

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Third Year Examination : May- 2021 (Re-schedule on July-2021)

Dravyaguna – II (Ayurvedic Pharmacology)

Date: 27-07-2021
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 *Samanpratyarabdha* and *Vichitrapratyarabdha* in detail. 10
2. Answer any one out of two questions. 10
 - A. Discuss *Shaka varga* in detail.
 - B. Explain specialty of *Raj Nighantu* with its classification.
3. Write a short note on any **Four** of the following : 20
 - A. *Aharopyogi varga*.
 - B. *Anuvasanopaga* and *Asthapanopaga*.
 - C. *Dadhi varga*.
 - D. *Stanyajanana* and *Stanyashodhana*.
 - E. *Dhanwantari Nighantu*.
4. Answer any **Five** of the following : (two to three sentences) 10
 - A. Define *Arshoghna* with examples.
 - B. Any four examples of *Phala varga dravyas*.
 - C. *Jwarahara*.
 - D. Write properties of cow milk.
 - E. *Swasahara*.
 - F. Write types of *Nadiya Jala*.

SECTION-B

5. Discuss *Kumari* in detail. 10
6. Answer any one out of two questions. 10
 - A. Write ingredients and collective actions of *Panchapallava* and *Panchavalkala*.
 - B. Write botanical name, family, dose, actions, uses and formulations of *Haridra* and *Shalmali*.
7. Write a short note on any **Four** of the following : 20
 - A. *Ashtavarga*.
 - B. *Panchatikta*.
 - C. Write actions and uses of *Manjistha*.
 - D. *Ksharashtaka*
 - E. Discuss *Narikela* in brief.
8. Answer any **Five** of the following: (Write botanical name, family, part used and single main action.) 10
 - A. *Agaru*
 - B. *Madhuka*
 - C. *Ingudi*
 - D. *Parisha*
 - E. *Koshataki*
 - F. *Bimbi*

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Third Year Examination : May- 2021 (Re-schedule on July-2021)

Pharmaceutical Technology of Ayurvedic Drugs -I

Date: 28-07-2021
Wednesday

Time: 02:30 P.M. to 05:30 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 are different powder dosage forms in Ayurveda? Explain problems arising during the preparation of powders. 10
2. Answer any one out of two questions. 10
 - A. What is the emulsion? Discuss their merits and demerits in details?
 - B. What are liquid dosage forms? Explain their types and additives used in manufacturing of liquid dosage form?
3. Write a short note on any **Four** of the following : 20
 - A. Different types of additives
 - B. Factors affecting stability of suspension
 - C. Difference between Syrup I.P. & Syrup U.S.P.
 - D. Difference between Syrup & elixir
 - E. Identification tests for emulsion
4. Answer any **Five** of the following : (two to three sentences) 10
 - A. Antioxidants
 - B. Eutectic mixtures
 - C. Preservatives
 - D. Diluents
 - E. Effervescent powders
 - F. HLB

SECTION-B

5. Discuss types of suppositories their bases & explain manufacturing methods of suppositories? 10
6. Answer any one out of two questions. 10
 - A. Discuss in detail types of ointment bases?
 - B. Explain aerosols, their types, components & evaluation?
7. Write a short note on any **Four** of the following : 20
 - A. Semisolid bases
 - B. Ideal requirements for suppositories
 - C. Different types of creams
 - D. Difference between gels and gellies
 - E. What are the components of aerosol packaging? Explain the importance?
8. Answer any **Five** of the following : (two to three sentences) 10
 - A. Define Bougies.
 - B. preservatives
 - C. Propellants
 - D. Counter irritants
 - E. Types of aerosols
 - F. pyrogens

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Third Year Examination : May- 2021 (Re-schedule on July-2021)

Pharmacology & Toxicology of Ayurvedic Drugs -I

Date: 30-07-2021
Friday

Time: 09:30 A.M. to 11:30 P.M.
Marks: 100

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

SECTION-A

1. Enlist various factors which can modify effects of Drugs and describe any five factors of it. 10
2. Answer any **One** of the following: 10
 - A Enumerate different routes of drug administration. Discuss the advantages and disadvantages of Oral route.
 - B What is Biotransformation of Drugs? Write note on Phase-I reactions of Drug Metabolism.
3. Write short notes on any **Four** of the following : 20
 - A. Ion channel linked receptors.
 - B. Teratogenicity.
 - C. Blood Brain Barrier (BBB).
 - D. How pH and ionization affect the Drug Absorption & Bioavailability?
 - E. Sources of Drugs.
4. Answer any **Five** of the following : 10
 - A. Define: Agonist and Antagonist.
 - B. Pinocytosis.
 - C. Drugs metabolised by Acetylation.
 - D. Define: Chemotherapy
 - E. Drugs eliminated through Lungs.
 - F. Adverse Drug Reactions.

SECTION-B

5. Write classification and distribution of Cholinergic receptors and drugs acting on it. 10
6. Answer any **One** of the following: 10
 - A Describe physiological aspects of Vomiting and classify Anti-emetic drugs.
 - B Classify Sedative-Hypnotic drugs with their mechanism of actions.
7. Write short notes on any **Four** of the following : 20
 - A. Types of Seizures.
 - B. Carminatives.
 - C. Proton pump inhibitors.
 - D. Ayurvedic drugs for Anxiety and Stress.
 - E. Classification of adrenergic drugs.
8. Answer any **Five** of the following : 10
 - A. Ayurvedic Laxative drugs.
 - B. Name of Cholinesterase reactivators.
 - C. Mechanism of action and adverse reactions of Levodopa.
 - D. Write name of Anti-depression drugs.
 - E. Name of β -blockers.
 - F. Define and write name of two Antacids.

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Third Year Examination : May- 2021 (Re-schedule on July-2021)

Pharmacognosy of Ayurvedic Drugs – II

Date: 31-07-2021
Saturday

Time: 02:30 P.M. to 05:30 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 different pharmacopoeias of India in detail. 10
2. Answer any one out of **Two** questions. 10
A What is substitute? Discuss any two-substitute drugs with their identifying characters.

OR

- B Discuss various types of glycosides in general and name at least one drug containing each of them.
3. Write short notes on any **Four** of the following : 20
A. Froth test
B. What are marine drugs ?
C. Japanese Pharmacopoeia
D. Note on Yastimadhu
E. Explain coumarin glycosides are used in leukoderma
4. Answer any **Five** of the following : (two to three sentences) 10
A. What is galactoside ?
B. Importance of cardiac glycoside
C. What is monograph ?
D. Define calcium oxalate crystals
E. What is sapotoxin ?
F. What is adulterant ?

SECTION-B

5. What are the importance of tannin in plant ? Classify tannin in detail. 10
6. Answer any one out of **Two** questions. 10
A What are waxes ? Discuss about Beeswax in detail
B Describe general morphological characters of Datura and Vasaka leaves.
7. Write short notes on any **Four** of the following : 20
A. Types of stomata
B. Ranunculaceous drugs
C. Therapeutic importance of Kutaj and its various market brand
D. Varieties of Marich
E. Black and pale Catechu
8. Answer any **Five** of the following :(two to three sentences) 10
A. Biological source, family and uses of Erand
B. Chemical constituents and therapeutic usage of Soma
C. Biological source, family and uses of Kupilu
D. Chemical constituents and therapeutic usage of Bala
E. Biological source, family and uses of Jyotismati
F. Chemical constituents and therapeutic usage of Kantakari

Pharmaceutical Engineering

Date: 03-08-2021

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 mechanism & application of Ball mill in detail. 10
2. Answer any one out of **Two** questions. 10
 - A Explain in detail colloidal mill?
 - B Explain factors affecting size reduction ?
3. Write short notes on any **Four** of the following : 20
 - A. Types of mixtures.
 - B. Roller cutting mill.
 - C. Mechanism of liquid mixing.
 - D. Ultrasonic emulsifier.
 - E. Cyclone Separator.
4. Answer any **Five** of the following : 10
 - A. Define leaching.
 - B. Define Decoction.
 - C. Colloidal mill.
 - D. Maceration.
 - E. Standards of sieve.
 - F. Types of mixing.

SECTION-B

5. Describe factors affecting drying in detail. 10
6. Answer any one out of **Two** questions. 10
 - A Explain in detail vacuum crystallizer ?
 - B Factors affecting the process of evaporation in detail.
7. Write short notes on any **Four** of the following : 20
 - A. Steam distillation.
 - B. Drum dryer.
 - C. Fluidized bed dryer.
 - D. Tank Crystallizer
 - E. Extraction.
8. Answer any **Five** of the following : 10
 - A. Define manstrum.
 - B. Define Crystals.
 - C. Spray drayer.
 - D. Evaporating pan.
 - E. Define Evaporation.
 - F. Define Condensation.

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Third Year Examination : May- 2021 (Re-schedule on July-2021)

Rasashastra & Bhaishajya Kalpana – III (Ayurvedic Pharmaceutics)

Date: 04-08-2021
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 Pathya kalpana and describe any four of them. 10
2. Answer any **One** out of two questions: 10
 - A. Write the ancient method of Arka preparation.
 - B. Describe Narikel lavan in detail.
3. Write a short note on any **Four** of the following : 20
 - A. Apamarga Kshar
 - B. Saptamusti Yusha
 - C. Snehapaka and their lakshan
 - D. Gomutra kshar churna
 - E. Kasisadi taila
4. Answer any **Five** of the following : (two to three sentences) 10
 - A. What is Avartan in Sneha kalpana?
 - B. Ingredients and dose of Arka lavan.
 - C. Shelf life of Ghrita kalpana.
 - D. Name the types of Kshar kalpana.
 - E. Name five formulations of Taila kalpana.
 - F. Ingredients and use of Mishreya arka.

SECTION-B

5. Describe Pottali kalpana in detail. 10
6. Answer any **One** out of two questions: 10
 - A. Name the Uparasa and describe anyone in detail.
 - B. Describe Jaypal.
7. Write a short note on any **Four** of the following : 20
 - A. Kampillaka
 - B. Vatsanabha Shodhan and its toxicity
 - C. Varatika
 - D. Gunja
 - E. Hingula
8. Answer any **Five** of the following : (two to three sentences) 10
 - A. Dose and use of Rasasindura.
 - B. Name two examples of Galastha kupipakva rasayan.
 - C. Give two synonyms and formula of Navsar.
 - D. Name two formulations of Kupilu.
 - E. What is the colour of Kasis bhasma?
 - F. Name four drugs of Schedule E(1).

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Third Year Examination : May- 2021 (Re-schedule on July-2021)

Pharmaceutical Analysis of Ayurvedic Drugs - II

Date: 05-08-2021

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. Explain the Instrumentation of Gas chromatography with diagram wherever necessary. 10
2. Answer any one out of two questions. 10
 - A. Instrumentation of HPLC with diagram.
 - B. What is HPTLC? Explain sample application in HPTLC.
3. Write a short note on any **Four** of the following : 20
 - A. Describe different procedure to prepare column as in Column chromatography.
 - B. Describe shapes and Types of columns used in GC.
 - C. Applications of HPLC in details.
 - D. Explain temperature programming used in GC.
 - E. Types of Injectors in H.P.L.C.
4. Answer any **Five** of the following : (two to three sentences) 10
 - A. Derivatization.
 - B. Types of Ion exchange resin.
 - C. Enumerate 6 different stationary phases used in TLC.
 - D. Name any two spray reagents with its detection of class of chemicals.
 - E. Enumerate 4 Non polar solvents.
 - F. Define:- Retention time

SECTION-B

5. What is E.M.R.? Explain instrumentation of U.V.Spectroscopy in detail. 10
6. Answer any one out of two questions. 10
 - A. Explain the Flame photometry instrumentation with diagram in detail.
 - B. Instrumentation of Nephelometry with diagram.
7. Write a short note on any **Four** of the following : 20
 - A. Applications of Fluorimetry and Phosphorimetry.
 - B. Applications of Ion-exchange Chromatography.
 - C. Applications of Flame Photometry.
 - D. Explain classification of vibrations as per IR spectroscopy.
 - E. Applications of UV spectroscopy.
8. Answer any **Five** of the following : (two to three sentences) 10
 - A. Define: Frequency
 - B. Source of I.R. radiation.
 - C. Conditions to get I.R. spectra
 - D. Red Shift.
 - E. Snell's law equation.
 - F. Define: Monochromator.
