

FACULTY OF PHARMACY

B. Pharmacy 2/4 II-Semester (Non-CBCS)(Backlog) Examination, March 2021

Subject : Pharmacognosy – I

Time: 2 Hours

Max. Marks: 70

Note: Answer any four questions.

(4 x 17^{1/2} = 70 Marks)

- 1 (a) Describe the effect of exogenous and endogenous factors affect the cultivation of medicinal plants.
(b) List the plant hormones and discuss about Auxins.
- 2 (a) With suitable examples discuss the effect of season, time of collection and age of the plant on quality of medicinal plants cultivation.
(b) Give an informative note on good storage practices.
- 3 What are metabolic pathways? Explain in detail about Shikimic acid pathway.
- 4 (a) Describe the Isoprenoid biosynthesis and its importance.
(b) Write a note on precursor product sequence.
- 5 Write about:
(i) Drug deterioration by non-living factors (ii) Quantitative microscopic analysis
- 6 Write about:
(i) Lycopodium spore method (ii) Leaf constants (iii) Organoleptic evaluation
- 7 (a) What are fixed oil and fats? Write the chemical properties.
(b) Give biological source, chemistry and uses of:
(i) Castor oil (ii) Arjuna (iii) Agar-Agar
- 8 (a) Define and classify the tannins. Give the color reaction and pharmaceutical importance of tannins.
(d) Write the biological sources, chemistry and uses of
(i) Isabgol (ii) Linseed (iii) Black catechu
- 9 (a) What are plant fibers and give the pharmaceutical importance?
(b) What are proteins and classify? Give the source, pharmaceutical significance and method of preparation of any two proteins.
- 10 Write the biological source, chemistry method of preparation and pharmaceutical importance of
(i) Honey (ii) Cantherides (iii) Silk (iv) Cotton

FACULTY OF PHARMACY

B. Pharmacy 2/4 II-Sem. (Non-CBCS) (Backlog) Examination, July 2019

Subject: Pharmaceutical Organic Chemistry - II

Time: 3 Hours

Max. Marks: 70

Note: Answer all questions. All questions carry equal marks.

1. (a) Explain the mechanism of sulphonation and Friedel-crafts alkylation. 8
(b) Explain in detail $4n+2$ rule and aromaticity. 6
OR
2. (a) Add a note on Heats of hydrogenation. 6
(b) Write the structure and electrophilic reactions of Naphthalene. 8
3. (a) Explain in detail about Optical isomerism. 7
(b) Explain Sequence rules to determine R and S configuration. 7
OR
4. (a) Explain in detail about Cis-Trans isomerism. 8
(b) Define and explain Elements of symmetry. 6
5. (a) Discuss the method of preparation and electrophilic substitution reactions of Thiophene. 10
(b) Write the structure and specific uses of drug compounds containing Pyridine and Indole. 4
OR
6. (a) Explain the reactions of Pyrrole. 8
(b) Discuss the Oxidation reactions of Quinoline and Isoquinoline. 6
7. (a) Write any two method of preparations of Benzimidazole and Phenothiazine. 8
(b) Write the structure and specific uses of drug compounds containing
i) Phenam ii) Cepham iii) Triazole. 6
OR
8. (a) Write the method of preparation and reactions of Pyrazole. 8
(b) Write the structure and specific uses of drug compounds containing
i) Oxazine ii) Benzofuran iii) Tetrazole 6
9. (a) Describe the mechanism of the following reactions. 8
i) Fries migration ii) MPV reduction
(b) Write two applications of Lithium aluminum hydride and Lead tetra acetate. 6
OR
10. (a) Write two applications of Selenium oxide and Perchloric acid. 6
(b) Describe the mechanism of the following reactions. 8
i) Beckmann rearrangement ii) Birch reduction.

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Hyderabad

FACULTY OF Pharmacy

B. Pharmacy 2/4 II-Semester (Non-CBCS) (Backlog) Examination, August 2019

Subject : Environmental Studies

Time : 3 Hours

Max. Marks: 70

Note: Answer All questions, All Questions carry equal marks.

- 1 a) Write an essay on equitable use of all resources for sustainable development with examples. (7)
b) Discuss the structure and characteristic features of ecosystems. (7)
OR
- 2 Write detailed notes on the following.
(a) Conservation of natural resources. (7)
(b) Concepts and functions of ecosystems. (7)
- 3 a) Write a detailed essay on biodiversity, its types, functions and its distribution with classical examples. (9)
b) "Protection of Environment and sustainable development" – Explain. (5)
OR
- 4 Write detailed information on the following:
(a) Consumptive and productive use of biodiversity. (7)
(b) Hot spots and levels of biodiversity. (7)
- 5 a) Explain the following with details.
(i) Sanitation and public health. (7)
(ii) Climate change. (7)
OR
- 6 Write detailed notes on the following:
(a) Control measures for industrial wastes. (7)
(b) Recycle and Reuse. (7)
- 7 a) Write a detailed essay on various social issues in the human society and discuss the possible remedial measures. (10)
b) Write briefly on nuclear accidents and bio terrorism. (4)
OR
- 8 Explain the following with details.
(a) Water harvesting and water shed management. (7)
(b) Disaster management plan. (7)
- 9 Write short notes on the following: (3.5x4=14)
(a) Eco audit and Eco labeling.
(b) Environment protection Act.
(c) Environmental Impact Assessment.
(d) Municipal solid waste rules.
OR
- 10 Write short notes on the following:
(a) Environmental Management Plant.
(b) ISO 14000
(c) Wild life protection Act.
(d) Hazardous waste rules.

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Subject: Pharmacognosy - I

Time: 3 Hours

Max. Marks: 70

Note: Answer all questions. All questions carry equal marks.

1. (a) Discuss the role of plant hormones in cultivation of medicinal plants.
(b) Write a note on Mutation. 10+4
OR
2. (a) Discuss the various stages subsequent to cultivation of crude drugs.
(b) Describe the good storage practices. 9+5
OR
3. (a) Write a note on autoradiography.
(b) Describe in detail about Isoprenoid biosynthesis. 4+10
OR
4. (a) Describe the Shikmic acid pathway.
(b) Write a note on competitive feeding technique. 10+4
OR
5. (a) Define the terms adulteration and spurious drugs.
(b) Describe the methods of adulteration of crude drugs and their detection. 4+10
OR
6. Write about
i) Lycopodium spores technique ii) Leaf constants iii) Determination of foreign matter. 5+5+4
OR
7. (a) Give the biological source of
i) Indian psyllium ii) Indian Goose berry iii) Katha.
(b) Describe the following tests and their significance
i) Gold beaters skin test ii) Gambier fluroscin test.
(c) Write the physical and chemical properties of fixed oils. 6+4+4
OR
8. (a) Define and classify the tannins. Describe applications of tannins,
(b) Give the source and chemical structure of following Phytoconstituents
i) Catechin ii) Chaulmogric acid iii) Arjunolone. 5+9
OR
9. (a) What are plant fibers and give the sources, preparation and applications of cotton and Hemp fibers.
(b) Give an informative note on Honey and cochineal. 7+7
OR
10. (a) Give the source of shark liver oil and Cod liver oil. Write the chemistry, uses and chemical test.
(b) Give and informative note on Musk and cantharides. 7+7

FACULTY OF PHARMACY

B. Pharmacy 2/4 II-Semester (Non-CBCS)(Backlog) Examination, July 2019

Subject : Pharmaceuticals Engineering - II**Time : 3 Hours****Max. Marks: 70****Note: Answer all questions. All questions carry equal marks.**

- 1 (a) How the particle size and its distribution of pharmaceutical powders are determined by sieving method? (8)
- (b) Explain the construction, working and applications of Rotex screen. (6)
- OR**
- (c) Compare and contrast between air separator and cyclone separator with the help of diagrams. (8)
- (d) Write the construction and working principle of hammer mill. (6)
- 2 (a) Describe the factors influencing evaporation process. (7)
- (b) Explain the theory, construction and working of steam distillation unit. (7)
- OR**
- (c) Describe the energy and material balances in evaporation process. (6)
- (d) Write the theory involved in azeotropic distillation and mention the construction and working of distillation under reduced pressure. (8)
- 3 (a) Write the importance of gas absorption and different types of Towers along with their packing. (6)
- (b) Explain the construction, working and application of freeze dryer. (8)
- OR**
- (c) Explain the caking of crystal and its prevention. (6)
- (d) Explain the construction, working and application of Swenson Walker crystallizer. (8)
- 4 (a) Explain the construction, working and applications of triple roller mill. (7)
- (b) Write the principle, construction and working of Zig-zag mixer. (7)
- OR**
- (c) Explain the types of ion exchange process along with the applications in pharmacy. (7)
- (d) Write about Vortex formation and its prevention techniques with the help of diagrams. (7)
- 5 (a) What are the applications and drawbacks of automatic process control? (4)
- (b) Write the techniques for measurement of pressure and temperature. (10)
- OR**
- (c) What are forces involved during compaction and mention their measurement techniques? (10)
- (d) Write the importance of Huckle plots in tablet compression. (4)

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