

NEW
Part-III 3-Tier
2018
BOTANY
(Honours)
PAPER—VIII
(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) Perform two physiological experiments as indicated in (1a, 1b) in the card to be drawn from a lot. Write in brief the experimental procedures, results and inferences. 15+5

[[for a : Requisition—2; Setup—2; procedure—5;

Result—4; inference—2]

(for 1b : Requisition—1; setup—1; procedure—1;

Result & Comments—2)]

2. (a) Perform the qualitative / quantitative (Sample : M), tests as indicated in the card drawn from a lot. 10

[[Requisition—2; Procedure—3;

Result—3; Inference—2;]

(Turn Over)

3. Calculate the segregation ratio of the sample 'O', determine the "Goodness of fit" from the specimen supplied. 8
[[Calculation—6; Conclusion—2;]
4. Make a suitable stained squash preparation of the pretreated and fixed root tip material 'N'. Determine the mitotic index of the specimen supplied. Draw, label and count the chromosome from a scattered metaphase plate. 15
[Squash preparation—3; Calculation (mitotic index)—5; preparation of metaphase plate—3; Drawing and labelling—3; Chromosome count—1;]
5. Demonstrate the plant breeding experiment as mentioned in the card to be drawn from a lot. Write the experimental procedure in brief. 3+3
[Demonstration—3; Procedure—3;]
6. Submit the bound and duly signed of your dissertation work (maximum 40 pages) prepared by you and present the same (3—5 min). 15
[Submission—6; Presentation—4; Discussion on presentation—5;]
7. Identify the slides 'P', 'Q' and 'R' with necessary comments. 3×2
[[Identification—1; Comment—1;]
8. Laboratory Note Book. 10
9. Viva-Voce. 10
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