

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Third Year Examination : December-2019

Dravyaguna -- II (Ayurvedic Pharmacology)

Date: 16-12-2019
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 about the author, period and classification with speciality of *Madanapala Nighantu*. 10
2. Answer any one out of two questions. 10
 - A. Define *Shaka Varga* and describe in detail any five.
 - B. Write about the basis of nomenclature in *Ayurvedic* classics and describe the importance of synonyms.
3. Write a short note on any **Four** of the following : 20
 - A. *Dhanavantary Nighantu*.
 - B. *Mansa Varga*.
 - C. *Ikshu Varga*.
 - D. *Stanyajanan and Stanyashodhana*.
 - E. *Taila Varga*.
4. Answer any **Five** of the following : (two to three sentences) 10
 - A. *Mutrasamgrahaniya*.
 - B. *Ropana*.
 - C. *Asthapanopaga*.
 - D. *Vedanasthapana*.
 - E. *Artavajanana*.
 - F. *Trushnanigrahana*.

SECTION-B

5. Write about the consideration of *Mishraka Varga* according to different *Nighantukara* and describe in detail *Astavarga*. 10
6. Answer any one out of two questions. 10
 - A. Write botanical name, synonyms, habit, habitat, part used and formulations of *Sariva*.
 - B. Write ingredients of *Madhuratriphala* with their collective actions and indications.
7. Write a short note on any **Four** of the following : 20
 - A. *Ksharadwaya*.
 - B. *Madhuratraya*.
 - C. *Saptopavisha*.
 - D. *Trisharkara*.
 - E. *Panchavalkala*.
8. Answer any **Five** of the following : (two to three sentences) 10
 - A. *Kasamarda*.
 - B. *Rasona*.
 - C. *Patola*.
 - D. *Lavanga*.
 - E. *Latakasturi*.
 - F. *Kalamegha*.

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Third Year Examination : December-2019

Pharmaceutical Technology of Ayurvedic Drugs -I

Date: 17-12-2019
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. Define Additives. Classify them and describe lubricating agents and binding agents used in tablet. 10
2. Answer any **one** out of two questions. 10
 - A. What are powder dosage forms in Ayurveda ? Discuss processing and packaging of powder formulation.
 - B. Define and classify Biphasic dosage forms. Describe the process of emulsion of edible oil.
3. Write a short note on any **Four** of the following : 20
 - A. Evaluation methods of suspensions.
 - B. Requirements of ophthalmic products.
 - C. Short notes on effervescent granules.
 - D. Evaluation methods of emulsion.
 - E. Theory of suspension.
4. Answer any **Five** of the following : (two to three sentences) 10
 - A. Flocculating agents.
 - B. HLB.
 - C. Glidants.
 - D. Pyrogens.
 - E. Preservatives for ophthalmic products.
 - F. Throat paint.

SECTION-B

5. What are semisolid dosage forms ? Describe method of preparation of Ointment. Enlist Ointment bases. 10
6. Answer any **one** out of two questions. 10
 - A. What is Suppository ? Describe characteristics and method of preparation of Suppository.
 - B. Define Aerosols. Discuss the uses and packaging methods of Aerosols.
7. Write a short note on any **Four** of the following : 20
 - A. Evaluation methods of Suppositories.
 - B. Different compound of Aerosol containers.
 - C. Shaving cream in brief.
 - D. Evaluation methods of semi-solid dosage forms.
 - E. Suppository bases.
8. Answer any **Five** of the following : (two to three sentences) 10
 - A. Cold cream and Vanishing cream.
 - B. Electuaries.
 - C. Bougies.
 - D. Propellants.
 - E. After shave lotion.
 - F. Depilatories.

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Third Year Examination : December-2019

Pharmacology & Toxicology of Ayurvedic Drugs -I

Date: 18-12-2019
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. Define and classify receptors. Write a note on any one type of receptors. 10
2. Answer any **One** out of two questions: 10
 - A. Enlist various channels of drug elimination and discuss renal elimination of drugs in details.
 - B. Discuss the advantages and disadvantages of drug administration through oral route.
3. Write a short note on any **Four** of the following : 20
 - A. Sources of drugs
 - B. Blood brain barrier.
 - C. Oxidation and reduction reactions of drug metabolism
 - D. How particle size and ionization affect drug absorption and bioavailability?
 - E. Different types of allergic reactions
4. Answer any **Five** of the following : (two to three sentences) 10
 - A. Define: Drug (WHO)
 - B. Give the name of drugs metabolised by the acetylation
 - C. Drug tolerance
 - D. Intradermal route of drug administration
 - E. Pinocytosis
 - F. What is pharmacy?

SECTION-B

5. Describe cholinergic transmission and write classification of anti-cholinergic drugs with examples. 10
6. Answer any **One** out of two questions. 10
 - A. Discuss pathophysiology of Parkinsonism. Write mechanism of action of levodopa and selegiline.
 - B. Classify antiemetic drugs with their mechanism of action.
7. Write a short note on any **Four** of the following : 20
 - A. Adrenergic receptors.
 - B. Stages of sleep cycles.
 - C. Antipsychotic drugs.
 - D. Digestants.
 - E. Classification of antiulcer drugs.
8. Answer any **Five** of the following : (two to three sentences) 10
 - A. Ayurvedic drugs used in the treatment of insomnia
 - B. Give names of alpha blockers
 - C. Write mechanism action of phenytoin
 - D. Ayurvedic drugs used in the treatment of constipation.
 - E. What are generalized tonic clonic seizures?
 - F. Define: carminatives.

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Third Year Examination : December-2019

Pharmacognosy of Ayurvedic Drugs – II

Date: 19-12-2019
Thursday

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. Give a detail account on Monographs. 10
2. Answer any **One** out of two questions. 10
 - A. Discuss substitute in detail and enumerate at least two substitute drugs with suitable examples.
 - B. What is glycoside? Discuss in detail and write a note on drug containing bitter glycoside.
3. Write a short note on any **Four** of the following : 20
 - A. What is guignard reaction.
 - B. Give different tests to detect anthraquinone glycosides. Mention one in detail.
 - C. Write a short note on Indian Pharmacopoeia.
 - D. Write a note on Senna.
 - E. Write a note on Yastimadhu.
4. Answer any **Five** of the following : (two to three sentences) 10
 - A. What is S-glycoside?
 - B. Importance of isothiocynate glycoside.
 - C. What is C- glycoside?
 - D. What is buffadenolides?
 - E. What are the allied drugs of digitalis?
 - F. What do you mean by adulterants?

SECTION-B

5. What are lipids? Discuss in detail. Write a detail account on Nimba tail. 10
6. Answer any **One** out of two questions. 10
 - A. How fixed oil and waxes differ from each other ? discuss the evaluation of fixed oil.
 - B. Define seed. Name the alkaloids containing seed drugs which you have studied this year. Describe the histological characters of one seed drug.
7. Write a short note on any **Four** of the following : 20
 - A. Indole alkaloids.
 - B. Role of Kupilu in Ayurveda.
 - C. Discuss the therapeutic importance of Jyotismati in Ayurveda.
 - D. Give distinguish tests for pale and black Catechu.
 - E. Stomata of Vasaka and Datura.
8. Answer any **Five** of the following : (two to three sentences) 10
 - A. Biological source, family and uses of Karanj.
 - B. Chanical constituents and uses of Khadir.
 - C. Biological source, family and uses of Ashwagandha.
 - D. Define tannins.
 - E. Give uses of Triphala.
 - F. Biological source, family and uses of Erand.

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Third Year Examination : December-2019

Pharmaceutical Engineering

Date: 20-12-2019

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. Discuss ideal properties of solvent for extraction & difficulties associated with crude drugs. 10
2. Answer any **One** out of two questions. 10
 - A. Explain in detail Silverson emulsifier.
 - B. Explain Ball mill in brief.
3. Write a short note on any **Four** of the following : 20
 - A. Double cone mixer.
 - B. Types of mixing.
 - C. Sieves.
 - D. Maceration.
 - E. Cyclone Separator
4. Answer any **Five** of the following : (two to three sentences) 10
 - A. What is elutriation?
 - B. Principle of ball mill.
 - C. Application of hammer mill.
 - D. Ideal Solvent for extraction.
 - E. Define emulsifiers.
 - F. Percolation.

SECTION-B

5. Explain in detail Rotary evaporator. 10
6. Answer any **One** out of two questions. 10
 - A. Discuss mier's theory for super Saturation.
 - B. How drying plays an important role in Pharmacy.
7. Write a short note on any **Four** of the following : 20
 - A. Crystal growth.
 - B. Multiple effect evaporator.
 - C. Tunnel dryer.
 - D. Describe radiant heat dryer.
 - E. Principle of microwave.
8. Answer any **Five** of the following : (two to three sentences) 10
 - A. Define magma.
 - B. Application of vacuum crystallizer.
 - C. Define distillation & condensation.
 - D. Evaporating Pan.
 - E. Uses of spray dryer.
 - F. Application of freeze drying.

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Third Year Examination : December-2019

Rasashastra & Bhaishajya Kalpana – III (Ayurvedic Pharmaceutics)

Date: 21-12-2019
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. Describe Kshirbala taila in detail. 10
2. Answer any one out of two questions. 10
 - A. What is Lavan kalpana? Describe an example of it.
 - B. Write about Apamarga kshar.
3. Write a short note on any **Four** of the following : 20
 - A. Mishreya arka
 - B. Takra kalpana
 - C. Pratisaraniya kshar
 - D. Explain Yusha and Yavagu
 - E. Masi kalpana
4. Answer any **Five** of the following : (two to three sentences) 10
 - A. Dose and use of Kasisadi taila.
 - B. Why Murchana is done in Sneha kalpana?
 - C. Ingredients and dose of Arka lavan.
 - D. What is Krushara?
 - E. State shelf life of Arka kalpana.
 - F. Name two Sneha kalpana formulations useful for the eye.

SECTION-B

5. Describe Pottali kalpana. 10
6. Answer any one out of two questions. 10
 - A. Write about Rasasindura.
 - B. Explain Hartala in detail.
7. Write a short note on any **Four** of the following : 20
 - A. What is schedule E(1)? Enlist it.
 - B. Kasis
 - C. Jaypal
 - D. Gandhak
 - E. Hingula
8. Answer any **Five** of the following : (two to three sentences) 10
 - A. Formula of all Uparasa dravya.
 - B. Ingredients and dose of Rasamanikya.
 - C. Name Sadharan rasa dravya with their English name.
 - D. Grahya Gairika.
 - E. Two formulations of Gunja.
 - F. Dose and method of administration of Gandhak druti.

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Third Year Examination : December-2019

Pharmaceutical Analysis of Ayurvedic Drugs - II

Date: 23-12-2019
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. Discuss detectors used in H.P.L.C. in brief. 10
2. Answer any **One** out of two questions. 10
 - A. What is the difference between classical column chromatography and H.P.L.C.? Describe the various column preparation methods in detail.
 - B. Discuss instrumentation of Thin layer chromatography in detail.
3. Write a short note on any **Four** of the following : 20
 - A. Describe chromatogram development techniques in Paper Chromatography.
 - B. Enumerate types of gases used in G.C. with their selection criteria.
 - C. Explain types of chambers and chamber saturation in H.P.T.L.C.
 - D. Enumerate 10 Spray reagents used in T.L.C.
 - E. Applications of ion exchange chromatography in details.
4. Answer any **Five** of the following : (two to three sentences) 10
 - A. Define: Guard column
 - B. Define: Chromatograph.
 - C. What is S.C.O.T. column?
 - D. Ninydrin spray is used for?
 - E. NP-HPLC
 - F. Refractive index.

SECTION-B

5. What is Flourescence? Describe "rotating can" and "rotating disc" phosphoroscope in detail. 10
6. Answer any **One** out of two questions. 10
 - A. Give an account of Flame Emission spectroscopy.
 - B. Explain principles and instrumentations of Refractometry.
7. Write a short note on any **Four** of the following : 20
 - A. Applications of U.V.Spectroscopy.
 - B. Describe Conditions to get I.R.Spectra.
 - C. What is E.M.R.? Explain spectroscopy in brief.
 - D. Different types of vibrations in I.R.Spectroscopy.
 - E. Explain instrumentation of Nephelometer in brief.
8. Answer any **Five** of the following : (two to three sentences) 10
 - A. Bathochromic Shift.
 - B. Hypsochromic shift.
 - C. Source of U.V. radiation.
 - D. F.T.I.R. full form.
 - E. Name the Natural ion exchange resins.
 - F. Amplitude.
