

STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI 600 086
(For candidates admitted from the academic year 2023 – 2024)

B.Sc. DEGREE EXAMINATION, APRIL 2024
BRANCH VI.A. – ADVANCED ZOOLOGY AND BIOTECHNOLOGY
SECOND SEMESTER

COURSE : **ALLIED CORE**
PAPER : **GENERAL BOTANY - II**
SUBJECT CODE : **23BT/AC/GB24**
TIME : **3 HOURS**

MAX. MARKS: 100

Q. No.	SECTION A (20 x 1 = 20)	CO	KL
I	Choose the correct answer	1-5	K1
1.	<i>Funaria</i> is a common terrestrial a) fern b) moss c) epiphyte d) mould		
2.	Stomata surrounded by epidermal cells is called a) anisocytic b) anomocytic c) paracytic d) diacytic		
3.	Symplastic absorption of water is through the a) stomata b) plasmodesmata c) casparian strips		
4.	Ethylene promotes a) apical dominance b) bolting. c) shoot elongation d) ripening of fruits		
5.	The dry decoration method involves a) drying b) burying c) glycerin method d) all of these.		
II	State whether true or false	1-5	K1
6.	The conspicuous phase in the life cycle of bryophytes is the sporophyte .		
7.	Dorsiventral leaves have bulliform cells in the lower epidermis		
8.	Potassium ions are needed for opening and closing of stomata		
9.	Ammonium sulphate is used to condition flowers		
10.	Auxins are used to increase the length of grape stalks		
III	Fill in the Blanks	1-5	K1
11.	In <i>Lycopodium</i> the small, simple and sessile leaves are called as ----- -----		
12.	Embryonic regions of unlimited growth and cell division is referred as -----		
13.	----- ions are used in splitting of water during photosynthesis		
14.	----- is an Japanese technique of flower arrangement		
15.	----- is a rooting hormone .		
IV	Match the following	1-5	K1
16.	Coralloid root - ABA		
17.	Dicot root - sucrose		
18.	Root pressure - apogeotropic		
19.	Flowers - exarch		
20.	Senescence - diffusion		

Q. No.	SECTION B Answer any 8 of the following in 50 words	(8 x 2 = 16)	CO	KL
21.	Bulbils		1-5	K2
22.	Protonema		1-5	K2
23.	Bicollateral vascular bundles		1-5	K2
24.	Chlorenchyma		1-5	K2
25.	Photophosphorylation		1-5	K2
26.	Bolting		1-5	K2
27.	Vernalisation		1-5	K2
28.	Bonsai		1-5	K2
29.	Garden rake		1-5	K2
30.	Osmosis		1-5	K2
Q. No.	SECTION C Answer the following in 200 words	(4 x 6 = 24)	CO	KL
31.	Describe the sporophyte of <i>Lycopodium</i> (or)		1-5	K3
32.	Illustrate and describe the habit of <i>Funaria</i>			
33.	Explain the variations in the different types of vascular bundles (or)		1-5	K3
34.	What is meristem and how are they classified?			
35.	Give an account of the active and passive transport mechanism (or)		1-5	K4
36.	Explain photoperiodism			
37.	Explain the physiological effects of auxins (or)		1-5	K4
38.	How important are cut flowers and can you explain the various methods to prolong vase life ?			
Q. No.	SECTION D Answer the following in 1000 words	(2 x 20 =40)	CO	KL
39.	With schematic illustrations explain the life cycle of <i>Cycas</i> (or)		1-5	K5
40.	Differentiate and explain with illustrations the anatomical structures of dicot and monocot stem			
41.	Explain Calvin cycle (or)		1-5	K5
42.	Give a detailed account of the various methods of vegetative propagation			
