

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Second Year Examination : May- 2021 (Re-schedule on July-2021)

Rasashastra & Bhaishajya Kalpana – II (Ayurvedic Pharmaceutics)

Date: 26-07-2021

Time: 02:30 P.M. to 05:30 P.M.

Monday

Marks: 100

- Instructions: 1. Every question is compulsory.
2. Every question bears the marks written on the right side.

SECTION-A

1. Define Avaleha Kalpana. Write about its method of Preparation. Paka Pariksha. Dose, Anupana and shelf-life period. 10
2. Answer any one out of two questions. 10
 - A What is Churna Kalpana? Explain its types, method of preparation, storage and packaging with suitable example.
 - B Define Vati kalpana with the example of Vyoshadi vati in detail.
3. Write short notes on any **Four** of the following : 20
 - A. Triphala Guggulu.
 - B. Panaka Kalapana.
 - C. Chandrodaya Varti.
 - D. Samshamani Vati.
 - E. Shankhapushpi Sharkara – method of preparation and use.
4. Answer any **Five** of the following : 10
 - A. Shelf-life of Sharkar Kalpana.
 - B. Ingredients of Vasa Avaleha.
 - C. Latin name and Family of Guggulu.
 - D. Guda paka Pariksha.
 - E. Shelf life of Guggula kalpa.
 - F. Use of Chyavanprasha Avaleha.

SECTION-B

5. Describe the Ashta samskara of Parada in detail. 10
6. Answer any one out of two questions. 10
 - A Define Kharaliya Rasayana. Describe the Role of Bhavana in Kharaliya Rasayana.
 - B What is shodhana ? Describe the concept of Shodhana in detail.
7. Write short notes on any **Four** of the following : 20
 - A. Explain the concept of Jarana.
 - B. Explain the process of Dhanya abhraka.
 - C. Shodhana and marana of Makshika.
 - D. Parpati Paka Pariksha.
 - E. Ingredients, method of preparation, dose and use Laghuvasantmalti rasa.
8. Answer any **Five** of the following : 10
 - A. Bhavana Dravya of Tribhuvan Kirti Rasa.
 - B. Give the definition of Satvapatana.
 - C. Use of Ananda bhairava Rasa.
 - D. Apunarbhava Pariksha.
 - E. Give the name of two formulation of Tuttha.
 - F. Dose and types of Shilajatu.

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Second Year Examination : May- 2021 (Re-schedule on July-2021)

Dravyaguna – I (Ayurvedic Pharmacology)

Date: 28-07-2021
Wednesday

Time: 09:30 A.M. to 12:30 P.M.
Marks: 100

- Instructions: 1. Every question is compulsory.
2. Every question bears the marks written on the right side.

SECTION-A

1. Describe the classification of Dravya on the basis of Chetan-Achetanabheda and Yonibheda. 10
2. Answer any one out of Two questions. 10
 - A. Mention different definitions of Rasa, its types, Panchabhautika composition and action on Dosha, Dhatu and Mala.
 - B. Describe Veerya in detail.
3. Write short notes on any **Four** of the following : 20
 - A. Classification of Guna.
 - B. Chhedana.
 - C. Jeevaniya.
 - D. Define Dravyaguna Vigyan and Dravya.
 - E. Define Prabhava with examples.
4. Answer any **Five** of the following : 10
 - A. Which Rasas are considered as Vidahi and Avidahi Rasas.
 - B. Aahara Dravya according to Acharya Sushruta.
 - C. Define Pichhila guna with examples.
 - D. Which is the Laghuttama Rasa? Write its Panchabhautika composition.
 - E. Enlist any two Virechanopaga Dravyas.
 - F. Write the Panchabhautika composition of Tikta and Kashaya Rasas.

SECTION-B

5. Define Panchakola and Kantakapanchamoola with its botanical name and Collective actions. 10
6. Answer any one out of Two questions. 10
 - A. What is Nagar? Describe this Dravya in detail.
 - B. Write the Botanical name, Family, Rasapanchaka, Part used and main action of Ankola and Darbha.
7. Write short notes on any **Four** of the following : 20
 - A. Chaturjata.
 - B. Chaturushana.
 - C. Laghupanchamoola.
 - D. Write the botanical name, Family, Veerya, Part used and main action of Haritaki.
 - E. Write short description on Nimba.
8. Answer any **Five** of the following : 10
 - A. Write the Part used and formulations of Eranda.
 - B. Write the dosage and formulations of Arjuna.
 - C. Write the adulterants of Vidanga.
 - D. Write the name of dravyas whose bark is used in medicine.
 - E. Write the botanical name of any two drugs which belong to the family Combretaceae.
 - F. Write any two drugs which are having katu rasa and ushna veerya.

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Second Year Examination : May- 2021 (Re-schedule on July-2021)

Pharmacognosy of Ayurvedic Drugs – I

Date: 29-07-2021
Thursday

Time: 02:30 P.M. to 05:30 P.M.
Marks: 100

- Instructions: 1. Every question is compulsory.
2. Every question bears the marks written on the right side.

SECTION-A

1. Describe Solanaceae family with detail describe of Datura plant. 10
2. Answer any one out of two questions. 10
 - A Give detail account on attachment of Anther to the filament. Discuss the types of aestivation.
 - B Discuss plant as a source of drug.
3. Write short notes on any **Four** of the following : 20
 - A. Brief account on tissue culture
 - B. Morphological differences between monocot and dicot.
 - C. Modification of stem.
 - D. Classification of leaf.
 - E. Discuss flower parts in detail.
4. Answer any **Five** of the following : 10
 - A. Define stem.
 - B. Family key of Malvaceae.
 - C. How to store medicinal plants?
 - D. Definition of leaf.
 - E. Give Latin name and family of Arka.
 - F. Latin name and family of Guduchi.

SECTION-B

5. What is Pharmacognosy? Discuss Ayurvedic system in detail. 10
6. Answer any one out of two questions. 10
 - A What are Carbohydrates? Give detail classification of carbohydrates with suitable examples.
 - B Preparation of Aloe.
7. Write short notes on any **Four** of the following : 20
 - A. Unani System of Medicine.
 - B. Taxonomical classification.
 - C. Parenchyma and aerenchyma.
 - D. Identification tests of carbohydrate.
 - E. Phloem tissue.
8. Answer any **Five** of the following : 10
 - A. Chemical constituents of Honey.
 - B. Define organized drugs.
 - C. What is swelling factor?
 - D. Uses of Brihat Gokshuru.
 - E. Latin name of Karaya gum.
 - F. What are Crystals?

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Second Year Examination : May- 2021 (Re-schedule on July-2021)

Physical Pharmacy and Pharmaceutics

Date: 02-08-2021
Monday

Time: 02:30 P.M. to 05:30 P.M.
Marks: 100

- Instructions: 1. Every question is compulsory.
2. Every question bears the marks written on the right side.

SECTION-A

1. Discuss the concepts & various factors influencing the Viscosity in details. 10
2. Answer any **One** out of two questions. 10
 - A Various methods to determine the Viscosity of Liquids.
 - B Explain first and second law of Thermodynamics and derive its equation.
3. Write short notes on any **Four** of the following : 20
 - A. Different types of Densities
 - B. Application of Chemical Kinetics
 - C. Difference between Newtonian and Non Newtonian flow
 - D. Difference between Dielectric constant and Dipole moment
 - E. Types of solutions
4. Answer any **Five** of the following : 10
 - A. Thixotropy
 - B. Order of reactions
 - C. Half life
 - D. Concentration unit
 - E. Osmotic pressure
 - F. Non Newtonian liquids

SECTION-B

5. Describe the various methods of determination of Surface Tension. 10
6. Answer any **One** out of two questions. 10
 - A Discuss the methods of purification of Colloidal Dispersions.
 - B Narrate methods for Particle size determination.
7. Write short notes on any **Four** of the following : 20
 - A. Difference between Flocculated & De flocculated suspensions
 - B. Explain the derived properties of powders
 - C. Angle of Repose
 - D. Types of Densities of Powders
 - E. Difference between Emulsion & Suspension
8. Answer any **Five** of the following : 10
 - A. Emulsifying agents
 - B. Surface active agents
 - C. HLB
 - D. Micrometrics
 - E. Dispersed phase
 - F. Emulsion

Pharmaceutical Analysis of Ayurvedic Drugs - I

Date: 03-08-2021
Tuesday

Time: 02:30 P.M. to 05:30 P.M.
Marks: 100

- Instructions: 1. Every question is compulsory.
2. Every question bears the marks written on the right side.

SECTION-A

1. Define Iodine value and explain its method of determination. 10
2. Answer any one out of two questions. 10
 - A. Enlist different types of physico-chemical parameters used for drug evaluation and explain any three methods.
- OR**
2. B. Give WHO-GMP guidelines for sampling of drug.
3. Write short notes on any **Four** of the following : 20
 - A. Fluorescence analysis.
 - B. Specific gravity.
 - C. Sampling methods for tablet and pills.
 - D. RMPK value.
 - E. Hardness and friability test for tablet.
4. Answer any **Five** of the following : 10
 - A. Give significance of Saponification value.
 - B. Define Acid value.
 - C. Define Acetyl value.
 - D. Give different instruments use for determination of Refractive index.
 - E. Define Acid insoluble ash.
 - F. Define Foreign matter.

SECTION-B

5. Define Reducing sugar and explain its estimation. 10
6. Answer any one out of two questions. 10
 - A. Give examples of calcium containing drugs and explain estimation of calcium.
- OR**
6. B. Explain different types of extractive value in Avaleha and Paka preparation.
7. Write short notes on any **Four** of the following : 20
 - A. Total solid content in Asava and Arishta preparation.
 - B. Why pH determination is important in Asava and Arishta preparation. Explain its determination.
 - C. Distillation method for estimation of alcohol content.
 - D. How determination of consistency is important.
 - E. Define moisture content and explain its determination in Avaleha.
8. Answer any **Five** of the following : 10
 - A. Give qualitative tests for Copper.
 - B. Give qualitative test for Iron.
 - C. Define Kshara with examples
 - D. Give difference between Avleha and Paka
 - E. Explain Killer Killani test for sugar.
 - F. Give five examples of Asava and Arishta preparation

Pharmaceutical Biochemistry

Date: 31-07-2021
Saturday

Time: 09:30 A.M. to 12:30 P.M.
Marks: 100

- Instructions: 1. Every question is compulsory.
2. Every question bears the marks written on the right side.

SECTION-A

1. Define enzymes and write about various factors that affect enzyme activity. 10
2. Answer any one out of two questions. 10
 - A. Define and classify amino acids.
 - B. Define and classify lipids.
3. Write short notes on any **Four** of the following : 20
 - A. Epimers and mutarotation
 - B. Cell membrane
 - C. Differential centrifugation
 - D. Protein folding
 - E. Homopolysaccharides
4. Answer any **Five** of the following : 10
 - A. What are exons and introns?
 - B. Why mitochondria is of maternal origin?
 - C. What is suicide inhibition? Give examples.
 - D. Define Beer's and Lambert's law.
 - E. What is primary active transport? Give examples.
 - F. Define carbohydrates. Give examples.

SECTION-B

5. Write a note on diabetes mellitus. 10
6. Answer any one out of two questions. 10
 - A Write in detail the process of pentose phosphate pathway.
 - OR**
 - B Write in detail the process of TCA cycle.
7. Write short notes on any **Four** of the following : 20
 - A. Vitamin B3
 - B. Magnesium and phosphorus as micro nutrients
 - C. Urea cycle
 - D. Marasmus
 - E. Vitamin C
8. Answer any **Five** of the following : 10
 - A. What are the complications observed in obesity?
 - B. Which vitamin is known as sunshine vitamin and why?
 - C. What is night blindness?
 - D. What is the importance of Cori cycle?
 - E. How many ATP's are generated/ utilized from one cycle of
 - a. Glycolysis
 - b. Gluconeogenesis
 - F. Define and give examples of free radicals.

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Second Year Examination : May- 2021 (Re-schedule on July-2021)

Pharmaceutical Microbiology

Date: 04-08-2021
Wednesday

Time: 02:30 P.M. to 05:30 P.M.
Marks: 100

- Instructions: 1. Every question is compulsory.
2. Every question bears the marks written on the right side.

SECTION-A

1. Briefly describe contributions made by scientist in various fields of microbiology. 10
2. Answer any one out of two questions. 10
 - A. Give applications of PCR.
 - B. Differentiate prokaryotes and eukaryotes.
3. Write short notes on any four the following : 20
 - A. What is fluorescence microscopy? Give its application.
 - B. Write a note on various arrangements of bacterial cells.
 - C. Briefly describe the process of transduction.
 - D. Write a note on batch fermentation.
 - E. What are bacteriological media? Give its various types.
4. Answer any five of the following : 10
 - A. How would you differentiate RNA and DNA?
 - B. What are different types of flagella?.
 - C. What is principle of catalase test?
 - D. Give example of two spore former and two non-spore former bacteria.
 - E. Write a note on artificially induced competence.
 - F. What is micro and macro capsule? Give functions of capsule in a bacterial cell.

SECTION-B

5. What is antibiotics? How would you test its susceptibility against a microb? 10
6. Answer any one out of two questions. 10
 - A. What is sterilization? Briefly describe sterilization by various chemical agents.
 - B. Write a note on complement fixation
7. Write short notes on any four of the following : 20
 - A. What are microbiological guideline for herbal drugs?
 - B. How would you purify water? Discuss its principle.
 - C. Write a note on sterility testing.
 - D. What is antibiotic? How microbes develop resistance against a drug?
 - E. Briefly describe membrane filtration technique.
8. Answer any five of the following : 10
 - A. What is full form of DOD and CFT?
 - B. Write full form of RIA and ELISA?
 - C. Enlist type of cells of immune system
 - D. What is disinfection? Give example of any two disinfectants.
 - E. What is agglutination? Give example of agglutination reaction.
 - F. What is phagocytosis?
