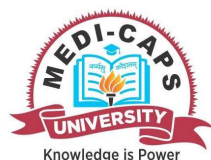


Total No. of Questions: 3

Total No. of Printed Pages: 2

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Enrollment No.....



Faculty of Pharmacy
End Sem (Even) Examination May-2022
PY3CO25 Herbal Drug Technology

Programme: B. Pharma

Branch/Specialisation: Pharmacy

Duration: 3 Hrs.

Maximum Marks: 75

Note: All questions are compulsory. Internal choices, if any, are indicated.

- Q.1
- Define biodynamic agriculture. 2
 - Define tridosha theory of ayurveda. 2
 - Discuss the interaction of Kava-kava and Gingko biloba with other drugs. 2
 - Write the source, constituents and uses of Alfa-alfa. 2
 - Define Phytosomes with one example. 2
 - Name any two natural sweeteners with their biological source. 2
 - Define bioprospecting and biopiracy. 2
 - Write down the constitution of ASU-DCC. 2
 - The finished goods storage area should be marked as 2
 - Discuss importance and objectives of GMP. 2

- Q.2
- Attempt any two:
- Explain different steps for processing of herbal raw material. 10
 - Define probiotics, explain nutraceuticals used in GIT disorders with examples. 10
 - (a) Enumerate different methods of pest control with example. 5
Explain in brief about mechanical method.
(b) Enlist different types of herbal drug interactions. Give brief account on Hypericum interaction with other drugs. 5

- Q.3
- Attempt any seven: Two questions from each section is compulsory.

Section - A

- Brief about colorants used in herbal cosmetics with examples. 5
- Classify different types of gums with examples. 5

P.T.O.

- Give an account of diluents used in herbal formulations with examples. 5

Section – B

- Write down ICH guidelines for stability testing of herbal drugs. 5
- Write a note on patenting aspect of natural products with case study of curcuma. 5
- Explain about safety, efficacy and quality standards of ASU medicines. 5

Section – C

- Write short note on present scope and future prospects of herbal industry. 5
- Give an account on plants of plant-based industries involved in medicinal and aromatic plants in India. 5
- Describe the general requirements for building, raw materials, finished goods stores, health and hygiene of workers and batch manufacturing records as per GMP (Schedule – T). 5

Marking Scheme
PY3CO25 Herbal Drug Technology

Q.1	i.	Definition of biodynamic agriculture.		2
	ii.	Definition of tridosha theory of ayurveda.		2
	iii.	Kava-kava interaction	1 mark	2
		Gingko biloba interaction	1 mark	
	iv.	Source of Alfa-alfa	1 mark	2
		Constituents	0.5 mark	
		Uses	0.5 mark	
	v.	Definition	1 mark	2
		Example	1 mark	
	vi.	Name	1 mark	2
		Biological sources	1 mark	
Q.2	vii.	Definition of bioprospecting	1 mark	2
		Definition of biopiracy	1 mark	
	viii.	Constitution of ASU-DCC.		2
	ix.	Finished goods storage area should be marked		2
	x.	Importance of GMP	1 mark	2
		Objectives of GMP	1 mark	
		Attempt any two:		
	i.	Steps for processing of herbal raw material		10
		1. Comminution description	2 marks	
		2. Extraction description	2 marks	
		3. Purification description	2 marks	
		4. Concentration description	2 marks	
	ii.	5. Drying of extract description	2 marks	10
		Definition of probiotics	2 marks	
		Neutraceuticals	3 marks	
	iii.	Any 5 examples (1 mark *5)	5 marks	5
		(a) Enumerate	1 mark	
		Example	1 mark	
		Mechanical method	3 marks	
		(b) Types of herbal drug interactions	2 marks	
		Interaction with other drugs	3 marks	

Q.3 Attempt any seven: Two questions from each section is compulsory.

Section - A

i.	Introduction	2 marks	5
	3 examples with description (1 mark * 3)	3 marks	
ii.	4 Flow chart of types with examples		5
	(0.5 mark * 4)	2 marks	
iii.	Explanation Any 2 examples		5
	(1.5 marks *2)	3 marks	
	Explanation of 2 examples	(2.5 marks * 2)	

Section – B

iv.	ICH guidelines for stability testing of herbal drugs		5
	As per explanation		
v.	Definition and introduction	2 marks	5
	Case study	3 marks	
vi.	Description on Safety	1 mark	5
	Efficacy	1 mark	
	Evaluation parameters of ASU medicines	3 marks	

Section – C

vii.	Present scope of herbal industry	2.5 marks	5
	Future prospects of herbal industry	2.5 marks	
viii.	Description of aromatic plants with eg.	1 mark	5
	Name, turnover, import, export about Indian industries involved in aromatic plants	4 marks	
ix.	General requirements for building	1 mark	5
	General requirements for raw materials	1 mark	
	General requirements for finished goods stores		
		1 mark	
	General requirements for health and hygiene of workers		
		1 mark	
	General requirements for batch manufacturing records		
		1 mark	
