

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Third Year Examination : December - 2017

**Dravyaguna – II (Ayurvedic Pharmacology)**

Date: 14-12-2017  
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. Describe the basis of symptoms and its importance in identification. 10
2. Answer any one out of two questions. 10
  - A. Describe the classification method of Dhanvantary Nighantu with its speciality.
  - B. Define Samanapratyarabdha, Vichitrapratyarabdha, give two examples of each with mode of action.
3. Write a short note on any **Four** of the following : 20
  - A. Pramathi.
  - B. Raj Nighantu.
  - C. Aharopayogi Varga.
  - D. Dugdha Varga.
  - E. Shaka Varga.
4. Answer any **Five** of the following : 10
  - A. Enlist any two Anshoghna Dravya.
  - B. Enlist any two Stanyashodhana Dravyas.
  - C. Define Rukshana.
  - D. Define Vranaropana.
  - E. Enlist variety of Madhu.
  - F. Define Chhardi Nigrahana.

**SECTION-B**

5. Write the Botanical name, habit, part used, Rasapanchaka and formoolation of Chandanadwaya. 10
6. Answer any one out of two questions. 10
  - A. Define Mishraka Varga, describe in detail Panchamruta with its therapeutic indications.
  - B. Describe in detail Guduchi.
7. Write a short note on any **Four** of the following : 20
  - A. Ksharadwaya.
  - B. Madhuratraya.
  - C. Panchamahavisha.
  - D. Swalpatriphala.
  - E. Yamaka.
8. Write Botanical name, part used, formoolation and main action of the following (any **Five**): 10
  - A. Shigru.
  - B. Rasna.
  - C. Kivattikta.
  - D. Hingu.
  - E. Lavanga.
  - F. Ashwattha.

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GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Third Year Examination : December - 2017

**Pharmaceutical Technology of Ayurvedic Drugs -I**

Date: 15-12-2017  
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. Define Suspension. Write a detail note on manufacturing procedure and evaluation parameters of Suspension. 10
2. Answer any **one** out of two questions. 10
  - A. What are different powder dosage forms in Ayurveda ? Discuss processing and packaging of powder formation.
  - B. Define Emulsion. Describe various types of additives required for Biphasic dosage forms.
3. Write a short note on any **Four** of the following : 20
  - A. Liquid dosage forms of Ayurveda.
  - B. Suspending agents.
  - C. List of additives for tablet.
  - D. Evaluation of ophthalmic products.
  - E. Effervescent granules.
4. Answer any **Five** of the following : (two to three sentences) 10
  - A. Colloidion.
  - B. Syrup.
  - C. HLB values.
  - D. Zeta potential.
  - E. Bulking agents.
  - F. Pyrogens.

**SECTION-B**

5. Describe the evaluation method of Ointment and Suppository in detail. 10
6. Answer any **one** out of two questions. 10
  - A. What is Suppository ? What are characteristics of Suppository and different types of bases used for preparations ?
  - B. Define Cream and Lotion. Discuss any one method for preparation of cream and lotion.
7. Write a short note on any **Four** of the following : 20
  - A. Propellants.
  - B. Suppository base.
  - C. Pharmaceutical application of Aerosol.
  - D. Electuries and Poulitice.
  - E. Packaging materials for Aerosols.
8. Answer any **Five** of the following : (two to three sentences) 10
  - A. Hydrocarbon base.
  - B. Gels and Jellies.
  - C. Herbal shampoo.
  - D. Vanishing cream.
  - E. Polymorphism of cocoa butter.
  - F. Bougies.

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Third Year Examination : December - 2017

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

Date: 16-12-2017  
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 various factors which can affect absorption of drug from gastrointestinal tract. 10
2. Answer any one out of two questions. 10
  - A. Describe briefly metabolism of drugs.
  - B. Enumerate factors which can modify drug effects. Briefly describe how body weight and age can modify drug effect ?
3. Write a short note on any **Four** of the following : 20
  - A. Pharmacovigilliance.
  - B. Drug antagonism.
  - C. Drug dependence.
  - D. Plasma protein binding.
  - E. Drug excretion.
4. Answer any **Five** of the following : 10
  - A. Define plasma half-life.
  - B. What is therapeutic index ?
  - C. Define agonist.
  - D. Synergism.
  - E. Two advantages of sublingual route.
  - F. Define bioavailability.

**SECTION-B**

5. Classify antiepileptic drugs. Write mechanism of action of phenytoin sodium. 10
6. Answer any one out of two questions. 10
  - A. Classify sedative hypnotic drugs. Write mechanism of action of benzodiazepines.
  - B. Classify cholinomimetic drugs. Write mechanism of action of anticholinesterases.
7. Write a short note on any **Four** of the following : 20
  - A. Antiemetics.
  - B. Antidiarrheal drugs used in Ayurveda.
  - C. Antianxiety drugs.
  - D. Levodopa.
  - E.  $\beta$ -blockers.
8. Answer any **Five** of the following : 10
  - A. Name two antidepressants.
  - B. Define carminatives.
  - C. Name two  $\alpha$ -blockers.
  - D. Name two bulk laxatives.
  - E. Name neurotransmitters of adrenergic nervous system.
  - F. Name two proton pump inhibitors.

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GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Third Year Examination : December - 2017

**Pharmacognosy of Ayurvedic Drugs – II**

Date: 18-12-2017  
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. What is the role of Pharmacopeia in Ayurvedic system of medicine ? 10
2. What is glycoside? Discuss in detail. Write a note on drug containing cardiac glycoside. 10

**OR**

Define substitutes. How drugs are substituted, explain in detail with suitable examples.

3. Write short notes on any **Four** of the following : 20
  - A. Discuss different types of sugar and its role in glycoside.
  - B. Differentiate Alexandrian senna and Indian senna.
  - C. Write the process of Killani test.
  - D. Name two patent product of Shatavari and discuss its role in them.
  - E. What are Marine toxin ? Discuss in detail.
4. Answer any **Five** of the following :(two to three sentences) 10
  - A. What do you mean by adulterants ?
  - B. Define coumarin.
  - C. Name two drugs containing flavonoid glycoside.
  - D. Name aglycons of glycosides.
  - E. Give chemical constituents and uses of Yastimadhu.
  - F. Write biological source family and uses of Chakramarda.

**SECTION-B**

5. What is fixed oil ? Discuss its various extraction method. 10
6. Define tannin, classify them and mention Goldbeater's test. 10

**OR**

What is tropane alkaloid ? Discuss any one drug in detail.

7. Write short notes on any **Four** of the following : 20
  - A. Transformation and Formation of alkaloids.
  - B. Discuss Pseudo tannin.
  - C. Role of stomata in identification of crude drugs.
  - D. Explain Galls are pathological product of plants.
  - E. Importance of cold expressed oil.
8. Answer any **Five** of the following :(two to three sentences) 10
  - A. Define Drying oil.
  - B. Give biological source, family and uses of Jyotishmati.
  - C. Give example of Indole alkaloids.
  - D. What is white Pepper ?
  - E. Define hydrolysable tannin.
  - F. Give chemical constituents and uses of Soma.

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Third Year Examination : December - 2017

**Pharmaceutical Engineering**

Date: 19-12-2017  
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. Which are important factors affecting Size reduction ? 10  
2. Describe the various factors affecting selection of Extraction process. 10

**OR**

Explain the principles, construction, mechanism and applications of Silverson emulsifier.

3. Write short notes on any **Four** of the following : 20  
A. Colloidal mill.  
B. Maceration and Percolation.  
C. Methods of Size separation.  
D. Objectives of mixing.  
E. Triple roller mill.  
4. Answer any **Five** of the following :(two to three sentences) 10  
A. Ideal solvents.  
B. Solvents used for extractions.  
C. Positive mixer.  
D. Standards of Sieve.  
E. Q.P. emulsifier.  
F. Cyclone separator.

**SECTION-B**

5. Define Evaporation. Discuss various factors affecting process of Evaporation. 10  
6. Define Drying. Write advantages, disadvantages and function of Vacuum dryer. 10

**OR**

Explain theory of crystallization in detail.

7. Write short notes on any **Four** of the following : 20  
A. Rectification distillation.  
B. Fluidizer bed dryer.  
C. Swenson walker crystallizer.  
D. Freeze drying.  
E. Distillation under reduced pressure.  
8. Answer any **Five** of the following :(two to three sentences) 10  
A. Vacuum crystallizer.  
B. Rectification.  
C. Principle of Microwave.  
D. Steam distillation.  
E. Rotary evaporator.  
F. Tunnel dryer.

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GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Third Year Examination : December - 2017

**Rasashastra & Bhaishajya Kalpana – III (Ayurvedic Pharmaceutics)**

Date: 20-12-2017  
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. State importance of Sneha kalpana and describe Jatyadi ghrita. 10
  2. What is Arka ? Describe Arka kalpana in detail. 10
- OR**
- Describe any five of the Pathya kalpana.
3. Write short notes on any **Four** of the following : 20
    - A. Masi kalpana.
    - B. Saptmusti Yusha.
    - C. Kshar kalpana.
    - D. Arka Lavan.
    - E. Sneha Murchana.
  4. Answer any **Five** of the following :(two to three sentences) 10
    - A. Dose and use of Kshirbala taila.
    - B. Mishreya arka – ingredients with preparation.
    - C. Use of Kasisadi taila.
    - D. Snehapaka Pariksha.
    - E. Importance of Pathya Kalpana.
    - F. Colour and use of Pinda taila.

**SECTION-B**

5. What is Kupipakva rasayan ? Describe its importance, types and general method of preparation. 10
  6. Enlist the Sadharan Rasa dravyas and describe Varatika in detail. 10
- OR**
- Enlist the Uprasa dravyas and describe Hartala in detail. :
7. Write short notes on any **Four** of the following : 20
    - A. Kupilu Shodhan.
    - B. Rasapuspa.
    - C. Kasis.
    - D. Parada Jarana.
    - E. Navsar.
  8. Answer any **Five** of the following :(two to three sentences) 10
    - A. Antidote and two formulations of Vatsanabha.
    - B. Gandhak Shodhan.
    - C. Give two formulations of Manashila.
    - D. Ingredients of Makardvaj.
    - E. Pottali pake pariksha.
    - F. Types of Parada murchana with examples.

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GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Third Year Examination : December - 2017

**Pharmaceutical Analysis of Ayurvedic Drugs - II**

Date: 21-12-2017  
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 chromatography ? How will you separate volatile components from non-volatile compound. Explain the working and instrumentation of G.C. 10

2. Explain the working and instrumentation of H.P.L.C. with diagram. 10

**OR**

Explain instrumentation and applications of paper chromatography.

3. Write short notes on any **Four** of the following : 20

A. Describe in brief types of detectors used in gas chromatography.

B. Visualisation techniques used in T.L.C.

C. Explain elution techniques in column chromatography.

D. Describe types of chambers and chamber saturation in H.P.T.L.C.

E. Explain different types of plate preparation techniques in T.L.C.

4. Answer any **Five** of the following :(two to three sentences) 10

A. Essential requirements of sample to be analyzed in G.C.

B. Chromatograph.

C. Enumerate 4 stationary phases for T.L.C.

D. Degasser.

E. Analyte.

F.  $R_f$  Value.

**SECTION-B**

5. What is E.M.R. ? Discuss conditions to get I.R. spectra and explain its instrumentation. 10

6. Explain the instrumentation of U.V. spectroscopy. 10

**OR**

Explain the term luminescence and describe the instrumentation of spectrofluorimeter in detail.

7. Write short notes on any **Four** of the following : 20

A. Explain beer's law in brief.

B. Types of vibrations in I.R. spectroscopy.

C. Abbe's refractometer.

D. Application of Nephelometry and Turbidimetry.

E. Factors affecting intensity of flame in flamephotometry.

8. Answer any **Five** of the following :(two to three sentences) 10

A. Light source of double beam fluorimeter.

B. Amplitude.

C. Frequency.

D. Range of visible light.

E. Sources of I.R. radiation.

F. Name different burners used in F.E.S.

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