

AQ – 818

First Semester M. Sc. (Part – I) Examination

BOTANY

Paper – IV

(Plant Development and Reproduction)

P. Pages : 2

Time : Three Hours]

[Max. Marks : 80

Note : (1) All questions are compulsory and carry equal marks.

(2) Draw well labelled diagram wherever necessary.

1. Explain :--

(a) Unique differences between plant and animal development. 6

(b) Physiological aspects of seed germination. 5

(c) Methods of breaking seed dormancy. 5

OR

(d) Seed structure. 5

(e) Protein degradation. 5

(f) Significance of seed dormancy. 6

2. Explain :—

(g) Laticifers. 5

(h) Secondary growth in plants. 5

(i) Vascular cambium. 6

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OR

- | | |
|----------------------------------|---|
| (j) Root apical meristem. | 6 |
| (k) Types of meristem in plants. | 5 |
| (l) Secretory ducts. | 5 |

3. Explain :—

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|------------------------|---|
| (m) Sex determination. | 6 |
| (n) Homeotic mutants. | 5 |
| (o) Types of ovules. | 5 |

OR

- | | |
|-----------------------------|---|
| (p) Pollen viability tests. | 5 |
| (q) Structure of ovule. | 5 |
| (r) Flower development. | 6 |

4. Give an account of floral character in plant with respect to structure and various vectors visiting flowers.

OR

Discuss the various parameters from fruit growth to Maturation.

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5. Explain Androgenesis mechanism. Add a note on its significance.

OR

Explain the mechanism of senescence in plants. Add note on Role of Ethylene in senescence.

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