UUCMS. No.		
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B.M.S COLLEGE FOR WOMEN BENGALURU – 560004

III SEMESTER END EXAMINATION – JAN/FEB-2024

B.Sc. – BOTANY

PLANT ANATOMY AND DEVELOPMENTAL BIOLOGY

(NEP Scheme 2021-22 onwards F+R)

Course Code: BOT3DSC03 Duration: 2 ¹/₂ Hours QP Code: 3018 Max marks: 60

Instructions: 1. Answer all the sections. 2. Draw diagrams wherever necessary.

SECTION-A

I. Answer any FIVE of the following. Each question carries TWO marks. (5x2=10)

- 1. What is triple fusion?
- 2. List any four types of stomata.
- 3. What is amphicribal vascular bundle?
- 4. Mention the types of meristems on the basis of their position.
- 5. Define microsporogenesis.
- 6. What is bilateral symmetry in plants? Give an example.
- 7. What is plant morphogenesis?

SECTION-B

II. Answer any FOUR of the following. Each question carries FIVE marks. (4x5=20)

- 8. Sclerenchyma.
- 9. Microspore tetrad and its types.
- 10. Primary structure of dicot root.

- 11. Polarity in multicellular system.
- 12. Primary structure of monocot leaf.
- 13. Laticiferous tissue.

SECTION-C

III. Answer any THREE of the following. Each question carries TEN marks. (3x10=30)

- 14. Give an account of complex permanent tissues.
- 15. Explain the anomalous secondary growth in Dracaena stem.
- 16. Explain shoot apical meristem (SAM), and add a note on the theories of organization of SAM.
- 17. Describe the structure of anatropous ovule and add a note on types of ovules.
- 18. Explain a. free nuclear endosperm.

b. ABC model specification of floral organs.



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Question Paper Template with Course Outcome and Bloom's Taxonomy

Tin	ne: 2.5 Hours Marks:60			
		Marks	со	Bloom's level
1.	a) What is triple fusion?	2	1	1
	b) List any four types of stomata.	2	1	2
	c) What is amphicribal vascular bundle?	2	1	1
	d) Mention the types of meristems on the basis of their position.	2	1	1
	e) Define microsporogenesis	2	4	2
	f) What is bilateral symmetry in plants? Give an example.	2	4	4
	g) What is plant morphogenesis?	2	1	2
2.	a) Sclerenchyma.	5	1	1
	b) Microspore tetrad and its types.	5	4	1
	c) Primary structure of dicot root.	5	1	2
	d) Polarity in multicellular system.	5	2	1
	e) Primary structure of monocot leaf	5	1	2
	f) Laticiferous tissue.	5	2	1
3.	a) Give an account of complex permanent tissues	10	1	2
	b) Explain the anomalous secondary growth in Dracaena stem.	10	2	1
	c) Explain shoot apical meristem (SAM), and add a note on the theories of organization of SAM.	10	1	1
	d) Describe the structure of anatropous ovule and add a note on types of ovules	10	1	4
	e) Explain a. Free nuclear endosperm.	5	1	2
	b. ABC model specification of floral organs.	5	1	2

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