

आयुर्वेद शिक्षण एवं अनुसंधान संस्थान, जामनगर

B. PHARM. (AYU.) THIRD YEAR EXAMINATION - August - 2024

RASASHASTRA AND BHAISHAJYA KALPANA - III (AYURVEDIC PHARMACEUTICS)

Date : 20/08/2024

Time : 10:00 A.M. - 01:00 P.M.

Tuesday

Marks : 100

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

SECTION-A

1. Define Masi kalpana and describe an example of it. 10
2. Answer any one out of two questions. 10
 - A Describe the apparatus and agni used for Arka kalpana.
- OR**
- B Describe Pinda taila in detail.
3. Write short notes on any **Four** of the following : 20
 - A. Define any five of the Pathya kalpana
 - B. Pratisaraniya kshar
 - C. Sneha murchana
 - D. Narikela lavan
 - E. Mamsa rasa
4. Answer any **Five** of the following :(two to three sentences) 10
 - A. Dose of Paniya kshar
 - B. Define Takra
 - C. Sneha siddhi lakshan for Kharapaka
 - D. Ingredients of Saptmusti yusha
 - E. General dose of Sneha kalpana
 - F. Shelf life of Ghrita kalpana

SECTION-B

5. Explain Pottali kalpana 10
6. Answer any one out of two questions. 10
 - A Parada murchhana
- OR**
- B Describe anyone of the Uparasa
7. Write short notes on any **Four** of the following : 20
 - A. Hartala
 - B. Kasis maran
 - C. Jaypal shodhan
 - D. List of Schedule E(1) drugs
 - E. Vatsnabha
8. Answer any **Five** of the following :(two to three sentences) 10
 - A. Enlist the Upvisha
 - B. 'Karaskar' is the synonym of which dravya?
 - C. Give two formulations of Bhallataka
 - D. Antidote of Bhallataka
 - E. Colour of Rasamanikya
 - F. Dose of Varatika bhasma

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B. PHARM. (AYU.) THIRD YEAR EXAMINATION - August - 2024

DRAVYAGUNA - II (AYURVEDIC PHARMACOLOGY)

Date : 21/08/2024

Time : 10:00 A.M. - 01:00 P.M.

Wednesday

Marks : 100

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

SECTION-A

1. Discuss in detail *Dhanwantri Nighantu*. 10
2. Answer any one out of two questions. 10
- A Explain *Krutanna Varga* with suitable examples.
- OR**
- B Discuss *Bhavaprakash Nighantu* with its types.
3. Write short notes on any **Four** of the following : 20
- A. Discuss *Purishsangrahaniya* and *Purishviranjananiya*.
- B. *Navneeta Varga*.
- C. Explain basis of Nomenclature.
- D. Discuss *Vichitrapratyarabdha*.
- E. Explain *Trushnanigrahana* and *Truptighana*.
4. Answer any **Five** of the following :(two to three sentences) 10
- A. *Pramathi*.
- B. Define *Darana*.
- C. Write any two examples of *Madhu Varga*.
- D. Enumerate types of *Dadhi*.
- E. Define *Sandhaniya* with an example.
- F. *Vidahi*.

SECTION-B

5. Discuss in detail about *Guduchi*. 10
6. Answer any one out of two questions. 10
- A Write the botanical name, family, part used, dose and any two formulations of *Khadira* and *Sariva*.
- OR**
- B Write botanical name, habit, *Rasa*, *Veerya* and any two synonyms of *Udumbara* and *Kumari*.
7. Write short notes on any **Four** of the following : 20
- A. *Ksharapanchaka*.
- B. Discuss *Ashthavarga* with its substitutes.
- C. Discuss in brief about *Kanchanara*.
- D. *Madhurtraya* and *Madhurtriphala*.
- E. *Mahasneha* and *Yamaktrivruta*.
8. Write botanical name, family, part used and single main action for any five of the following. 10
- A. *Bijapoor*
- B. *Aavartani*
- C. *Krutvedhana*
- D. *Jambir*
- E. *Plaksha*
- F. *Mishreya*

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B. PHARM. (AYU.) THIRD YEAR EXAMINATION - August - 2024

PHARMACOGNOSY OF AYURVEDIC DRUGS - II

Date : 22/08/2024

Time : 10:00 A.M. - 01:00 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. Write an account on Guduchi and its importance in Ayurved. 10
2. Answer any one out of two questions. 10
 - A Discuss glycoside in general and write a note on any one drug containing anthraquinone glycoside.
- OR**
- B Give a detail account on marine as a source of drugs.
3. Write short notes on any **Four** of the following : 20
 - A. British Pharmacopoeia.
 - B. Role of sugar in glycoside.
 - C. Note on Yastimadhu.
 - D. Cardiac glycoside.
 - E. Substitute and adulterant.
4. Answer any **Five** of the following :(two to three sentences) 10
 - A. Define pharmacopoeia.
 - B. Give biological source and chemical constituents of Manjistha.
 - C. What is Emil Fischer method.
 - D. Give biological source and chemical constituents of Atasi.
 - E. Give biological source and chemical constituents of Sarsapa.
 - F. Give biological source and chemical constituents of Chakramarda.

SECTION-B

5. Write a complete account on alkaloid. 10
6. Answer any one out of two questions. 10
 - A Discuss classification of tannin and its general medicinal importance.
- OR**
- B What is steroidal alkaloid? Discuss one drug in detail containing them.
7. Write short notes on any **Four** of the following : 20
 - A. Pseudo alkaloid.
 - B. Goldbeater's skin test.
 - C. Note on Arjuna.
 - D. Discuss wax.
 - E. Short note on Madhuchista.
8. Answer any **Five** of the following : (two to three sentences) 10
 - A. Define fixed oil.
 - B. Give biological source and chemical constituents of Kupilu.
 - C. What is dragendorff's test.
 - D. Give biological source and chemical constituents of Karanj.
 - E. Give biological source and chemical constituents of Khadir.
 - F. Give biological source and chemical constituents of Punarnava.

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B. PHARM. (AYU.) THIRD YEAR EXAMINATION - August - 2024

PHARMACOLOGY AND TOXICOLOGY OF AYURVEDIC DRUGS-I

Date : 23/08/2024

Time : 10:00 A.M. - 01:00 P.M.

Friday

Marks : 100

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

SECTION-A

1. Enumerate different routes of drug administration. Discuss the advantages and disadvantages of oral route of drug administration. 10
 2. Answer any one out of two questions. 10
A Renal elimination of drugs.
- OR**
- B What is drug metabolism? Describe Phase II reactions of drug metabolism.
 3. Write short notes on any **Four** of the following : 20
A. Passive diffusion
B. Teratogenicity
C. Ion channel linked receptors
D. Plasma protein binding of drugs
E. Sources of drugs
 4. Answer any **Five** of the following :(two to three sentences) 10
A. Define: chemotherapy
B. Side effects of drugs
C. Define: pharmacy
D. Synergism
E. Redistribution of drug
F. Enlist various factors affecting drug absorption and its bioavailability

SECTION-B

5. Explain cholinergic transmission. Classify cholinergic and anti- cholinergic drugs. 10
 6. Answer any one out of two questions 10
A Explain pathophysiology of peptic ulcer and classify drugs used in the treatment of it.
- OR**
- B Classify anti –epileptic drugs and write mechanism action of any two class of drugs.
 7. Write short notes on any **Four** of the following : 20
A. Sleep cycle
B. Carminatives
C. Anti-anxiety drugs
D. Difference between parasympathetic and sympathetic nervous system
E. Ayurvedic drugs used in the treatment of constipation
 8. Answer any **Five** of the following :(two to three sentences) 10
A. Emetics
B. Ayurvedic drugs used in the treatment of depression
C. Give the name of β -blockers.
D. Ayurvedic drugs used in Parkinson's disease.
E. Write therapeutic uses and adverse reactions of benzodiazepines
F. Adrenergic drugs

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B. PHARM. (AYU.) THIRD YEAR EXAMINATION - August - 2024

PHARMACEUTICAL ANALYSIS OF AYURVED DRUGS - II

Date : 27/08/2024

Time : 10:00 A.M. - 01:00 P.M.

Tuesday

Marks : 100

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

SECTION-A

1. Narrate the whole instrumentation of classical column chromatography in brief. 10
2. Answer any one out of two questions. 10
- A What is principle of ion exchange chromatography? Give details of practical requirements for ion exchange chromatography.
- OR**
- B Define Chromatography. Write the whole requirements to perform TLC in detail.
3. Write short notes on any **Four** of the following : 20
 - A. Applications of HPTLC.
 - B. Detectors used in Gas chromatography.
 - C. Write detecting techniques used in TLC.
 - D. Elution techniques used as in column chromatography.
 - E. Types of columns as per HPLC.
4. Answer any **Five** of the following :(two to three sentences) 10
 - A. Define: Analyte
 - B. Any two spray reagents with detecting class of chemicals.
 - C. What is solvent front?
 - D. Two important criteria for substance to be analysed in GC.
 - E. Enumerate different types of detectors used in HPLC.
 - F. Enumerate types of paper chromatography.

SECTION-B

5. Define Fluorescence. Explain Spectrofluorimeter with diagram. 10
6. Answer any one out of two questions. 10
- A Define Refractive index. Explain theory of refraction and enumerate types of refractometers and its applications.
- OR**
- B Explain the vibrations in IR spectroscopy with diagram and give its applications.
7. Write short notes on any **Four** of the following : 20
 - A. Factors affecting intensity of flame as in FES and its applications.
 - B. Instrumentation of Turbidimetry in brief.
 - C. Applications of Turbidimetry and nephelometry.
 - D. Write a short note on pH.
 - E. Rotating disc phosphoroscope.
8. Answer any **Five** of the following :(two to three sentences) 10
 - A. Bathochromic shift
 - B. Define: Amplitude
 - C. What is Wave length?
 - D. What is Monochromator?
 - E. Define: Frequency
 - F. What is dipole moment?

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B. PHARM. (AYU.) THIRD YEAR EXAMINATION - August - 2024

PHARMACEUTICAL ENGINEERING

Date : 28/08/2024

Time : 10:00 A.M. - 01:00 P.M.

Wednesday

Marks : 100

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

SECTION-A

1. Describe the construction, working, advantages and application of Hammer mill. 10
2. Answer any one out of two questions. 10
- A Describe the construction, working, advantages and application of ultrasonic emulsifiers.

OR

- B Describe Methods of extractions of active constituents from crude drugs in details.
3. Write short notes on any **Four** of the following : 20
 - A. Mechanisms and methods of size reduction
 - B. Methods of size separation
 - C. Silver son emulsifiers
 - D. Standards of powders
 - E. Procedure to prepare vasaka liquid extract according to I.P.
4. Answer any **Five** of the following :(two to three sentences) 10
 - A. Advantages of fluid energy mill
 - B. Percolation
 - C. Types of mixing
 - D. Objectives of size reduction
 - E. Define marc and menstrum
 - F. Maceration

SECTION-B

5. Describe with construction, working, advantages and application of spray dryers. 10
6. Answer any one out of two questions. 10
- A Describe in details different types of crystallizes (any two with diagram)

OR

- B Describe with construction, working, advantages and application of vacuum evaporators.
7. Write short notes on any **Four** of the following : 20
 - A. Drum dryer
 - B. Industrial scale distillation equipments
 - C. Tunnel dryers
 - D. Importance of extraction in pharmacy.
 - E. Factors affecting process of evaporation.
8. Answer any **Five** of the following :(two to three sentences) 10
 - A. Advantages of evaporating pan
 - B. Freeze drying
 - C. Advantages of Swenson walker crystallizer
 - D. Define crystals
 - E. Limitations of mier's theory
 - F. Define crystallization

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B. PHARM. (AYU.) THIRD YEAR EXAMINATION - August - 2024

PHARMACEUTICAL TECHNOLOGY OF AYURVEDIC DRUGS- I

Date : 24/08/2024

Time : 10:00 A.M. - 01:00 P.M.

Saturday

Marks : 100

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

SECTION-A

1. What are additives? Discuss the importance and types of preservatives. 10
2. Answer any one out of two questions. 10
 - A What is the emulsion ? discuss their merits and demerits in details ?
- OR**
- B What are liquid dosage forms ? Explain in detail ?
3. Write short notes on any **Four** of the following : 20
 - A. Organoleptic additives
 - B. Emulsifying agents
 - C. Identification tests for emulsion
 - D. Difference between Syrup & elixir
 - E. Difference between flocculated and deflocculated suspension
4. Answer any **Five** of the following :(two to three sentences) 10
 - A. Collodions
 - B. Effervescent granules
 - C. Preservatives
 - D. Disintegrating agents
 - E. Eutectic mixture
 - F. Define HLB values.

SECTION-B

5. Define suppositories. Explain method of preparation and evaluation parameters in detail. 10
6. Answer any one out of two questions. 10
 - A Discuss general formulation and bases for semisolid preparations ?
- OR**
- B What are the components of aerosol packaging ? Explain the importance
7. Write short notes on any **Four** of the following : 20
 - A. Various types of ointment bases.
 - B. Ideal requirements for suppositories
 - C. Different types of creams
 - D. Explain gels and jellies in detail.
 - E. Ideal requirements for suppositories.
8. Answer any **Five** of the following :(two to three sentences) 10
 - A. Define Bougies
 - B. Use of Cocoa butter
 - C. Propellants
 - D. Ear cone
 - E. Actuator
 - F. Pyrogens
