NEW

Part-II 3-Tier

2018

BOTANY

(General)

PAPER—III

(PRACTICAL)

Full Marks : 100

Time : 5 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. Make a microscopic preparation of the specimen 'A'. Draw, label and identify the specimen with comment. Name the genus only. Leave your preparation for examination. 10

[Staining and mounting–3, Labelled diagram–3, Comment–3, Name of the genus–1]

2. Make a microscopic preparation of the specimen 'B'. Draw, label and identify the specimen with comment. Name the genus only. Leave your preparation for examination. 10

[Staining and mounting–3, Labelled diagram–3, Comment–3, Name of the genus–1]

3. Draw, label and describe the specimen 'C' in botanical terms. Dissect the flower and display the floral parts, write the floral formula and draw the floral diagram. Indentify the family with reasons. Leave your preparation for examination. 15

[Labelled diagrams–3, Description–4, Dissection & display–2, Floral formula–1, Floral diagram–2, Identification–1, Reasons–2]

4. Prepare a requisition slip to carry out the experiment as mentioned in the card drawn by you. Set the experiment. Write down the procedure. Indicate / write the result(s) and inference. 12

[Requisition–2, Setting up of the experiment–3, Procedure–3, Result–2, Inference–2]

5. Cut a thin T.S. of the specimen 'D'. Stain the T.S. by double staining method and prepare a permanent slide. Draw a labelled sketch of the preparation. Identify the specimen with reasons. Leave your preparation for examinations. 10

[Section cutting–1, Staining–1, Mounting–1, Labelled diagram–3, Identification–1, Reasons–3]

6. Prepare a uniform squash with the supplied specimen material 'E'. Show any (single) stage of mitotic division to the invigilator and get your drawing endorsed. Draw and label another mitotic stage observed in the slide. 7

[Squash preparation–2, Mitotic stage observation–2, Drawing and lebelling–3]

7. (a) Identify the specimens — F, G and H with reasons. (2×3) 6

[Identification–1, Reasons–1]

(b) Identify the specimens I, J and K with reasons. (2×3) 6

[Identification–1, Reasons–1]

(c) Identify the specimens L, M and N. (2×3) 6

[Genus–1, Family–1]

8. Laboratory Note Books, Field records, Herbarium and prepared slides. 13

[Laboratory Note Books–4, Herbarium specimens–3, Field Note Books–4, Slides–2]

9. Viva-voce. 5
