# GUJARAT AYURVED UNIVERSITY

## JAMNAGAR

B. Pharm(Ayu.) Third Year Examination May-2014

**Ayurvediya Aushadha Nirmana Shastra - III**

Date: 24-05-2014
Saturday

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

Instructions Every question is compulsory.

**SECTION - A**

1. What is Masi Kalpana ? Explain preparatory method, pharmacological properties, shelf life, storage and packaging of Triphala Masi. 10

2. Enlist different types of Lavana and write their identification features. Explain preparatory method, shelf life, therapeutic properties, storage and packaging of Sauvarchala Lavana in detail. 10

**OR**

Define Sneha Kalpana and explain the preparatory method, usage, dosage, storage and packaging of Jatyadi Ghrita.

3. Write in brief on any **four** of the following - 20
   A. Narikela Lavana.
   B. Apamarga Kshara.
   C. Mamsa Rasa.
   D. Sneha Siddhi Lakshana.
   E. Raaga and Shadava.

4. Write short notes on any **five** of the following - 10
   A. Importance of Sneha Kalpana.
   B. Importance of Pathya Kalpana.
   C. Limitation of Lavana Kalpana.
   D. Yusha.
   E. Yavagu.
   F. Usage of Tankana Kshara.

**SECTION - B**

5. What is meant by Jarana and Marana of Parada ? Explain any one Murcchana of Parada in detail. 10

6. Enumerate drugs under Upavisha Varga. Mention their identification features, toxic effects, Shodhana and Marana procedures in detail. 10

**OR**

Enumerate the drugs included in Sadharana Rasa. Explain in detail about the organic drugs included in Sadharana Rasa.

7. Write in brief on any **four** of the following - 20
   A. Gandhaka.
   B. Hingula.
   C. Gairika.
   D. Haratala.
   E. Somala.

8. Answer any **five** of the following - 10
   A. Kasisa Shodhana.
   B. Kupilu Shodhana.
   C. Bhallataka Shodhana.
   D. Kankshi Shodhana.
   E. Toxic effects of Vatsanabha.
   F. Formulations of Hingula.

# GUJARAT AYURVED UNIVERSITY

## JAMNAGAR

B. Pharm(Ayu.) Third Year Examination May-2014

**Ayurvediya Aushadha Gunadharma Shastra – III**

Date: 26-05-2014
Monday

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

Instruction : Every question is compulsory.

**SECTION - A**

1. Define the word 'Saveeryata Avadhi'. Mention the differetnt Kalpanas with its Saveeryata Avadhi. 10

2. Explain the abbreviation 'G.C.P.' and describe in detail. 10

**OR**

Explain the word 'Visha' and 'Upavisha' and describe in detail.

3. Write short notes on any **four** of the following - 20

   A. Rasna.
   B. Parpata.
   C. Pashanbheda.
   D. Sandhigdha Aushadhi.
   E. Storage method.

4. Define any **five** of the following - 10

   A. Mootravirajaniya.
   B. Anuvasanopaga.
   C. Ubhayatobhaghar.
   D. Mootra Samgrahaniya.
   E. Saumanasyajanan.
   F. Swedopanayan.

**SECTION - B**

5. Describe the synonyms, Botanical name, family, Dosha Karma, uses, part used and formulation of the drug 'Kirat tikta'. 10

6. Mention the types, properties and uses of 'Kshara'. 10

**OR**

Describe the different types of 'Taila' belongs to Taila Varga along with its properties and actions.

7. Write short note on any **four** of the following - 20

   A. Dadhivarga.
   B. Pancha Mahavisha.
   C. Pancha Pitta.
   D. Adhyapushpa.
   E. Anjan tritay

8. Mention the Botanical name, Habitate, chemical composition and properties of any **five** of the following - 10

   A. Kumari.
   B. Swarnapatri.
   C. Kushmand.
   D. Jatiphala.
   E. Ushira.
   F. Chandan.

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# GUJARAT AYURVED UNIVERSITY

## JAMNAGAR

B. Pharm(Ayu.) Third Year Examination May-2014

**Pharmaceutical Technology of Ayurvedic Drugs-I**

Date: 27-05-2014
Tuesday

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

Instructions : 1. Every question is compulsory.
2. Draw suitable diagrams wherever necessary.

### SECTION-A

1. What are emulsions ? Explain types of emulsions. Describe advantages and disadvantages of an emulsion. 10

2. What are granules ? Describe procedure for preparing granules giving example. How will you preserve granules ? 10

**OR**

Enumerate liquid dosage forms. How will you prepare a mixture containing indiffusible solids giving example.

3. Answer any **Four** of the following : 20
   A. Differentiate between a mixture and elixir.
   B. What is a liniment ? Describe its uses.
   C. Define and describe importance of HLB values.
   D. Ingredients required for preparing effervescent granules.
   E. Enumerate different types of preservatives.

4. Answer any **Five** of the following : 10
   A. Define flocculated and deflocculated suspensions.
   B. Enumerate solid dosage forms.
   C. Packaging requirements for effervescent granules.
   D. Define collodions.
   E. Enumerate ophthalmic dosage forms.
   F. Define aromatic waters.

### SECTION-B

5. What are aerosols ? Describe components used for generating pressure in aerosols. Explain its uses. 10

6. Define suppositories. Describe its ideal characteristics and evaluation techniques. 10

**OR**

What are ointments ? Describe different types of ointments bases. Differentiate between ointment and cream.

7. Answer any **Four** of the following : 20
   A. Preparation of a shampoo with example.
   B. Differentiate between dusting powder and baby powder.
   C. Ideal characteristics of lipstick.
   D. Indigenous hair dye.
   E. polymorphism in cocoa butter.

8. Answer any **Five** of the following : 10
   A. Define gels and jellies.
   B. Define dentifrices.
   C. Poultices and its uses.
   D. Define bougies and its uses.
   E. Pharmaceutical applications of aerosols.
   F. Shaving preparations.

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GUJARAT AYURVED UNIVERSITY

JAMNAGAR

B. Pharm(Ayu.) Third Year Examination May-2014

**Pharmaceutical Chemistry - II**

Date: 19-05-2014
Monday

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

Instructions : 1. Every question is compulsory.
2. Draw suitable diagrams wherever necessary.

**SECTION-A**

1. Discuss scope and application of gas chromatography in Ayurvedic pharmacy. 10

2. Discuss scope and application of column chromatography. 10

**OR**

Discuss scope and application of thin layer chromatography.

3. Answer any **Four** of the following : 20
   A. Cation resin.
   B. Instrumental analysis used in Ayurvdic pharmacy.
   C. Classification of chromatography on the basis of phase difference.
   D. Instruments available in partition chromatography.
   E. Use of guard column in HPLC.

4. Answer any **Five** of the following : 10
   A. Isotherm.
   B. Eddy's diffusion.
   C. Visualization on TLC.
   D. Non-destructive detection methods.
   E. Modified adsorbents used in column chromatography.
   F. Use of saturation time in TLC.

**SECTION-B**

5. Scope and applications of polarography in Ayurvedic pharmacy. 10

6. Scope and applications of X-ray diffraction. 10

**OR**

Scope and applications of potentiometry.

7. Answer any **Four** of the following : 20
   A. UV-VIS. Spectrometry.
   B. Thermo-analytical method.
   C. Atomic absorbance spectrometry.
   D. Nephalometry.
   E. pH metry.

8. Answer any **Five** of the following : 10
   A. Potanciometric analysis in Ayurvedic pharmacy.
   B. Post chromatographic derivatisation.
   C. Column development methods and types of pumping in chromatography.
   D. Edge effect in thin layer chromatography.
   E. Refractrometry.
   F. Source light used in IR spectrometry.

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GUJARAT AYURVED UNIVERSITY

JAMNAGAR

B. Pharm(Ayu.) Third Year Examination May-2014

**Pharmacology & Toxicology of Ayurvedic Drugs -I**

Date: 20-05-2014
Tuesday

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

Instructions : 1. Every question is compulsory.
2. Draw suitable diagrams wherever necessary.

**SECTION-A**

1. Discuss phase-I reactions of drug metabolism. 10

2. Discuss any five factors which modify the effects of drug. 10

**OR**

Define adverse drug reactions and explain different types of allergic reactions.

3. Answer any **Four** of the following : 20
   A. G-protein coupled receptors.
   B. Transcutaneous routes of drug administration.
   C. Blood brain barrier.
   D. Drug - drug interactions.
   E. Active transport system.

4. Answer any **Five** of the following : 10
   A. Define pharmacology.
   B. Pinocytosis.
   C. Drugs metabolised by acetylation.
   D. Pharmacy.
   E. Bioavailability of drug.
   F. Intradermal route of drug administration.

**SECTION-B**

5. Describe the distribution of sympathetic nervous system. Give classification of sympathomimetic and sympatholytic drugs. 10

6. Classify anti parkinson's disease drugs with their mechanism of action. 10

**OR**

Discuss drugs used as anti ulcer agents with their mechanism of action.

7. Answer any **Four** of the following : 20
   A. Anti diarrhoeal drugs.
   B. Classification of hypnotics.
   C. Cholinergic drugs.
   D. Anti anxiety drugs.
   E. Types of seizures.

8. Answer any **Five** of the following : 10
   A. Ayurvedic drugs used in vomiting.
   B. Name of α blockers.
   C. Atypical anti depressants.
   D. Purgatives.
   E. Ayurvedic drugs used in the treatment of epilepsy.
   F. Types of sleep.

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GUJARAT AYURVED UNIVERSITY

JAMNAGAR

B. Pharm(Ayu.) Third Year Examination May-2014

**Pharmaceutical Engineering**

Date: 22-05-2014
Thursday

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

Instructions : 1. Every question is compulsory.
2. Draw suitable diagrams wherever necessary.

## SECTION-A

1. Explain in detail factors affecting size reduction. 10

2. Explain construction, mechanism and application of Ball mill. 10

**OR**

Explain mechanism, application, advantages and disadvantages of Colloidal mill.

3. Answer any **Four** of the following : 20
   A. Q.P. emulsifier.
   B. Write a brief note on theory of extraction.
   C. Ultra sonic emulsifier.
   D. Triple roller mill.
   E. Sigma blade mixer.

4. Answer any **Five** of the following : 10
   A. What is leaching ?
   B. What is the principle of Silverson emulsifier ?
   C. What is the application of size reduction ?
   D. How many types of extraction ?
   E. What are the objectives of size separation ?
   F. Define Negative mixer.

## SECTION-B

5. Explain principle, construction, advantages and disadvantages of Wiped film evaporator. 10

6. Explain the Evaporating still in detail. 10

**OR**

Explain the Steam distillation.

7. Answer any **Four** of the following : 20
   A. Tray dryer.
   B. Differentiate Evaporation and Drying.
   C. Tank crystallizer.
   D. Fluidized bed dryer.
   E. Simple distillation.

8. Answer any **Five** of the following : 10
   A. Define Evaporation.
   B. How many types of Distillation ?
   C. Define Condensation.
   D. Define Crystallization.
   E. Give names or any two equipment used for Crystallisation
   F. Enlist any two factors affecting process of Evaporation.

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GUJARAT AYURVED UNIVERSITY

JAMNAGAR

B. Pharm(Ayu.) Third Year Examination May-2014

**Pharmacognosy of Ayurvedic Drugs - II**

Date: 23-05-2014
Friday

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

Instructions : 1. Every question is compulsory.
2. Draw suitable diagrams wherever necessary.

**SECTION-A**

1. Define alkaloids. Discuss its role and formation in plants. Mention any one seed drug in detail containing them. 10

2. Discuss the endogenous or genetic factors affecting quality of crude drugs. 10

**OR**

What is lipid ? Describe lipid in detail.

3. Answer any **Four** of the following : 20
   A. Differentiate Vasaka and Dhatura leaf microscopically.
   B. Demargination and deodarization in fixed oil.
   C. Tests of alkaloids.
   D. Cold expression.
   E. Microscopical importance of starch grains.

4. Answer any **Five** of the following : 10
   A. Give botanical name, family and uses of Daru Haridra.
   B. Give chemical test of Brucine.
   C. Give botanical name, family and uses of Langali.
   D. Define plasmodesma.
   E. Give botanical name, family and uses of Jyotishmati.
   F. Chemical constituents of Sadapuspi.

**SECTION-B**

5. What is volatile oil ? Discuss its classification and describe its distillation method in detail. 10

6. Explain microscopical evaluation of crude drugs with suitable examples. 10

**OR**

Define tannin and give its classification in detail.

7. Answer any **Four** of the following : 20
   A. Eurelle
   B. Pseudo tannin.
   C. Enfleurage.
   D. Goldbeater's skin test.
   E. Terpeneless volatile oil.

8. Answer any **Five** of the following : 10
   A. Give botanical name, family and uses of Satahva.
   B. Blown cloves.
   C. Give botanical name, family and uses of Karkatasringi.
   D. Chemical constituents of cinnamon.
   E. Give botanical name, family and uses of Tagara.
   F. Give biological source and chemical constituents of Jatipatri.

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