

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Third Year Examination : August-2022

Rasashastra & Bhaishajya Kalpana – III (Ayurvedic Pharmaceutics)

Date: 25-08-2022
Thursday

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. Write about Kshirbala taila in detail. 10
2. Answer any one out of **Two** questions. 10
 - A Describe Mishreya arka.
 - B Explain preparation method, dose, anupan and uses of Kshara Kalpana.
3. Write short notes on any **Four** of the following : 20
 - A. Arka Lavaa.
 - B. Jatyadi Ghrita.
 - C. Sneha siddhi lakshan.
 - D. Masi Kalpana.
 - E. Arka Prashasti Lakshan.
4. Answer any **Five** of the following : 10
 - A. Give two examples of sneha kalpana used for Nasya.
 - B. Shelf life of Arka Kalpana.
 - C. What is Avartan ?
 - D. Give an example of Avartan is Sneha Kalpana.
 - E. Define Peya.
 - F. Give two examples of Kshara Kalpana.

SECTION-B

5. Describe Rasasindura in detail. 10
6. Answer any one out of **Two** questions. 10
 - A Enlist Uparasa with their english names and describe Hartala
 - B Describe Gandhak druti.
7. Write short notes on any **Four** of the following : 20
 - A. Antidote of any five dravyas of Rasashastra.
 - B. Kampillaka.
 - C. Schedule E (i).
 - D. Kupillu
 - E. Svitvari Rasa.
8. Answer any **Five** of the following : 10
 - A. Effect of hot and cold water on virechan caused by Jaypal.
 - B. Two formulations of each of Vatsnabha and Bhallataka.
 - C. What is Kankustha ?
 - D. 'Shulvari' is a synonym of which dravya ?
 - E. Which is the Agrahya Bhallataka ?
 - F. Name four formulations of Pathya Kalpana.

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Third Year Examination : August-2022

Dravyaguna – II (Ayurvedic Pharmacology)

Date: 26-08-2022
Friday

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

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

SECTION-A

1. Discuss *Ghrita Varga* in detail. 10
2. Answer any **one** among following: 10
 - A. Describe *Raj Nighantu* with its classification and specialities.
 - B. Explain concept of *samanapratyabdhha* and *vichitrapratyabdhha*.
3. Write a short note on any **four** of the following: 20
 - A. Discuss basis of nomenclature of *Dravyas*.
 - B. *Shaka varga*.
 - C. Differentiate *Mutrasangrahaniya* and *Mutravirechaniya*.
 - D. Explain importance of *Phala Varga* with suitable examples.
 - E. Discuss *Bhavapraksha Nighantu*.
4. Answer any **five** of the following: 10
 - A. Explain *Swasahara karma*.
 - B. Write any two examples of *Sandhaniya dravyas*.
 - C. Define *Darana* and *Prapidana*.
 - D. Write properties of *Ikshu*.
 - E. Enumerates types of *Takra*.
 - F. Define *Swedopnayana*.

SECTION-B

5. Discuss *Haridra* in detail. 10
6. Answer any **one** among following: 10
 - A. Write botanical name, family, any two synonyms, vernacular name and habit of *Shigru* and *Saptaparna*.
 - B. Write detail description of *Chandanadwayam*.
7. Write a short note on any **four** of the following: 20
 - A. *Madhuratraya*
 - B. *Ashtavarga*
 - C. *Panchapallava*
 - D. *Panchamahavisha* and *Saptaupavisha*.
 - E. *Lavana Panchaka*
8. Write botanical name, family, part used and single main action for any **five** of the following: 10
 - A. *Dronapushpi*
 - B. *Parnabeeja*
 - C. *Mudgaparni*
 - D. *Kasamarda*
 - E. *Jambir*
 - F. *Kapittha*

Pharmacognosy of Ayurvedic Drugs – II

Date: 29-08-2022
Monday

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

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

SECTION-A

1. Enumerate Ayurvedic Pharmacopoeia of India , British Pharmacopoeia, Indian Pharmacopoeia & the criteria for standardization of drug in detail. 10
2. Answer any **One** out of two questions. 10
 - A. Name substitute drugs of Astavarga commonly available in Market? Discuss any one in detail.
 - B. What is glycoside ? discuss in detail and write a note on drug containing saponin glycoside?
3. Write a short note on any **Four** of the following : 20
 - A. Classify the glycoside as per their linkage.
 - B. Discuss in detail on any two marine drugs used as anticancer.
 - C. Explain enzymatic hydrolysis is recommended in case of cynogenetic glycoside.
 - D. Give process of hydrolysis of amygdalin.
 - E. Write a short note on European Pharmacopoeia.
4. Answer any **Five** of the following : (two to three sentences) 10
 - A. What is galactoside?
 - B. Importance of cardiac glycoside.
 - C. What is O-glycoside?
 - D. Importance of cynogenetic glycoside.
 - E. Name an enzyme present in digitalis.
 - F. What do you mean by substitute?

SECTION-B

5. Name the fruit drugs containing tannin. Give their botanical source, family, chemical constituents and therapeutic uses. 10
6. Answer any **One** out of two questions. 10
 - A. Collection of Ahiphen latex and its medicinal importance and discuss endogenous factors affecting the quality of crude drugs.
 - B. Define bark. Name bark drug containing alkaloids. Describe the histological characters of one bark drug which you have studied.
7. Write a short note on any **Four** of the following : 20
 - A. Occurrence and distribution of alkaloids in plant.
 - B. Why shape of kuataja is recurved?
 - C. Give botanical source family and chemical constituent of Shigru.
 - D. Describe the preparation of Khadhirsar.
 - E. Extraction of fixed oil.
8. Answer any **Five** of the following : (two to three sentences) 10
 - A. Biological source, family and uses of Sarpagandha.
 - B. Evaluation of fixed oil.
 - C. What is hydrolysable tannin?
 - D. Biological source, family and uses of Arjun.
 - E. Name the fruit drugs containing tannins.
 - F. Biological source, family and uses of Marich.

Pharmacology & Toxicology of Ayurvedic Drugs -I

Date: 30-08-2022
Tuesday

Time: 09:30 A.M. to 11:30 P.M.
Marks: 100

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

SECTION-A

1. What is drug? Enumerate sources and natures of drugs in details. 10
2. Answer any **One** out of two questions. 10
 - A. Describe various factors affecting absorption and bioavailability of a drug.
 - B. Discuss the advantages and disadvantages of drug administration through parenteral route.
3. Write a short note on any **Four** of the following : 20
 - A. Teratogenicity
 - B. Principles of mechanism of drug action
 - C. Phase – II reactions of drug metabolism
 - D. Receptors which regulate gene expression
 - E. How age and body weight modify drug effect?
4. Answer any **Five** of the following : (two to three sentences) 10
 - A. Define : pharmacokinetic and pharmacodynamic
 - B. Give name of the drugs metabolised by oxidation
 - C. First order kinetics
 - D. Type – I allergic reaction
 - E. Define – chemotherapy
 - F. Placental transfer

SECTION-B

5. Discuss cholinergic receptors. Classify anti- cholinesterase with its mechanism of action. 10
6. Answer any **One** out of two questions. 10
 - A. Classify sedatives and hypnotics drugs with their mechanism actions.
 - B. Classify drugs which reduce gastric acid secretion. Write their mechanism action.
7. Write a short note on any **Four** of the following : 20
 - A. Antidepressant drugs
 - B. Alpha blockers
 - C. Antidiarrhoeal drugs
 - D. Differences between parasympathetic and sympathetic nervous system
 - E. Types of seizures
8. Answer any **Five** of the following : (two to three sentences) 10
 - A. Ayurvedic drugs used in the treatment of vomiting
 - B. Give names of antipsychotic drugs
 - C. Name of appetizers
 - D. Ayurvedic drugs used as carminatives
 - E. Write mechanism action of sodium valproate
 - F. Write the name of adrenergic drugs

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Third Year Examination : August-2022

Pharmaceutical Technology of Ayurvedic Drugs -I

Date: 01-09-2022
Thursday

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 and classified liquid dosage forms. Enumerate different types of additives required for the liquid dosage forms. 10
2. Answer any one out of two questions. 10
 - A. Define dosage forms. Discuss in detail different types of dosage forms in ayurveda?
 - B. Discuss basic requirements for ophthalmic product? & their evaluation parameters?
3. Write a short note on any **Four** of the following : 20
 - A. Manufacturing Additives
 - B. Factors affecting stability of suspension
 - C. Types of emulsion
 - D. Difference between lotion and liniments
 - E. Identification tests for emulsion
4. Answer any **Five** of the following : (two to three sentences) 10
 - A. Biphasic dosage form
 - B. elixirs
 - C. Ophthalmic preparations
 - D. Diluents
 - E. Effervescence granules
 - F. Define liniments

SECTION-B

5. What are aerosols? Discuss their components & different types of aerosols? 10
6. Answer any one out of two questions. 10
 - A. Define suppositories. Explain method of preparation and evaluation parameters in detail.
 - B. Define ointment? Enlist different types of ointment bases in details.
7. Write a short note on any **Four** of the following : 20
 - A. Ideal requirements for suppositories.
 - B. Describe the importance of propellant in aerosols.
 - C. Semisolid dosage form
 - D. Difference between cold cream and vanishing cream
 - E. Difference between paste & ointment
8. Answer any **Five** of the following : (two to three sentences) 10
 - A. Application of aerosols
 - B. Vanishing cream
 - C. Passaries
 - D. Polymorphism of cocoa butter
 - E. Propellant
 - F. Suppository

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Third Year Examination : August-2022

Pharmaceutical Analysis of Ayurvedic Drugs - II

Date: 02-09-2022
Friday

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. Explain the difference between T.L.C. and H.P.T.L.C. Describe H.P.T.L.C. in detail. 10
2. What is adsorption chromatography ? Explain column chromatography in detail. 10

OR

What is chromatography ? Explain general requirements to perform thin layer chromatography.

3. Write short notes on any **Four** of the following : 20
- A. Explain the working of instrument in G.C. with diagram.
B. Applications of Ion-Exchange chromatography.
C. Describe the types of H.P.L.C. based on modes of chromatography.
D. Application of T.L.C. in detail.
E. Different types of paper chromatography.
4. Answer any **Five** of the following :(two to three sentences) 10
- A. Derivatization.
B. Define – chromatography.
C. Enumerate natural resins used in Ion-Exchange chromatography.
D. Name any four specific spray reagents.
E. Name the detectors used in Gas chromatography.
F. Retention time.

SECTION-B

5. What is fluorescence ? Explain different types of phosphorimeter in detail. 10
6. What is E.M.R. ? Explain conditions to get I.R. spectra. Describe its instrumentation. 10

OR

Explain the principles and instrumentation of nephelometry and turbidimetry.

7. Write short notes on any **Four** of the following : 20
- A. Instrumentation of U.V. spectroscopy.
B. What is pH ? Who invented pH ? Describe the entire range of pH scale.
C. Explain the theory of refraction and refractive index.
D. Double beam spectrofluorimeter.
E. Applications of polarography.
8. Answer any **Five** of the following :(two to three sentences) 10
- A. Name different refractometers.
B. Wave length.
C. Blue shift.
D. Bathochromic shift.
E. P.M.T.
F. Define – Phosphorescence.

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Third Year Examination : August-2022

Pharmaceutical Engineering

Date: 03-09-2022
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. Discuss objects & significance of size reduction in pharmacy. Describe mechanisms of size reduction with examples and enumerate applications of size reduction in Pharmaceutical Industry 10
2. Answer any one out of two questions. 10
 - A. Explain in detail methods of size separation
 - B. Explain principle and mechanism of Powder mixing.
3. Write a short note on any **Four** of the following : 20
 - A. Write advantages and disadvantages ball mill
 - B. Draw the diagram of any emulsifier and explain in brief.
 - C. Explain theory of extraction.
 - D. Short note on Percolation.
 - E. Standards for sieving.
4. Answer any **Five** of the following : (two to three sentences) 10
 - A. Define: - Leaching.
 - B. Explain application of any one Mill.
 - C. Define: - Infusion.
 - D. Define: - Size reduction.
 - E. Advantages of cyclone separator.
 - F. What is menstruums?

SECTION-B

5. Write advantages, disadvantages, structure and function of vacuum dryer. 10
6. Answer any one out of two questions. 10
 - A. Explain theory of crystallization.
 - B. Explain molecular distillation.
7. Write a short note on any **Four** of the following : 20
 - A. Freeze drying.
 - B. Factors affecting selection of drying equipments.
 - C. Differentiate between drum dryer and tunnel dryer.
 - D. Explain the need of distillation and condensation in Pharma industry.
 - E. Short note on F.B.D.
8. Answer any **Five** of the following : (two to three sentences) 10
 - A. What is Crystallization?
 - B. Write advantages of any dryer.
 - C. Limitations of Mier's Super saturation theory.
 - D. Disadvantages of tank crystallizer.
 - E. Define: - Crystals.
 - F. Define: - Magma.
