

Name:
Enrolment No:



UNIVERSITY OF PETROLEUM AND ENERGY STUDIES

End Semester Examination, May 2022

Course: Pharmacognosy and Phytochemistry 1

Semester: IV

Program: B. Pharm

Time: 03 hrs.

Course Code: BP405T

Max. Marks: 75

Instructions: All the sections are compulsory.

SECTION A

S. No.	CO		Marks
		Answer all the questions.	20
1.	CO1	The father of medicine is A. Pedanius Dioscorides B. Hippocrates C. Theophratus D. Aristotle	1
2.	CO1	Swelling index is used to determine the quality and purity of crude drug containing A. Volatile oil B. Resin C. Mucilage D. Protein	1
3.	CO1	A supplier of crude drugs received an order to supply 10 kg of <i>Strychnous nuxvomica</i> . Since he could arrange on 8 kg of the drug he added 2 kg of <i>Strychnous potatorum</i> to it, labelled the package as <i>Strychnous nuxvomica</i> and supplied it. What is this partial substitution of a crude drug with another one called? A. Substitution B. Mixing C. Allied drug D. Adulteration	1
4.	CO1	De Materia Medica was written by A. Aristotle B. Elder C. Dioscorides D. Hippocrates	1
5.	CO1	Palisade ratio is the average number of palisade cells present..... A. In 1mm square area of leaf B. 1cm Square area of leaf C. Under one epidermal cell D. Under ten epidermal cells	1
6.	CO5	Shark liver oil is -----source of drug a) Animal b) Mineral c) Marine d) Plant	1
7.	CO2	Chromosomal mutation in which the organism contain more than the two set of chromosomes is called A. Mutation B. Polyploidy	1

		C. Aneuploidy	D. Both A and B	
8.	CO2	Step of preparation of crude drug in which sand, dirt, and foreign organic matter from crude drug are removed is called as		1
		A. Dibbling	B. Garbling	
		C. Sophistication	D. Layering	
9.	CO3	Identify the part of plant used for tissue culturing.		1
		A. Scion	B. Explant	
		C. Stock	D. Callus	
10.	CO3	Which of following is not the component of Nutrient medium for plant tissue culture		1
		A. Plant growth regulator	B. Sucrose	
		C. Globulin	D. Inorganic salt	
11.	CO4	Non sugar part of glycoside is known as---		1
		A. Glycone	B. Aglycone	
		C. Both A & B	D. None of the above	
12.	CO3	Cellular totipotency is the property of		1
		A. Plants	B. Animals	
		C. Bacteria	D. All of these	
13.	CO4	Which of the following is the specific Chemical test for flavonoid?		1
		A. Keller kiliani test	B. Lieberman Burchard est	
		C. Shinoda test	D. Foam test	
14.	CO5	Wool fat is the another name of		1
		A. Beeswax	B. Lanolin	
		C. Spermaceti	D. Kokum butter	
15.	CO4	How many carbon atoms are present in monoterpenoids?		1
		A. 10	B. 15	
		C. 20	D. 25	
16.	CO4	Senna mainly contains		1
		A. O glycosides	B. C glycosides	
		C. N glycosides	D. S glycosides	
17.	CO2	Which of the following hormone can cause parthenocarpic fruit development?		1
		a) Auxin		
		b) Gibberellin		
		c) Ethylene		
		d) Cytokinin		
18.	CO5	Papain is the dried latex of the plant fruits of		1
		A. Carica papaya	B. Ficus glabrata	
		C. Ananas comosus	D. Withania somnifera	
19.	CO5	Among the following which is used as laxative.		1
		A. Coriander	B. Fennel	
		C. Digitalis	D. Ispaghula	
20.	CO5	Cotton is not cultivated in which part of India?		1

		A. Kashmir C. Gujarat	B. Rajasthan D. Maharashtra	
SECTION B				
Answer any two questions of the following.				20
1.	CO2	Write the different methods of cultivation. Explain various exogenous factor affecting cultivation of medicinal plants.		6+4
2.	CO3	What is plant tissue culture? Explain the different types of plant tissue culture with its application.		10
3.	CO5	Describe the biological sources, active constituent and one important use of a. Acacia b. Chaulmoogra oil c. Papain d. Hemp		2.5X4
SECTION C				
Answer any seven questions of the following.				35
1.	CO1	Explain evaluation of crude drug? Explain microscopical and chemical evaluation of crude drugs with examples?		5
2.	CO2	Write the role of plant hormones and their application with respect to medicinal plant.		5
3.	CO4	Crude drug samples were subject to following tests and the observations are mentioned as below. Identify the secondary metabolites present in each crude drug: i. Mayer's reagent test (Potassium mercuric iodide solution) → Creamy solution or pale yellow ppt ii. Wagner's reagent (iodine K ⁺ iodide solution) → Red brown ppt iii. Hager's Regent (Saturated picric acid solution) → Yellow precipitate iv. Dragendorff's Reagent test (Potassium bismuth iodide solution) → Brown or reddish brown ppt V. Sample drug + 10 to 20 ml of water → well shaken → generation of froths		5
4.	CO2	Briefly explain factors affecting the collection of crude drug.		5
5.	CO1	Define Adulteration. Explain different types of adulteration of crude drug.		5
6.	CO3	What are advantages and disadvantages of edible vaccines?		5
7.	CO1	What is Pharmacognosy ? Explain the history and development of Pharmacognosy.		5
8.	CO3	What are the basic requirements of plant tissue culture?		5
9.	CO4	Define alkaloids. Discuss in brief the chemical tests used for identifying alkaloids.		5
Total				75