

a: 15R00402

B.Pharm II Year II Semester (R15) Supplementary Examinations September 2022  
**PHARMACOGNOSY – II**

Max. Marks: 70

e: 3 hours

**PART – A**  
 (Compulsory Question)

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Answer the following: (10 X 02 = 20 Marks)

- (a) What is Modified Borntrager's test? Write its significance.
- (b) Write the identification tests for saponins.
- (c) Give the difference between nutraceuticals & cosmeceuticals with examples.
- (d) Write the botanical source and uses of henna.
- (e) Give the botanical source and uses of any two tropane alkaloids.
- (f) What is Van-Urk's test? Write its significance.
- (g) Write the chemical structure and uses of codeine.
- (h) What is Murexide test? Write its significance.
- (i) How will you identify flavonoids?
- (j) Differentiate between primary and secondary metabolites with examples.

**PART – B**

(Answer all the questions: 05 X 10 = 50 Marks)

- 2 (a) Define glycosides. Write the classification of glycosides.
- (b) Write a note on cardiac glycosides.

OR

- 3 Write about the pharmacognosy of senna.

- 4 Write short notes on the following cosmeceuticals: (i) Turmeric. (ii) Aloe vera.

OR

- 5 Write short notes on the following nutraceuticals: (i) Spirulina. (ii) Garlic.

Write the botanical source, chemical tests and uses of:  
 (i) Coca. (ii) Rauwolfia. (iii) Kurchi. (iv) Aswagandha.

OR

- 7 Write the classification, general method of extraction and identification tests for alkaloids.

- 8 Discuss about the pharmacognosy of opium.

OR

- 9 Write short notes on: (i) Ipecac. (ii) Solanum.

- 10 Write a note on general techniques of biosynthetic studies and basic metabolic pathways.

OR

- 11 Write a note on 'extraction'— definition, principle, different types and factors affecting the process of extraction.

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B.Pharm II Year II Semester (R19) Regular & Supplementary Examinations September 2022  
**PHARMACOGNOSY & PHYTOCHEMISTRY – I**

Time: 3 hours

Max. Marks: 75

**PART – A**  
(Compulsory Question)

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- 1 Answer the following: (10 X 02 = 20 Marks)
- Give suitable examples for dried latex in crude drugs.
  - Define serotaxonomy.
  - Write the collection practice of any one latex.
  - Mention the applications of auxins.
  - Define hairy root culture.
  - Define edible vaccines.
  - Define unani system of medicine.
  - Define glycosides.
  - Write the application of agar.
  - What are the uses of chaulmoogra oil?

**PART – B**  
(Answer any two questions: 02 X 10 = 20 Marks)

- Define adulteration, methods of adulteration and its detection.
  - Define palisade ratio.
- Discuss the storage process of crude drugs.
  - Discuss the application of plant tissue culture in pharmacognosy.
- Classify tannins with suitable examples.
  - Write about the novel drugs from marine sources.

**PART – C**  
(Answer any seven questions: 07 X 05 = 35 Marks)

- Discuss the organized crude drugs with suitable examples.
- Discuss on the determination of stomatal index with illustrated diagrams.
- Write the advantages of vegetative propagation.
  - Discuss the role of cytokinins in plant propagation.
- Discuss the hybridization in the propagation of medicinal plants.
  - Define plant tissue culture.
- What is somatic embryogenesis?
  - Give the applications of protoplast fusion.
- Mention the external medicines based on Siddha system of medicine.
  - Discuss about Keller Kiliani test.
- Classify flavonoids with suitable examples.
  - Write the properties and examples for volatile oil.
- Discuss the preparation of absorbent cotton.
  - What are the applications of Hemp fibre?
- Write about bromelain.
  - What are natural allergens?

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B.Pharm II Year II Semester (R19) Supplementary Examinations March 2022  
**PHARMACOGNOSY & PHYTOCHEMISTRY – I**

Time: 3 hours

Max. Marks: 75

**PART – A**  
(Compulsory Question)

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- 1 Answer the following: (10 X 02 = 20 Marks)
- Define the term dried latex with an example.
  - What is serotaxonomy?
  - What are gibberellins?
  - Define the term polyploidy.
  - Define callus culture.
  - Define edible vaccines.
  - Define homeopathy.
  - Write modified Borntrager's test.
  - Define the term teratogen? Give examples from natural origin.
  - Write the sources and uses of castor oil.

**PART – B**  
(Answer any two questions: 02 X 10 = 20 Marks)

- Discuss the methods of adulteration of drugs of natural origin.
  - Discuss the pharmacological classification of crude drugs.
- Discuss about the conservation of medicinal plants.
  - What are the applications of plant tissue culture in pharmacognosy?
- Discuss the role of pharmacognosy in Ayurveda.
  - Elaborate the fibres of natural origin.

**PART – C**  
(Answer any seven questions: 07 X 05 = 35 Marks)

- Write about the scope of pharmacognosy.
  - Define leaf constants.
- Mention the physical methods of evaluation of crude drugs.
  - Give the benefits of lycopodium spore method.
- What is vegetative propagation?
  - How the altitude and temperature affects the cultivation of medicinal plants? Give examples.
- Write the applications of auxins in plant growth.
  - Define the term mutation and hybridization.
- Write history of plant tissue culture.
  - Write about cell suspension culture.

Contd. in page 2

- 10 (a) What is hairy root culture?  
(b) Write nutritional requirements of plant tissue culture.
- 11 (a) Mention any three external medicines used in siddha.  
(b) Classify tannins.
- 12 (a) Define alkaloids and pseudo alkaloids with examples.  
(b) Write the source and constituents of tragacanth.
- 13 (a) Discuss isolation of bromelain.  
(b) Mention the novel medicinal agents from marine sources.

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B.Pharm II Year II Semester (R15) Regular &amp; Supplementary Examinations October/November 2020

**PHARMACOGNOSY – II**

Time: 3 hours

Max. Marks: 70

**PART – A**

(Compulsory Question)

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- 1 Answer the following: (10 X 02 = 20 Marks)
- Write a note on crude drug containing triterpenoid saponin.
  - Write the modified Borntrager's test.
  - Define the term nutraceuticals with an example.
  - Write the utilization of garlic as a nutraceutical.
  - Write the confirmatory test for ergot alkaloid.
  - Write the source and uses of Kurchi bark.
  - Define the term glycoalkaloid with its chemical nature.
  - Write the confirmatory test for caffeine.
  - Define the terms secondary metabolite & biogenesis.
  - Define the term extraction. How do you preserve aqueous extract?

**PART – B**

(Answer all five units, 5 X 10 = 50 Marks)

**UNIT – I**

- 2 (a) Discuss the chemical nature of digitalis.  
(b) Give a note on Ginseng.

**OR**

- 3 (a) Write the chemical nature and uses of Senna.  
(b) Write the pharmacognosy of Psoralea?

**UNIT – II**

- 4 (a) Discuss the applications of Amla in personal care products.  
(b) Discuss the applications of Turmeric in skin care preparations.

**OR**

- 5 (a) Discuss the applications of henna in hair care formulations.  
(b) Discuss the cultivation and utilization of Spirulina.

**UNIT – III**

- 6 (a) Write the pharmacognosy of Veratrum.  
(b) Write the pharmacognosy of Nux-Vomica.

**OR**

- 7 (a) Write the pharmacognosy of Tobacco.  
(b) Explain the pharmacognosy of Pilocarpus.

**UNIT – IV**

- 8 (a) Write the sources, chemical properties and uses Cinchona.  
(b) Discuss the pharmacognosy of coffee.

**OR**

- 9 (a) Write the pharmacognosy of Ephedra.  
(b) Write the sources, chemical properties and uses Opium.

**UNIT – V**

- 10 (a) Elaborate shikimic acid pathway.  
(b) Discuss on supercritical fluid extraction.

**OR**

- 11 (a) Write the process of extraction and identification of alkaloids.  
(b) Give a note on morphine biogenesis.

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B.Pharm II Year II Semester (R15) Supplementary Examinations March 2022  
**PHARMACOGNOSY – II**

Time: 3 hours

Max. Marks: 70

**PART – A**  
(Compulsory Question)

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- 1 Answer the following: (10 X 02 = 20 Marks)
- Explain Keller Kiliani test.
  - Write the chemical structure of cardenolide and bufadienolide.
  - What is the role of herbs in cosmetics?
  - Give the source and uses of Garlic.
  - Explain Wagner's and Dragendorff's test.
  - List out powder microscopic characters of Datura and Nux-vomica.
  - Explain Murexide test.
  - Write the chemical constituents of vasaka.
  - Define extraction and list out various methods of extraction.
  - Write matchstick test for tannins.

**PART – B**  
(Answer all the questions: 05 X 10 = 50 Marks)

- 2 (a) Give the source, chemical constituents and tests for identification of senna.  
(b) Write a short note on chirata.

OR

- 3 (a) With neat labeled diagram, explain the microscopy of digitalis.  
(b) Give the source, chemical constituents and uses of ginseng.

- 4 (a) Give the source, chemical constituents and uses of turmeric.  
(b) Write a brief note on aloe vera with special reference in cosmetics.

OR

- 5 (a) Write the descriptive note on spirulina.  
(b) Give the source, chemical constituents and uses of bitter orange peel.

- 6 (a) Define and classify alkaloids with examples.  
(b) Discuss the life cycle of Ergot.

OR

- 7 Give the source, chemical constituents, uses of tobacco and kurchi.

- 8 (a) Describe the cultivation and collection of Opium.  
(b) Write the principle and procedure involved in the isolation of caffeine.

OR

- 9 Explain in detail about pharmacognostic report of ephedra.

- 10 Explain shikimic acid pathway with reaction and give its significance.

OR

- 11 Describe supercritical fluid extraction with its advantages and disadvantages.

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