description of morphological characters—3]*

- (b) Write the morphological features of the specimen 'B₁', B₂ and B₃. 2×3

(Turn Over)

2. Draw, label and describe the specimen 'C' with proper botanical terms. Dissect the flower and leave the preparation with the floral diagram. Identify the family and genus with reasons following the supplied published key.

18

[Drawing and Labelling—3+2 ; Description—5 ;

Dissertation of floral parts—2 ; floral formula—1 ;

Floral diagram—1 ; Identification the family with reasons—2 ;

Identification of the genus with reasons—2]

3. (a) Make a T.S. of the specimen 'D' and make suitably stained preparation of the specimen, Draw, label and identify the specimen with anatomical comments. submit your preparation.

12

[Section cutting—1 ; Staining—1 ; Mounting—1 ;

Drawing—3 ; Labelling—2 ; Anatomical comments—4 ;]

- (b) Make a thin TLS ? RLS of the specimen 'E' and prepare a temporary slides. Draw label and identify the specimen with anatomical comments, leave your preparation.

12

[Section cutting—1 ; Drawing—2 ; Labelling—2 ; Anatomical comments—2 ; Identification—1 ;]

4. (a) Make a temporary preparation of the crude drug powder of the specimen 'F'. Draw label and identify the crude drug.

4

[Labelled sketches—2 ; Identification with reason—2]

(b) Identify the specimen 'G' performing at least two chemical tests for tannin or alkaloids. 2+2

5. Identify the specimen 'H', 'I', 'J' K : L and 'M' Mention their family names generic names and specific epithets.

$1\frac{1}{2} \times 6$

[Family— $\frac{1}{2}$; Generic name— $\frac{1}{2}$; Specific Epithet— $\frac{1}{2}$]

6. Submission :

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| (a) Herbarium specimen | 6 |
| (b) Laboratory Note Book. | 10 |
| (c) Field records. | 3 |
| (d) Permanent slides (Made during practical classes) | 2 |

7. Viva-voce. 10