

SET 2 QUESTION PAPER

Subject: Pharmacognosy & Phytochemistry I

Year and Sem: S.Y. B.Pharm (SEM-IV) (Choice Based) (R-2019)

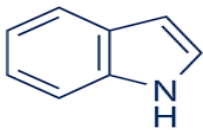
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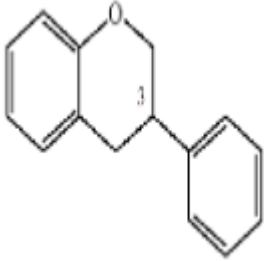
Total marks: 80

N.B.: 1. All questions are compulsory

2. Figures to right indicate full marks

Q. I	Choose appropriate option for following multiple choice based questions:	20M
1	Artificial invert sugar, an adulterant for honey is detected by ---	
a	Selivonanoff's test	
b	Fiehe's test	
c	Ninhydrine test	
d	Fehling test	
2	Position of Plant in taxonomy and chemical nature of drugs is included in which of the following system of classification	
a	Taxonomical Classification	
b	Chemotaxonomical Classification	
c	Chemical classification	
d	Serotaxonomical classification	
3	Total Ash value in case of crude drug signifies	
a	Organic content of the drug	
b	Cellular content of the drug	
c	Inorganic content of the drug	
d	Phytoconstituents of the drug	
4	Palisade ratio is	
a	Total number of palisade cells beneath each epidermal cell	
b	Total number of Palisade cells beneath mesophyll	
c	Average number of Palisade cells beneath each epidermal cell	
d	Average number of Palisade cells beneath four continuous epidermal cells	
5	A change of the DNA sequence within a gene or a chromosome of an organism resulting in the creation of a new character or trait not found in the parental type	
a	Chemodemes	
b	Hybridization	
c	Polyploidy	
d	Mutation	
6	The natural plant growth regulator which promote cell division, cell elongation and useful in root formation, phototropism, geotropism and apical dominance	
a	Cytokinins	
b	Abscisic acid	
c	Auxins	

d	Gibberellins	
7	The method of collection of gum from the plant	
a	felling	
b	cutting	
c	tapping	
d	digging	
8	Following are the methods of in-situ conservation except	
a	National Park	
b	Botanical Garden	
c	Statuary	
d	Biosphere reserve	
9	Cytokinins are derivatives of	
a	Proteins	
b	Adenine	
c	Glycosides	
d	Indole	
10	Following are the macronutrient; except	
a	Nitrogen	
b	Sulphur	
c	Copper	
d	Potassium	
11	The unorganized mass of cells which proliferates from the cells of an explant is termed as	
a	Callus culture	
b	Protoplast culture	
c	Suspension culture	
d	Culture	
12	The system of medicine which put forth the Laws of Similars which says that like cures like (Similae similibus curentur)	
a	Unani	
b	Homeopathy	
c	Ayurveda	
d	Siddha	
13	Identify the class of compound from the given basic nucleus	
		
a	Indole Alkaloids	
b	Anthraquinone Glycosides	

c	Quinoline Alkaloids	
d	Cardiac Glycosides	
14	Identify the class of compound from the given basic nucleus	
		
a	Isoflavonoids	
b	Neo Flavonoids	
c	Flavonoids	
d	Flavan-3-ol	
15	C-Antraquinone glycosides are confirmed by which of the following tests	
a	Borntrager's test	
b	Modified Borntrager's test	
c	Keller Killiani test	
d	Shinoda test	
16	Hemp is an example of fibre belonging to the class	
a	Regenerated fibre	
b	Mineral fibre	
c	Carbohydrate fibre	
d	Protein fibre	
17	-----are agents that can cause a birth defect by permanently altering the structure and functions of organs exposed to them	
a	Teratogens	
b	Allergens	
c	Hallucinogens	
d	Enzymes	
18	The proteolytic enzyme derived from the bacteria present in the gut of silk worm	
a	Urokinase	
b	Streptokinase	
c	Serratiopeptidase	
d	Pepsin	
19	Acacia and tragacanth are examples of natural gums classified in specific group	
a	Seed gums	
b	Marine gums	

c	Exudate gums	
d	Microbial Gums	
20	Gelatin is the example of source of drug of natural origin which is obtained from the following	
a	Vegetable source	
b	Animal source	
c	Mineral source	
d	Marine Source	
Q. II A	Answer any one of the following.	12M
1a	Draw the nucleus, example, use and chemical test of the following- i. Tropane alkaloid ii. Cardiac glycosides iii. Triterpenoidal pentacyclic saponin	6M
1b	Define Ash value and swelling Index? Write a note on wax obtained from animal source.	6M
2a	Draw the nucleus, example, use and chemical test of the following i. Anthraquinone Glycosides ii. Steroidal saponin iii. Isoquinoline alkaloids	6M
2b	Define and write the significance of moisture content as physical parameter in the evaluation of Drugs of Natural origin. Give complete pharmacognostic account of any one oil having cathartic property.	6M
Q.II B	Answer any four out of the five	48 M
1a	Explain the role of Pharmacognosy in Allopathy and Ayurveda system of medicine with examples.	6 M
1b	Write in detail about any three factors influencing cultivation of medicinal plants with one example each.	6 M
2a	Discuss transgenic plants and their use in the production of edible vaccines. Give the advantages of edible vaccine.	6 M
2b	Classify following with examples: i. Volatile oil ii. Tannins	6 M
3a	With the help of suitable examples differentiate between organized and unorganized drugs. Write a note on Agar.	6 M
3b	Write the source, preparation, constituents, chemical tests and uses of 'Acacia'.	6 M
4a	Define Polyploidy and Hybridization.	3 M
4b	Differentiate between Callus and Suspension culture.	3M

4c	Compare and contrast Absorbent and Non-absorbent cotton.	3M
4d	Write about Sero-taxonomical classification of Drugs of natural origin with suitable examples.	3M
5a	Write a note on i. Conservation of medicinal plants. ii. Novel medicinal agents from marine source.	6 M
5b	Explain any two proteolytic enzymes obtained from plant source.	6 M