QP CODE: D4BBT2402	(Pages: 2)	Reg. No : .....
		Name : .....

FOURTH SEMESTER FYUGP EXAMINATION, APRIL 2026

Discipline Specific Core (DSC) Courses - Major

BOT4CJ204 : PHYTOCHEMISTRY & PHARMACOGNOSY

(Credits: 4)

Time: 2 Hours **Maximum Marks: 70**

Section A

Answer the following questions. Each carries 3 marks (Ceiling: 24 marks)

1.	What is cellulose? Mention its biological role in plants.	BL1	CO1
2.	What is enfleurage? Mention its application.	BL2	CO2, CO3
3.	Mention any three physical evaluation parameters of crude drugs.	BL2	CO2, CO3, CO4
4.	Define water-soluble extractive value.	BL2	CO2, CO3, CO4
5.	What is the role of the National Medicinal Plants Board (NMPB)?	BL2	CO3, CO4
6.	Define lipids and mention any two general characteristics.	BL2	CO1
7.	Mention any three ecological functions of secondary metabolites.	BL2	CO2, CO3
8.	State the etymology of the term pharmacognosy.	BL2	CO2, CO3, CO4
9.	What is tissue culture? Mention its role in drug production.	BL1	CO2, CO3, CO4
10.	Define enzymes and state any two of their properties.	BL2	CO1

Section B

Answer the following questions. Each carries 6 marks (Ceiling: 36 Marks)

11.	Describe primary metabolites with examples and their biological roles.	BL1	CO1
12.	Explain taxonomical classification of drugs and its importance in pharmacognosy.	BL1	CO2, CO3
13.	Explain the role of ATP, GTP, and UTP in cellular metabolism.	BL2	CO2, CO3, CO4
14.	Describe essential and non-essential amino acids with suitable examples.	BL2	CO2, CO3, CO4

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15.	Explain the need and importance of quality control of natural drugs.	BL2	CO3, CO4
16.	Explain the need and importance of standardization of herbal drugs as per WHO guidelines.	BL2	CO1
17.	Discuss the role of pharmacognosy in modern medicine and drug discovery.	BL2	CO2, CO3, CO4
18.	Explain gums and mucilages with sources, properties, and uses.	BL2	CO2, CO3, CO4
	Section C		
	Answer any one question. Each carries 10 marks (1 x 10 = 10 Marks)		
19.	Discuss the utilization of aromatic plants and their products, highlighting their importance in perfumery, cosmetic, food, and pharmaceutical industries, with suitable examples.	BL2	CO2, CO3
20.	Discuss the special types of enzymes such as isoenzymes, ribozymes, abzymes, and synzymes, and explain the role of co-enzymes and cofactors, along with the applications of enzymes in various fields, with suitable examples.	BL2	CO1, CO4
	CO : Course Outcome		
	BL : Bloom's Taxonomy Levels (1 – Remember, 2 – Understand, 3 – Apply, 4 – Analyse, 5 – Evaluate, 6 – Create)		