

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Third Year Examination : December - 2018

Dravyaguna – II (Ayurvedic Pharmacology)

Date: 24-12-2018

Time: 09:30 A.M. to 12:30 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. Describe the basis of namanclature and its importance in Nighantu. 10
2. Answer any one out of two questions. 10
 - A. Describe the classification method and speciality of Raja Nighantu.
 - B. Define Samana and Vichitrapratyarabdha and describe its therapeutic importance.
3. Write a short note on any **Four** of the following : 20
 - A. Abhishyandi.
 - B. Kaidev Nighantu.
 - C. Jala Varga.
 - D. Dudhi Varga.
 - E. Dhanya Varga.
4. Answer any **Five** of the following : 10
 - A. Enlist any two Anuvasanopaga Dravya.
 - B. Enlist any two Truptighna Dravyas.
 - C. Define Angamarda Prashamana.
 - D. Define Artava Janana.
 - E. Enlist variety of Takra.
 - F. Define Stanyajanana.

SECTION-B

5. Write the Botanical name, habit, part used, Rasapanchaka and formoolation of Jeerakadwaya. 10
6. Answer any one out of two questions. 10
 - A. Define Mishraka Varga, describe in detail Panchatikta with its collective action on D D M.
 - B. Describe in detail Patol.
7. Write a short note on any **Four** of the following : 20
 - A. Astavarga.
 - B. Lavanapanchaka.
 - C. Mahasneha.
 - D. Panchavalkala.
 - E. Trisharkara.
8. Write Botanical name, part used, formoolation and main action of the following (any **Five**): 10
 - A. Vdumbara.
 - B. Methika.Saptaparna.
 - C. Kanchanara.Khadira.
 - D. Jambu.
 - E. Kustha.
 - F. Ativisha.

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Third Year Examination : December - 2018

Pharmaceutical Technology of Ayurvedic Drugs -I

Date: 26-12-2018
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. Classify the liquid dosage forms. What are the additives used in suspension? 10
Describe role of suspending agent in suspension formulation.
2. Answer any **one** out of two questions. 10
 - A. Discuss ideal requirements of ophthalmic products. What care should be taken during manufacturing of ophthalmic products?
 - B. Explain powder dosage forms with its advantages. Write a detail note on effervescent granules.
3. Write a short note on any **Four** of the following : 20
 - A. Differentiate syrup and elixirs.
 - B. What are identification tests for emulsion?
 - C. How will you prepare collodion?
 - D. Difference between lotion and liniment.
 - E. What are the advantages of liquid dosage forms?
4. Answer any **Five** of the following : (two to three sentences) 10
 - A. Define HLB value
 - B. Gargles
 - C. What are evaluation test for emulsion?
 - D. Diluents
 - E. Linctuses
 - F. Emulsifying agents

SECTION-B

5. Define suppositories. Explain ideal characteristics and advantages of suppositories. 10
6. Answer any **one** out of two questions. 10
 - A. Define semi-solid product. Explain different types of ointment base in detail.
 - B. What are aerosols? Classify them. Explain types of aerosols containers.
7. Write a short note on any **Four** of the following : 20
 - A. Polymorphism in cocoa butter.
 - B. Comparison of liquefied gases and compressed gases as propellants.
 - C. Enlist methods of manufacturing of suppositories. Describe any one in detail.
 - D. Difference between gel and jellies.
 - E. Evaluation parameters of aerosols.
8. Answer any **Five** of the following : (two to three sentences) 10
 - A. Limitation of suppositories.
 - B. Application of aerosols.
 - C. Cataplasms and its uses.
 - D. Pessaries
 - E. Narrate methods of manufacturing of ointments.
 - F. What are electuaries?

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Third Year Examination : December - 2018

Pharmacology & Toxicology of Ayurvedic Drugs -I

Date: 27-12-2018
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. What is Pharmacokinetics ? Describe briefly about excretion of drugs. 10
2. What are different sources of drugs? Write in detail about drugs available from plants. 10

OR

Enumerate factors which can modify drug effects. Write briefly about age factor.

3. Write short notes on any **Four** of the following : 20
 - A. Bio availability.
 - B. Oral route of drug administration.
 - C. Drug dependence.
 - D. Tachyphylaxis.
 - E. Plasma protein binding of drugs.
4. Answer any **Five** of the following :(two to three sentences) 10
 - A. Define Pharmacology.
 - B. What is Pharmacovigilance ?
 - C. Define plasma half life.
 - D. Pharmacodynamics.
 - E. Active transport of drug.
 - F. Agonist.

SECTION-B

5. Classify briefly about cholinergic receptors. Name drugs which act on them. 10
6. Classify alpha blockers. Write effects of alpha blocker on various body system. 10

OR

Name anticholinesteras drugs. Write there mechanism of action.

7. Write short notes on any **Four** of the following : 20
 - A. Prokinetic drugs.
 - B. Ayurvedic drugs as laxatives.
 - C. Beta-blockers.
 - D. Levo dopa.
 - E. Carminatives.
8. Answer any **Five** of the following :(two to three sentences) 10
 - A. What is epilepsy ?
 - B. Write name of two anti cholinergic drugs.
 - C. Name two H₂-blockers.
 - D. Write name of two sedative drugs.
 - E. Name receptors on which adrenaline acts.
 - F. Name two ayurvedic drugs used for anxiety.

Pharmacognosy of Ayurvedic Drugs – II

Date: 28-12-2018
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. What is glycosides ? Discuss in detail. Write a note on drug containing saponin glycosides. 10
2. Define substituent and adulterants with suitable examples and discuss the method followed to confirm its authenticity. 10

OR

Give a detail account on Marine as a source of drug.

3. Write short notes on any **Four** of the following : 20
 - A. What is anthracene glycoside ? Discuss in detail.
 - B. History of digitalis.
 - C. Explain coumarin glycosides are used in leukoderma.
 - D. What are the importance of Pharmacopeia ?
 - E. Bitter value.
4. Answer any **Five** of the following :(two to three sentences) 10
 - A. Define flavonoid glycoside.
 - B. What is N-glycoside ?
 - C. Give two examples of bitter glycosides with botanical source.
 - D. What are glycone and aglycone ?
 - E. Importance of cardiac glycoside.
 - F. What is monograph ?

SECTION-B

5. What are Alkaloids ? Discuss its solubility, preservation and test to detect them. 10
6. What are tannins ? Give classification in detail and mention various chemical tests to detect them. 10

OR

Explain lipid in detail. Give its various physicochemical parameters.

7. Write short notes on any **Four** of the following : 20
 - A. Name two pattern products of Arjuna and discuss its role in them.
 - B. What is deodorization and demargination ?
 - C. Discuss different fracture of bark.
 - D. Give an account on solanaceous alkaloids.
 - E. Write detail note on Ashwagandha.
8. Answer any **Five** of the following :(two to three sentences) 10
 - A. Role of Trikatu in Ayurveda.
 - B. Give name of the tissues found in seed.
 - C. Write two examples of steroidal alkaloids with its uses.
 - D. Define wax with example.
 - E. Give Sanskrit name and chemical constituents of Adhatoda vasica Linn.
 - F. Mention the chemical test to detect strychnine.

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Third Year Examination : December - 2018

Pharmaceutical Engineering

Date: 29-12-2018
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. Explain construction, working, and disadvantages of ball mill. 10
2. Answer any one out of two questions. 10
 - A. Define extraction and explain industrial methods of extraction.
 - B. Enumerate methods of size separation and explain any method in detail.
3. Write a short note on any **Four** of the following : 20
 - A. Planetary mixer.
 - B. Types of mixing.
 - C. Ultrasonic emulsifier.
 - D. Cyclone separator.
 - E. Triple roller mill.
4. Answer any **Five** of the following : (two to three sentences) 10
 - A. Uses of cutter mill.
 - B. Application of hammer mill.
 - C. Define: - Decoction.
 - D. Ideal solvent.
 - E. Application of cyclone separator.
 - F. Define: - Maceration.

SECTION-B

5. Explain principle and working of a spray dryer. Give schematic diagram. 10
6. Answer any one out of two questions. 10
 - A. Describe theory, advantages and disadvantages of azeotropic distillation.
 - B. Discuss the Mier's theory of super saturation.
7. Write a short note on any **Four** of the following : 20
 - A. Distillation under reduced pressure.
 - B. Evaporating pan.
 - C. Swenson walker crystallizer.
 - D. Describe radiant heat dryer.
 - E. Describe vacuum crystallizer in brief.
8. Answer any **Five** of the following : (two to three sentences) 10
 - A. Define: - Evaporation.
 - B. Write principal of any evaporator.
 - C. Give any two disadvantages of Steam distillation.
 - D. Write advantages of any dryer.
 - E. Principle of freeze drying.
 - F. Construction of rotary evaporator.

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Third Year Examination : December - 2018

Rasashastra & Bhaishajya Kalpana – III (Ayurvedic Pharmaceutics)

Date: 31-12-2018
Monday

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 importance of Pathya Ahara Kalpana. 10
2. Answer any one out of two questions. 10
 - A. Write Kshara Gunas and its importance.
 - B. Give importance of of Lavana Kalpana.
3. Write a short note on any **Four** of the following : 20
 - A. Narikela Lavana.
 - B. Sneha Kalpana.
 - C. Arka Kalpana.
 - D. Kshara Kalpana.
 - E. Triphala Masi.
4. Answer any **Five** of the following : 10
 - A. Kshara Panchaka.
 - B. Lavana Panchaka.
 - C. Types of Yusha.
 - D. Dravya used for Ghrita Murchchhana.
 - E. Types of Takra.
 - F. Two examples of Yamka Sneha.

SECTION-B

5. Write brief note on Parada Murchchhana. 10
6. Answer any one out of two questions. 10
 - A. Give detailed description of Rasa Sindura.
 - B. Write short note on Visha Varga.
7. Write a short note on any **Four** of the following : 20
 - A. Rasa Karpura preparation.
 - B. Shodhana of Uparasa.
 - C. Controversies of Navasagara.
 - D. Gandhaka Shodhana.
 - E. Kapardika Marana.
8. Answer any **Five** of the following : 10
 - A. Dose and antidote of Gandhaka.
 - B. Dose and indications of Rasapushpa.
 - C. Antidote and formulations of Gunja.
 - D. Shodhana and dose of Kampillaka.
 - E. Toxicity and antidote of Visha.
 - F. Synonyms and types of Haratala.

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Third Year Examination : December - 2018

Pharmaceutical Analysis of Ayurvedic Drugs - II

Date: 01-01-2019
Tuesday

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. What is HPLC? Explain its principal and instrumentation with diagram. 10
2. Answer any one out of two questions. 10
 - A. Discuss detectors in gas chromatography with diagram.
 - B. Discuss instrumental up-gradation available in thin layer chromatography.
3. Write a short note on any **Four** of the following : 20
 - A. Note on temperature programming in Gas chromatography.
 - B. Enumerate different solvents used in T.L.C. and what are the criteria for selection of the mobile phase explain in brief.
 - C. Applications of T.L.C. as applicable to Ayurveda.
 - D. Applications of H.P.L.C. in detail.
 - E. Classification of resins in ion exchange chromatography
4. Answer any **Five** of the following : (two to three sentences) 10
 - A. What is isocratic elution?
 - B. Name the stationary phases used in TLC.
 - C. Name the spray reagents for detection of alkaloid and amino acids.
 - D. Enumerate types of papers used in paper chromatography.
 - E. What are the criteria for substance to be analyzed in GC?
 - F. What is reverse phase chromatography?

SECTION-B

5. Define spectroscopy. Explain the instrumentation of flame photometry with diagram in detail. 10
6. Answer any one out of two questions. 10
 - A. Write down the instrumentation of u.v. spectroscopy with diagram.
 - B. What is the difference between fluorescence and phosphorescence? Explain the different types of fluorimeters in brief.
7. Write a short note on any **Four** of the following : 20
 - A. Vibrations in I.R. spectroscopy in detail.
 - B. Abbe's refractometer in brief with diagram.
 - C. Note on differential scanning calorimeter(DSC).
 - D. Write a short note on different monochromators .
 - E. Applications of I.R.spectroscopy in brief.
8. Answer any **Five** of the following : (two to three sentences) 10
 - A. What is wavelength? How it is expressed?
 - B. Nerns't glower.
 - C. Define:- Refractive index.
 - D. Amplitude.
 - E. Conditions to get IR spectra.
 - F. Cell made up of which material in IR spectroscopy? Give examples.
