

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

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

Dravyaguna – II (Ayurvedic Pharmacology)

Date: 20-05-2019
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. Define *Dhanya Varga* and describe in detail any five. 10
2. Answer any one out of two questions. 10
 - A. Write about the author, period and classification with speciality of *Bhavaprakasha Nighantu*.
 - B. Describe in detail *Takra Varga* with its properties, indications and contraindications.
3. Write a short note on any **Four** of the following : 20
 - A. *Madanapla Nighantu*.
 - B. *Aaharopayogi Varga*.
 - C. *Samanapratyabdhha*.
 - D. *Swedana and Swedopaga*.
 - E. Basis of synonyms in Ayurvedic classics.
4. Answer any **Five** of the following : (two to three sentences) 10
 - A. *Angamarda Prashamanam*.
 - B. *Vranashodhana*.
 - C. *Chhardinigrahana*.
 - D. *Ashmaribhedana*.
 - E. *Darana*.
 - F. *Swedopanayana*.

SECTION-B

5. Define *Mishraka Varga* and describe in detail *Mahasneha*. 10
6. Answer any one out of two questions. 10
 - A. Write botanical name, synonyms, habit, habitat, part used and formulations of *Karkatashringi*.
 - B. Write ingredients of *Panchapallava* with their collective actions and indications.
7. Write a short note on any **Four** of the following : 20
 - A. *Lavanapanchaka*.
 - B. *Panchatikta*.
 - C. *Panchavalkala*.
 - D. *Ksharapanchaka*.
 - E. *Panchamahavisha*.
8. Answer any **Five** of the following : (two to three sentences) 10
 - A. *Agastya*.
 - B. *Dhamargava*.
 - C. *Ishwari*.
 - D. *Madhuka*.
 - E. *Sarshapa*.
 - F. *Parisha*.

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

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

Pharmaceutical Technology of Ayurvedic Drugs -I

Date: 21-05-2019
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 emulsion with its classification, advantages & disadvantages. What are the tests for identification of emulsion? 10
2. Answer any **one** out of two questions. 10
 - A. Define additives. Explain the function of antioxidants & preservatives in a formulation with their ideal properties.
 - B. What is suspension? Differentiate flocculated & deflocculated suspensions. What are evaluation parameters & labelling instruction of suspension ?
3. Write a short note on any **Four** of the following : 20
 - A. HLB scale
 - B. Evaluation of ophthalmic dosage forms.
 - C. What are effervescent granules? What its mode of action?
 - D. Mixture containing indiffusible solids.
 - E. Theory of emulsification.
4. Answer any **Five** of the following : (two to three sentences) 10
 - A. Define liniment.
 - B. Solid dosage forms.
 - C. Difference between decoction and infusion.
 - D. Disintegrants
 - E. Draught and Gargles.
 - F. Container for nasal preparation.

SECTION-B

5. Define aerosols. Describe types of propellants and their importance. Describe manufacturing methods of aerosols. 10
6. Answer any **one** out of two questions. 10
 - A. What is polymorphism? Explain with example.
 - B. What are suppositories? Discuss their evaluation parameter and ideal characteristics.
7. Write a short note on any **Four** of the following : 20
 - A. List out component of aerosols preparation.
 - B. How will you evaluate semi solid preparation?
 - C. Difference between ointment and paste.
 - D. Displacement value.
 - E. Types of aerosols system.
8. Answer any **Five** of the following : (two to three sentences) 10
 - A. Bougies
 - B. Poultice and its uses.
 - C. Define cream.
 - D. Disadvantages of suppositories.
 - E. Limitation of aerosols.
 - F. Types of suppositories base.

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

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

Pharmacognosy of Ayurvedic Drugs – II

Date: 23-05-2019
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. Give a detail account on marine as a source of drug. 10
2. Answer any one out of two questions. 10
 - A. Discuss Indian and British pharmacopoeia in detail.
 - B. What is glycoside? Discuss in detail. Write a note on drug containing cyanogenetic glycoside?
3. Write a short note on any **Four** of the following : 20
 - A. United States Pharmacopoeia
 - B. Name two patent products of Yastimadhu & mention the medicinal usage of that product.
 - C. Discuss why scilla is always stored in well filled closed containers?
 - D. Write a note on bitter glycoside. What is bitter value?
 - E. Coumarin glycoside.
4. Answer any **Five** of the following : (two to three sentences) 10
 - A. Give chemical constituents and uses of Senna.
 - B. What is 'emil fischer' method?
 - C. Give chemical constituents and uses of Katuki.
 - D. Importance of anthracene glycoside?
 - E. Latin name, family and uses of Kalmegh.
 - F. What is pharmacopoeia?

SECTION-B

5. Define fixed oil, fats and waxes. Described the method for preparation of medicinal castor oil. Explain why its cake is not used as a cattle food like other seed cakes. 10
6. Answer any one out of two questions. 10
 - A. What are tannins? How they are classified?
 - B. Write a detail account on alkaloids and discuss any one leaf drug containing them.
7. Write a short note on any **Four** of the following : 20
 - A. Name a bark drug of family Combretaceae. Give its botanical source and uses
 - B. Trichomes of Ashwagandha and Kupilu.
 - C. Fixed oil and waxes.
 - D. Name the therapeutic importance of Jyotismati in Ayurved.
 - E. Name the alkaloids of Maricha, Mention their Importance in Ayurved.
8. Answer any **Five** of the following : (two to three sentences) 10
 - A. Latin name, family and uses of Karkatshringi.
 - B. What is cold expression?
 - C. Latin name, family and uses of Jyotismati.
 - D. What is condensed tannin?
 - E. Biological source and chemical constituents of Ahiphen.
 - F. Name any two species of Sida.

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

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

Pharmaceutical Engineering

Date: 24-05-2019
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. Describe mechanism of size reduction with examples and enumerate applications of size reduction in pharmacy. 10
2. Answer any one out of two questions. 10
 - A. Discuss ideal properties of solvents for drug extraction and difficulties associated with extraction of crude drugs.
 - B. Explain in detail fluid energy mill.
3. Write a short note on any **Four** of the following : 20
 - A. Types of mixtures.
 - B. Standards for powder.
 - C. Colloid mill.
 - D. Cyclone separator.
 - E. Ultrasonic emulsifier.
4. Answer any **Five** of the following : (two to three sentences) 10
 - A. Define:- Leaching.
 - B. What is elutriation?
 - C. Principle of silverson emulsifier.
 - D. Applications of planetary mixer.
 - E. Standards for sieves.
 - F. Principle of ball mill.

SECTION-B

5. Explain in detail azotropic distillation. 10
6. Answer any one out of two questions. 10
 - A.
 - B. Differentiate distillation and evaporation. Enlist various distillation methods and applications for each.
7. Write a short note on any **Four** of the following : 20
 - A. Spray drying.
 - B. Swenson walker crystallizer.
 - C. Note on Mier's theory.
 - D. Distillation under reduced pressure.
 - E. Advantages and disadvantages of freeze drying.
8. Answer any **Five** of the following : (two to three sentences) 10
 - A. Advantages of evaporating pan.
 - B. Advantages of F.B.D.
 - C. Principle of tunnel dryer.
 - D. Disadvantages of steam distillation.
 - E. Definition of crystals.
 - F. Define: - Drying.

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

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

Rasashastra & Bhaishajya Kalpana – III (Ayurvedic Pharmaceutics)

Date: 25-05-2019
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. Why is Lavan kalpana named so ? Describe an example of this kalpana. 10
2. What is Sneha murchana and avartan ? Describe Sneha Siddhi lakshan. 10

OR

State importance of Kshar kalpana and describe it in detail.

3. Write short notes on any **Four** of the following : 20
A. Mishreya arka.
B. Triphala Masi.
C. Yavagu and Yusha.
D. Takra.
E. Ancient method of preparation of Arka kalpana.
4. Answer any **Five** of the following :(two to three sentences) 10
A. Ingredients and use of Saptmusti Yusha.
B. Veshwar.
C. Ingredients, dose, anupan and use of Amrita ghrita.
D. Use of Apamarga kshara taila.
E. Name the modern apparatus used for Arka kalpana.
F. What is the difference between Kshar and Masi kalpana.

SECTION-B

5. Enlist the Visha and Upvisha dravyas. Describe any one of the Upvisha dravya. 10
6. What is Pottali ? Describe this kalpana in detail. 10

OR

Describe Kasis in detail.

7. Write short notes on any **Four** of the following : 20
A. Rasamanikya.
B. Bhallatak Shodhan.
C. Schedule E (1).
D. Rasasindura.
E. Gandhak.
8. Answer any **Five** of the following :(two to three sentences) 10
A. Effect of hot and cold water on virechan caused by Jaypal yoga.
B. Ingredients of Rasapushpa.
C. Types of Kupipakva rasayan with examples.
D. Chemical formula of Hartal and Navsar.
E. Specific test for Hartal bhasma.
F. Dose, anupan and use of Varatika bhasma.

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

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

Pharmaceutical Analysis of Ayurvedic Drugs - II

Date: 27-05-2019
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. Explain the principal of paper chromatography and describe the instrumentation of paper chromatography in detail 10
2. Answer any one out of two questions. 10
 - A. What is HPTLC? Why it is said so? Explain the instrumentation in detail.
 - B. Enumerate the types of GC. Explain its principal and give its instrumentation in brief with diagram.
3. Write a short note on any **Four** of the following : 20
 - A. Elution techniques as in HPLC.
 - B. Detecting techniques as mentioned in TLC.
 - C. Short note on detectors used in HPLC.
 - D. Applications of Gas chromatography in brief.
 - E. What is the role of chamber saturation? Enumerate solvents used in chromatography as per their polarity and give criteria of selection of solvents.
4. Answer any **Five** of the following : (two to three sentences) 10
 - A. Retention time.
 - B. Ninhydrin is used for?
 - C. Name the natural resins used in ion exchange.
 - D. What do you mean by SCOT? How it is prepared?
 - E. Ideal characteristics of detectors used in GC.
 - F. Why derivatization is done?

SECTION-B

5. Explain the conditions to get I.R.spectra and describes types of vibrations and give its applications in pharmaceutical industry. 10
6. Answer any one out of two questions. 10
 - A. Explain the theory and principle of FES and give its instrumentation in brief.
 - B. What is beer's law? Give the instrumentation of visible spectroscopy in detail.
7. Write a short note on any **Four** of the following : 20
 - A. Applications of Fluorimetry and Phosphorimetry
 - B. What is critical angle " θ "? Write a short note on refractometry.
 - C. What are the ways in which the absorbed energy by molecule can be lost? Explain in brief.
 - D. Short note on photo multiplier tube (PMT) with diagram.
 - E. What is E.M.R.? Name the different types of E.M.R. and explain the terms like wavelength, frequency and amplitude with suitable diagram.
8. Answer any **Five** of the following : (two to three sentences) 10
 - A. Which types of monochromators used in I.R.spectroscopy.
 - B. Red shift.
 - C. Phosphorescence.
 - D. Enumerate elements detected by Flame photometry.
 - E. What is dipole moment?
 - F. What is triplet state?
