

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Final Year Examination : February-2023

**Rasashastra and Bhaishajya Kalpana – IV (Ayurvedic Pharmaceutics)**

Date: 13-02-2023  
Monday

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. Explain Standardization method of Herbal and Herbo-mineral drugs in detail. 10
2. Answer any one out of two questions. 10
- A Describe Nasal-preparations in detail.
- OR**
- B Describe Ophthalmological preparation in detail.
3. Write short notes on any **Four** of the following : 20
- A. Difference between *Asava* and *Arishta*
- B. *Dhumapaana*
- C. Preparation of *Kshaara-sutra*
- D. *Dashaanga-lepa*
- E. *Sahastra-dhauta Ghrita*
4. Answer any **Five** of the following :(two to three sentences) 10
- A. Dose of *Niruha-basti* and *Aasthaapana-basti*
- B. Dose of *Kavala* and *Gandusha*
- C. Precautions while making *Malahara-Kalpana*
- D. Packaging and storage of *Kshaara-sutra*
- E. Packaging and storage of *Sarjarasa malahara*
- F. Uses of *Upanaaha*

**SECTION-B**

5. Describe types, *Graahya-agraahya*, *Shodhana* and *Marana* of *Loha-dhatu* 10
6. Answer any one out of two questions. 10
- A Explain *Shankha* in detail.
- OR**
- B Explain *Pravala* in detail.
7. Write short notes on any **Four** of the following : 20
- A. *Nirutthikaran*
- B. *Yashada-Jaarana*
- C. *Saamanya* and *Vishishtha Shodhana* of *Tamra*
- D. *Tankana*
- E. *Shukti*
8. Answer any **Five** of the following :(two to three sentences) 10
- A. Dose and Anupaana of *Tamra-bhasma*
- B. Dose and Anupaana of *Rasa-sindura*
- C. Toxicity and antidote of *Naaga*
- D. Four formulations of *Loha*
- E. Two medicinal formulations of *Muktaa*
- F. Two medicinal formulations of *Zinc*

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GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Final Year Examination : February-2023

**Dravyaguna –III (Ayurvedic Pharmacology)**

Date: 14-02-2023  
Tuesday

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. Explain the Concept of *Aushadhayogasya karmukatvam* (Mode of action of classical formulations) according to *Ayurveda*. 10
2. Answer any one out of two questions. 10
- A What are the factors responsible for controversy and steps to resolve it with example of *Pashanbheda*.

**OR**

- B Method of collection, preservation and storage of drug according to *Ayurveda*.
3. Write short notes on any **Four** of the following : 20
- A. Write short not on *Rakshogna Karma*.  
B. Write short not on *Saviryata avadhi*.  
C. Resolve the controversy of *Jivanti*.  
D. *Vishaktata lakshana* of *Dhatura* and its management.  
E. Write short note on Impurities and purification technique of *Guggulu*.
4. Answer any **Five** of the following :(two to three sentences) 10
- A. *Shramahara Karma*.  
B. *Ashukari karma*.  
C. *Vayasthapan karma*.  
D. Botanical sources of *Brahmi*.  
E. *Shothahara karma*.  
F. Difference between *Vyavayi* and *Ashukari*.

**SECTION-B**

5. Write about *Astaloha* and *Panchasara* in detail. 10
6. Answer any one out of two questions. 10
- A Describe the drug *Bala* in detail.

**OR**

- B Describe the *Aushadhipanchamruta* and *Kshirtraya* in detail.
7. Write short notes on any **Four** of the following : 20
- A. What is the botanical source, *Veerya* and main action of *Rohitaka* and *Kharjura*.  
B. Synonyms, external morphology and actions of *Katuki*.  
C. Therapeutic action and formulations of *Parsikyavani* and *Karanja*.  
D. Write short note on *Kshirastaka*.  
E. Describe the *Rasapanchaka* and formulations of *Rasna* and *Punarnava*.
8. Answer any **Five** of the following :(two to three sentences) 10
- A. What are the ingredients of *Adhyapushpa*.  
B. Write down *Rasa-panchaka* of *Kapikachhu*.  
C. Write down the formulations of *Dadima* and *Jatamansi*.  
D. What is *Veerya* and main action of *Kupilu* and *Trivrit*.  
E. What are synonyms of *Palasha*.  
F. Write down the dose of *Ahifena* and *Bhanga*.

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**Forensic pharmacy & Pharmaceutical Management**

Date: 15-02-2023  
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. Discuss the Shops & Establishment act in brief. 10
2. Answer any one out of two questions. 10
  - A. Write the objectives and functions of PCI in brief.
- OR**
- B. Discuss labeling and packaging as per D & C Act.
3. Write short notes on any **Four** of the following : 20
  - A. Discuss the patent filing procedure.
  - B. According to the Drugs and Magic Remedies act, which classes of advertisements are not prohibited?
  - C. Discuss the handling of drugs & prescriptions by the pharmacist.
  - D. How can animals be prevented from cruelty during experimentation?
  - E. Discuss Narcotic drug legislation in brief.
4. Answer any **Five** of the following :(two to three sentences) 10
  - A. Define DCC and CDL.
  - B. Define Pollution and Pollutant.
  - C. Write any two examples of Psychotropic substances.
  - D. Define schedule A.
  - E. Which form should be used for the Application for a license to manufacture for sale of Ayurvedic/Siddha or Unani drugs?
  - F. Define schedule E (I)

**SECTION-B**

5. Write various factors affecting the Establishment of Plant. 10
6. Answer any one out of two questions. 10
  - A. Explain budgetary controls.
- OR**
- B. Explain scientific purchasing.
7. Write short notes on any **Four** of the following : 20
  - A. Discuss product layout versus process layout.
  - B. Explain the problem of productivity stores organization.
  - C. Explain window display.
  - D. Explain different types of training.
  - E. Sales promotion policies.
8. Answer any **Five** of the following :(two to three sentences) 10
  - A. Write any two names of Ayurvedic companies.
  - B. Define Marketing.
  - C. Quality Control.
  - D. Promotion.
  - E. Define Advertisement.
  - F. Budget.

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- Instructions: 1. Every question is compulsory.  
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**SECTION-A**

1. Explain importance of Stability study for Ayurvedic formulation with examples. 10
  2. Answer any **One** of the following: 10
    - A Write detail note on Incompatibilities.
- OR**
- B Explain the methods of coating of Tablets and coating defects in detail.
  3. Write short notes on any **Four** of the following: 20
    - A. Crystallinity and Polymorphism
    - B. Pilot plan scale up techniques
    - C. Pills and Lozenges
    - D. Dry and Wet granulation methods
    - E. Importance of Preformulations
  4. Answer any **Five** of the following (two to three sentences): 10
    - A. Lubricants
    - B. Hygroscopicity
    - C. Master formula
    - D. Mottling effect
    - E. Batch Manufacturing Procedure
    - F. Shelf life

**SECTION-B**

5. Define Microencapsulation. Enumerate the various techniques for preparation of Microencapsulation and explain Air suspension method in detail. 10
  6. Answer any **One** of the following: 10
    - A Explain various evaluation parameters for Parenteral preparations.
- OR**
- B What are the evaluation parameters for Containers?
  7. Write short notes on any **Four** of the following: 20
    - A. Vehicle for Parenteral preparations
    - B. Merits and demerits of Capsule
    - C. Soft gelatine Capsule
    - D. Targeted drug delivery system
    - E. Osmotic pumps and their applications
  8. Answer any **Five** of the following (two to three sentences): 10
    - A. Storage of Capsules
    - B. Use of Amber coloured glass
    - C. Define Sustained drug delivery system
    - D. Advantages of Microencapsulation
    - E. Osmotic Tablets
    - F. Nanoparticles

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GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Final Year Examination : February-2023

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

Date: 17-02-2023  
Friday

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. Explain Coagulation process and classification of Coagulants and Anti-coagulants. 10
2. Answer any **One** of the following: 10
  - A Explain the drugs used in treatments of Hypertension.
- OR**
- B Write detail note on drugs used in Asthma with their mechanism of actions.
3. Write short notes on any **Four** of the following: 20
  - A. Classification of Diuretics
  - B. Iron deficiency Anaemia
  - C. Classification of drugs used in treatments of Cough
  - D. Drugs used in treatments of Angina pectoris
  - E. Mechanism of urine formation
4. Answer any **Five** of the following (two to three sentences): 10
  - A. Examples of Anti-platelet drugs
  - B. Anti-diuretic drugs
  - C. Examples of Ayurvedic drugs used as Diuretics
  - D. Fibrinolytic drugs
  - E. Examples of Ayurvedic drugs used as Anaemia
  - F. Functions of Blood

**SECTION-B**

5. What is Diabetes Mellitus? Classify Anti-diabetic drugs with their mechanism of actions. 10
6. Answer any **One** of the following: 10
  - A Write a detail note on Immune reactions and drugs used as Immunosuppressants.
- OR**
- B Describe pathophysiology of inflammation and classify non-steroidal anti-inflammatory drugs.
7. Write short notes on any **Four** of the following: 20
  - A. Classification of Antimicrobial drugs
  - B. Estrogen
  - C. Growth hormones
  - D. Classification of Anticancer drugs
  - E. Analgesic drugs
8. Answer any **Five** of the following (two to three sentences): 10
  - A. Bacterial resistance
  - B. Ayurvedic drugs used in the treatment of Menstrual abnormalities
  - C. Name of Glucocorticoids
  - D. Ayurvedic drugs used in the treatment of Psoriasis
  - E. Ayurvedic drugs used in the treatment of Diabetes
  - F. Astringents

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**Pharmaceutical Analysis of Ayurvedic Drugs –III**

Date: 20-02-2023

Monday

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. Give analytical profile of Asava and Arishta and explain the estimation of Reducing Sugar in detail. 10
2. Answer any **One** of the following: 10
  - A What is C.G.L.P.? Explain Good Laboratory Practice (GLP) in brief.
- OR**
- B Explain determination of Volatile oil with diagram.
3. Write short notes on any **Four** of the following: 20
  - A. Total Solid content
  - B. Enumerate all the parameters for Churna preparation and explain L.O.D.
  - C. Explain process standardisation with examples
  - D. Saponification value
  - E. Enumerate different types of Refractometer and explain Refractive index
4. Answer any **Five** of the following:(two to three sentences) 10
  - A. Define: Specific gravity
  - B. Define: Iodine value
  - C. What is Quality?
  - D. Enumerate classical tests for Bhasma preparations
  - E. Why non-reducing sugar is so called?
  - F. Which table is used to calculate % of Sugar from the % of Copper?.

**SECTION-B**

5. Components of Good Manufacturing Practice (G.M.P.) in brief. 10
6. Answer any **One** of the following: 10
  - A Give analytical profile of Honey in brief.
- OR**
- B Differentiate between Quality Control & Quality Assurance and explain the Quality Control in brief.
7. Write short notes on any **Four** of the following: 20
  - A. Give procedures to estimate Fat content in Milk
  - B. Applications of AAS
  - C. Nitrogen content in Tea leaves
  - D. Concept of Quality Assurance in brief
  - E. Minimum area and equipments required for Capsule section according to GMP
8. Answer any **Five** of the following: (two to three sentences) 10
  - A. Name the procedure for the estimation of Sugar
  - B. Test for unboiled Milk
  - C. What is BMR?
  - D. What is ISO?
  - E. Test for artificial invert sugar in Honey
  - F. How much minimum space required for the building according to GMP?

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GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Final Year Examination : February-2023

**Pharmacognosy of Ayurvedic Drugs - III**

Date: 21-02-2023  
Tuesday

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. How the environmental & genetic factors affect on the raw drugs with suitable examples? 10
2. Answer any one out of two questions. 10
  - A Define volatile oil & its properties, classification tests and uses.
- OR**
- B What are secondary metabolites and discuss phytochemical screening in detail.
3. Write short notes on any **Four** of the following : 20
  - A. Soluble fibers
  - B. Endogenous factors
  - C. Ketones and Phenoles as volatile oil.
  - D. Natural colours used in Pharmaceutical industries
  - E. Cold extraction
4. Answer any **Five** of the following :(two to three sentences) 10
  - A. Give the latine name, family part used and uses of *Jatamansi*
  - B. *Swethchandani*
  - C. Give the latine name, family part used and uses of *Krishnajeerak*
  - D. Nylon as fibre.
  - E. Give the latine name, family part used and uses of *Devadaru*
  - F. Give the latine name, family part used and uses of Ester group plant

**SECTION-B**

5. Give details regarding nutraceuticals and its importance in ayurveda. 10
6. Answer any one out of two questions. 10
  - A Describe details about Insecticides and Rodenticides.
- OR**
- B Detail description on plants that cure Cancer and Diabetes.
7. Write short notes on any **Four** of the following : 20
  - A. Swine-flu
  - B. Prebiotics
  - C. Toxic plants
  - D. Narcotics
  - E. Pesticides
8. Answer any **Five** of the following :(two to three sentences) 10
  - A. Give the latin name, family part used and uses of *Shallaki*
  - B. EPA & DHA
  - C. Give the latin name, family part used and uses of *Trivrit*
  - D. AIDS
  - E. Give the latin name, family part used and uses of *Kulanjan*
  - F. PUFA

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