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

B. Sc. DEGREE EXAMINATION, NOVEMBER 2024 BRANCH V (a) – PLANT BIOLOGY AND PLANT BIOTECHNOLOGY THIRD SEMESTER

COURSE: MAJOR – COREPAPER: TAXONOMY OF ANGIOSPERMS AND ECONOMIC BOTANYSUBJECT CODE: 23BT/MC/TE34TIME: 3 HOURSMAX. MARKS: 100

TIME	: 3 HOURS	IVIAA. IVI	MAX. MAKKS	
Q. No.	SECTION	N A (20 x 1 = 20 Marks)	CO	KL
	I Choose the correct answer			
1.	The arrangement of veins on the leaf is called as			
	a) Vernation	b) Venation	1	1
	c) Vernalization	d) Vexillum		
2.	Chemical used in herbarium for poisoning is			
	a) Mercuric chloride	b) Silver chloride	1	1
	c) Magnesium chloride	d) Sodium chloride		-
	Interpetiolar stipule is characteristic of			
3.	a) Rutaceae	b) Rubiaceae	1	1
	c) Cucurbitaceae	c) Apcynaceae		
4.	Verticillaster infloresence is seen	in		
	a) Leucas aspera	b) Annona squamosa	1	1
	b) Cocos nucifera	d) Piper nigrum		
	The morphology of the useful part	of Asparagus racemosus is	1	1
5.	a) root b) leaves	c) stem d) flowers		
	II State whether true or false:		1	1
6.	Flowers are hemicyclic in Annona		1	
7.	Style arising from the base of the		1	1
8.	The botanical name of wheat is <i>Tr</i>		1	1
9.	Pollinium is characteristic feature	of Solanaceae.	1	1
10.	Numerical Taxonomy is also know	vn as Taximatrics .	1	1
	III Fill in the Blanks			
11.	Jack fruit is an example for	type of fruit.	1	1
12.	The world largest Herbarium is lo	cated at	1	
	··			1
13.	ICN is the abbreviation for		1	1
14.	The economically important part of	of Gossypium is	1	1
15.	The modern molecular based syste flowering plants is developed by _		1	1

	/2/ 23BT/MC	23BT/MC/TE34	
16.	IV Match the following Pollinium - Rutaceae	1	1
17.	Type specimen - Fumitory		1
18.	Gland dotted leaves - Asclepiadaceae		1
19.	Unisexuales - Holotype		1
20.	Nicotiana tabacum - Euphorbiaceae		1
Q. No.	SECTION BAnswer any 8 of the following in 50 words(8 x 2 = 16 marks)		KL
21.	Define Hypogynous flower.	2	2
22.	Differentiate bract and bracteole.		2
23.	What is BSI?		2
24.	List any two dye yielding plants.		2
25.	Assess the features of Epipetalous stamens.		2
26.	Specify Papilionaceous corolla.		2
27.	Define Cyathium inflorescence.		2
28.	Mention the characters of Monochlamydeae.		2
29.	What is Resupination?		2
30.	Define Chemotaxonomy.		2
Q. No.	SECTION CAnswer the following in 200 words(4 x 6 = 24 marks)	СО	KL
31.	What is Phyllotaxy? Categorize its types. (or)	3	3
32.	Trace the salient features of Annonaceae.		
33.	Distinguish the taxonomical keys and list their uses. (or)		3
34.	What do you infer from Typification?		
35.	Explicit the floral characteristics of Poaceae.		4
36.	(or) Mention the Botanical name, family, morphology of the useful part and the uses of paddy and pepper.		
37.	Explain the types of aestivation with suitable diagrams.		4
38.	(or) Enumerate the salient features of the flowers of Cucurbitaceae.		

	/3/ 23BT/MC/T	23BT/MC/TE34		
Q. No.	SECTION D	CO	KL	
	Answer the following in 1000 words $(2 \times 20 = 40 \text{ marks})$			
39.	Outline the Bentham and Hooker's System of Classification. Add a note on its merits and demerits.	5	5	
	(or)			
40.	Elaborate the techniques involved in herbarium preparation for plant preservation.			
41.	Substantiate the distinguishing characters of the sub- families of Fabaceae.	5	5	
	(or)			
42.	Describe the morphology, processing and uses of the oil obtained from <i>Arachis hypogaea</i>			
