

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

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

Dravyaguna – II (Ayurvedic Pharmacology)

Date: 17-05-2018

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

Thursday

Marks: 100

- Instructions: 1. Every question is compulsory.
2. Every question bears the marks written on the right side.

SECTION-A

1. Describe in detail the 'Ikshuvarga' with its nutritive and therapeutic importance. 10
2. Answer any one out of two questions. 10
 - A. Describe the classification method and speciality of Bhavaprakasha Nighantu in detail.
 - B. Define Vichitrapratyarabdha and compare it with Prabhava with examples in detail.
3. Write a short note on any **Four** of the following : 20
 - A. Viduhi.
 - B. Madanpal Nighantu.
 - C. Samanpratyarabdhatva.
 - D. Krutanna Varga.
 - E. Sandhana Varga.
4. Answer any **Five** of the following : 10
 - A. Enlist any two Snehopaga Dravya.
 - B. Enlist any two Ashmaribhedana Dravyas.
 - C. Define Purisha Virajaniya.
 - D. Define Darana.
 - E. Enlist variety of Dhanya.
 - F. Define Vedanasthapana.

SECTION-B

5. Write the Botanical name, habit, part used, Rasapanchaka and formoolation of Haridradwaya. 10
6. Answer any one out of two questions. 10
 - A. Define Mishraka Varga, describe in detail Chaturbhadra with its therapeutic indications.
 - B. Describe in detail Latakaranja.
7. Write a short note on any **Four** of the following : 20
 - A. Ksharapanchaka.
 - B. Madhuratriphala.
 - C. Panchapallava.
 - D. Sapta Upavisha.
 - E. Trivrutta.
8. Write Botanical name, part used, formoolation and main action of the following (any **Five**): 10
 - A. Shati.
 - B. Methika.
 - C. Kanchanara.
 - D. Chinha.
 - E. Kitamari.
 - F. Kushmanda.

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

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

Pharmaceutical Technology of Ayurvedic Drugs -I

Date: 18-05-2018
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. How will you differentiate between an additives and contaminant ? Explain how additives are useful in preparing Ayurveda formulation. 10
2. Answer any one out of two questions. 10
 - A. Explain the difference between a simple mixture and a suspension. What are the advantages and disadvantages of liquid dosage forms over solid dosage forms ?
 - B. Define suspension with its types. Explain its evaluation procedure.
3. Write a short note on any **Four** of the following : 20
 - A. Advantages and disadvantages of Emulsion preparation.
 - B. Classification of powders.
 - C. Short note on preservatives.
 - D. Evaluation methods for ophthalmic products.
 - E. Aromatic water with its formulation procedure.
4. Answer any **Five** out of six questions : 10
 - A. Two examples of diluents.
 - B. Define – Infusion.
 - C. Enumerate Anti-oxidants.
 - D. Name two Natural flavours with its sources.
 - E. Name ointment bases.
 - F. Suspending agents – examples.

SECTION-B

5. Give distinguishing characteristics between a cream and an ointment ? Discuss various types of ointment bases. 10
6. Write any **one** out of two questions : 10
 - A. Discuss the type of component used for generating pressure in aerosol preparation. Discuss various packing materials.
 - B. What are skin creams ? Describe one method of preparing cold cream.
7. Write a short note on any **Four** of the following : 20
 - A. Gels and jellies.
 - B. Shaving preparations.
 - C. Lipstick.
 - D. Indigenous hair dye.
 - E. Suppository bases.
8. Answer any **Five** of six questions : 10
 - A. Define – Polymorphism.
 - B. What are manicure preparation ?
 - C. What are Shampoos ?
 - D. Enlist ointment bases.
 - E. Composition of poultice.
 - F. Which propellants are used in aerosols.

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

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

Pharmacology & Toxicology of Ayurvedic Drugs -I

Date: 19-05-2018
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. What is pharmacokinetics? Describe briefly about drug metabolism. 10
2. Answer any one out of two questions. 10
 - A. Which are the principles of drug action? Write briefly about mechanism of drug action
 - B. What is Pharmacovigilance? Write briefly about various adverse drug reactions.
3. Write a short note on any **Four** of the following : 20
 - A. Oral route – advantages & disadvantages
 - B. Ion Channels as drug receptors
 - C. Bioavailability
 - D. Pharmacogenetics
 - E. Competitive Antagonism
4. Answer any **Five** of the following : (two to three sentences) 10
 - A. Define - Pharmacodynamics
 - B. Tolerance
 - C. First order kinetics of drug elimination
 - D. Define – Pharmacy
 - E. Cutaneous route
 - F. Clinical Trials

SECTION-B

5. Write briefly about neurohumoral transmission. Describe briefly about cholinergic transmission 10
6. Answer any one out of two questions. 10
 - A. Classify drugs which reduce gastric acid secretion. Write their mechanism of action.
 - B. Classify anti-epileptic drugs. Write mechanism of action of sodium valproate.
7. Write a short note on any **Four** of the following : 20
 - A. Hypnotic drugs
 - B. Omeprazole
 - C. Antiemetics
 - D. Antipsychotics
 - E. Ayurvedic drugs for anxiety & stress
8. Answer any **Five** of the following : (two to three sentences) 10
 - A. Name two β - blockers
 - B. Bulk purgatives
 - C. Prokinetics
 - D. Name two drugs used for depression
 - E. How Ranitidine acts?
 - F. Name two α - blockers

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

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

Pharmacognosy of Ayurvedic Drugs – II

Date: 21-05-2018
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. Define glycoside. Discuss in detail and write a note on drugs containing bitter glycosides. 10
2. Answer any one out of two questions. 10
 - A. Discuss the importance of pharmacopeia and criteria for standardization of Ayurvedic drug as per API.
 - B. Write a detail account on marine as a source of drug.
3. Write a short note on any **Four** of the following : 20
 - A. Discuss the classification of glycoside by their linkage.
 - B. Write the estimation of saponin glycosides.
 - C. Give the reason, why coumarin glycosides are used in leucoderma ?
 - D. What is Grignard Reaction ?
 - E. Define substitutions of drug in detail.
4. Answer any **Five** of the following : 10
 - A. What is morphological evaluation ?
 - B. Name anticancer drugs from marine source.
 - C. Give biological source, chemical constitutions and uses of Laghu Gokshara.
 - D. Give biological source, chemical constitutions and uses of Yashtimadhu.
 - E. Give structural formula of dienthrone.
 - F. Define seed.

SECTION-B

5. Discuss the properties, various tests and distribution of alkaloids in plants and animals with suitable examples and give detail account on Dhattura. 10
6. Answer any one out of two questions. 10
 - A. Explain extraction and isolation methods of alkaloids in detail.
 - B. Write a note on tropane alkaloids and drugs containing them in detail.
7. Write a short note on any **Four** of the following : 20
 - A. Various tests to detect alkaloids.
 - B. Role of alkaloids in plants.
 - C. What is pseudo tannin ? How tannin is evaluated ?
 - D. Discuss the classification of fixed oils, differentiate volatile oil and fixed oil.
 - E. Removal of free fatty acids from fixed oil.
8. Answer any **Five** of the following : 10
 - A. Structural formula of ephedrine.
 - B. Give botanical name of various species used under heading of ephedra.
 - C. Name at least two market patent drugs of Vasaka.
 - D. Give biological source, chemical constituents uses of Kupilu.
 - E. Give biological source, chemical constituents uses of Karkat Shringi.
 - F. Name drugs of non-heterocyclic glycosides.

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

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

Pharmaceutical Engineering

Date: 22-05-2018
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. Explain the various mechanisms of Size reduction in detail. 10
 2. Describe different methods of Size separation in detail. 10
- OR**
- Write a detailed note on Industrial method of Extraction.
3. Write short notes on any **Four** of the following : 20
 - A. Twinshell mixer.
 - B. Propeller mixer.
 - C. Elutriation.
 - D. Ultrasonic emulsifier.
 - E. Ball mill
 4. Answer any **Five** of the following :(two to three sentences) 10
 - A. Define Leaching.
 - B. Types of Mixing.
 - C. Maceration.
 - D. Decoction.
 - E. Colloidal mill.
 - F. Standards of Sieve.

SECTION-B

5. Explain theory of Crystallization and Vacuum crystallizer in details. 10
 6. Define Evaporation. Write a detailed note on factors affecting process of Evaporations. 10
- OR**
- Define Distillation and Condensation. Write any one method in detail.
7. Write short notes on any **Four** of the following : 20
 - A. Distillation under reduced pressure.
 - B. Drum dryer.
 - C. Rotary evaporator.
 - D. Fluidized bed dryer.
 - E. Tank crystallizer.
 8. Answer any **Five** of the following :(two to three sentences) 10
 - A. Principles of microwave.
 - B. Define Magma.
 - C. Tank crystallizer.
 - D. Mier's theory.
 - E. Spray dryer.
 - F. Tunnel dryer.

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

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

Rasashastra & Bhaishajya Kalpana – III (Ayurvedic Pharmaceutics)

Date: 23-05-2018
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. What is Yusha? Write about Saptmusti yusha in detail. 10
2. Answer any one out of two questions. 10
A. Explain the classical method of extracting Arka.
B. Describe Paniya and Pratisamiya kshar in detail.
3. Write a short note on any **Four** of the following : 20
A. Pathya kalpana
B. Explain Avartan with an example
C. Arka lavan
D. Jatyadi ghrita
E. Preparation of Arkapatan yantra
4. Answer any **Five** of the following : (two to three sentences) 10
A. Dose and use of Narikela lavan.
B. Use of Triphala masi.
C. Define Sneha kalpana with the general proportion.
D. Which Paka of Sneha kalpana is used for Nasya?
E. Colour of Apamarga kshar and its dose.
F. Name four examples of Arka kalpana.

SECTION-B

5. Name the Upvisha dravya and describe any two. 10
6. Answer any one out of two questions. 10
A. Explain Rasagarbha pottali.
B. Write about Rasamanikya.
7. Write a short note on any **Four** of the following : 20
A. Explain a Nirgandha yoga of Kupipakva rasayan
B. Vatsnabha
C. Parada murchana
D. Navasar
E. Kapardika
8. Answer any **Five** of the following : (two to three sentences) 10
A. Grahya Gandhak.
B. Antidote of Jaypal.
C. Kupillu shodhan.
D. Two formulations of Kasis.
E. Antidote of Gauripashan.
F. Ingredients of Makardvaja.

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

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

Pharmaceutical Analysis of Ayurvedic Drugs - II

Date: 24-05-2018
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. Differentiate between T.L.C. and H.P.T.L.C. Discuss how it is high in performance than T.L.C. ? Explain. 10
2. Explain the principal and working of gas chromatography. What is the role of temperature programming in G.C. ? 10

OR

How the chromatography word derived ? Explain the procedure of column packaging techniques in detail.

3. Write short notes on any **Four** of the following : 20
 - A. Describe in brief types of detectors used in G.C.
 - B. Applications of T.L.C in detail.
 - C. Types of Ion Exchange resin in brief.
 - D. Explain elution techniques in column chromatography.
 - E. What is the role of guard columns in H.P.L.C. ? Explain.
4. Answer any **Five** of the following :(two to three sentences) 10
 - A. Define Chromatography.
 - B. Derivatization.
 - C. Enumerate non-destructive detection techniques in T.L.C.
 - D. H.P.L.C.
 - E. Edge effect.
 - F. Define Retardation factor.

SECTION-B

5. What is refractometry ? Explain its theory, principle and instrumentation in detail. 10
6. What is flame photometry ? Explain the instrumentation in detail with diagram. 10

OR

Explain the theory, principle and instrumentation of I.R. spectroscopy.

7. Write short notes on any **Four** of the following : 20
 - A. Fluorimetry in brief.
 - B. pH metry in brief.
 - C. Explain sample preparation in I.R. spectroscopy.
 - D. Different types of burners used in F.E.S.
 - E. Monochomators used in I.R. spectroscopy.
8. Answer any **Five** of the following :(two to three sentences) 10
 - A. In plane bending vibrations.
 - B. D.S.C.
 - C. Hypsochromic shift.
 - D. Wave length.
 - E. Amplitude.
 - F. Nernst Glower.