

**NEW**  
**Part-III 3-Tier**  
**2016**  
**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.*

*Illustrate the answers wherever necessary.*

1. (a) Dissect and display the morphological parts of the specimen 'A'. Characterize it with suitable labelled sketches. 8  
*[ Dissection & display—2 ; Labelled sketches—3 ;  
Description of Morphological characters—3 ]*
- (b) Write the morphological features of the specimen 'B<sub>1</sub>', 'B<sub>2</sub>' and 'B<sub>3</sub>'. 2×3
2. Draw, label and describe the specimen 'C' with proper botanical terms. Dissect the flower and leave the preparation. Write the floral formula and draw the floral diagram. Identify the family and genus with reasons following the supplied published key. 18  
*[ Drawing & labelling—3+2 ; Description—5 ;  
Dissection of floral parts—2 ; Floral formula—1 ;  
Floral diagram—1 ; Identification the family with reasons—2 ;  
Identification of the genus with reasons—2 ]*

*(Turn Over)*

3. (a) Make a thin transverse section 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 T.L.S. / R.L.S. of the specimen 'E' and prepare a temporary slide. Draw, label and identify the specimen with anatomical comments. Leave your preparation. 8

[ 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 reasons—2 ]

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

5. Identify the specimens '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 :

- (a) Herbarium specimens. 6  
(b) Laboratory Note Book. 10  
(c) Field records. 3  
(d) Permanent Slides (made during practical classes). 2

7. Viva-Voce. 10