

INSTITUTE OF TEACHING AND RESEARCH IN AYURVEDA, JAMNAGAR

B. PHARM. (AYU.) SECOND YEAR EXAMINATION - August - 2023

RASASHASTRA AND BHAISHAJYA KALPANA - II(AYURVEDIC PHARMACEUTICS)

Date : 03/08/2023

Time : 02:30 P.M. - 05:30 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. Define *Churna Kalpana*. Explain its general method of preparation, dose storage and packaging by giving an example of *Hingvashtaka Churna*. 10
2. Answer any one out of two questions. 10
- A Define *Vati Kalpana*. Write about *Vyoshadi Vati*.

OR

- B Define *Avaleha Kalpana*. Describe its importance, general method of preparation, packaging and storage.
3. Write short notes on any **Four** of the following: 20
- A. Advantage and disadvantage of *Churna Kalpana*.
B. *Guggulu Shodhana*.
C. *Drakshadi Gutika*.
D. *Panaka Kalpana*.
E. *Shankhapushpi Sharkara*.
4. Answer any **Five** of the following :(two to three sentences) 10
- A. Write the shelf-life of *Avaleha Kalpana*.
B. Write the Latin name and family of *Guggulu*.
C. Write the Indication of *Triphala Guggulu*.
D. Write the indication of *Chyavanprash*.
E. Write the indication and anupan of *Sitopladi Churna*.
F. Write the ingredients of *Chandrodaya Varti*.

SECTION-B

5. Describe *Shodhana*, *Marana* and *Amritakarana* of *Abhraka*. 10
6. Answer any one out of two questions. 10
- A Write in detail about *Kajjali*.

OR

- B What is the importance of *Hingulottha Parada*? Describe the method of *Hingulottha Parada* in detail.
7. Write short notes on any **Four** of the following: 20
- A. Concept of *Lohitakarana*.
B. Concept of *Jaran*.
C. *Makshika Shodhana* and *Marana*.
D. *Tamra Parpati*.
E. 3rd and 6th *Samskara* of *Parada*.
8. Answer any **Five** of the following :(two to three sentences) 10
- A. Write the ingredients and use of *Shweta Parpati*.
B. Write the ingredients and dose of *Tribhuvankirti Rasa*.
C. Write any four example of *Kupipakva Rasayan* preparation.
D. Write any two formulation name of *Shilajit*.
E. Write the ingredients of *Laghuvasantmalati Rasa*.
F. Write the dose of *Swarna Makshika Bhasma*.

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DRAVYAGUNA - I

Date : 04/08/2023

Time : 02:30 P.M. - 05:30 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. Discuss *Guna* in detail. 10
 2. Answer any one out of two questions. 10
 - A Explain *Veerya* in detail.
- OR**
- B Discuss *Vipaka* in detail.
 3. Write short notes on any **Four** of the following: 20
 - A. Discuss types of *Rasas* and the effect of different *Rasas* on *Dosha* and *Mala*.
 - B. Write the classification of dravya according to *Chetan-Achetana bheda*.
 - C. Explain *Anulomana* and *Bhedaniya*.
 - D. *Yonibheda*.
 - E. Define *Dravyaguna Shastra* with its importance.
 4. Answer any **Five** of the following :(two to three sentences) 10
 - A. Define *Prabhava*.
 - B. *Medhya*.
 - C. Write the name of *Pancha Mahabhuta*.
 - D. *Rasayana*.
 - E. How many groups of drugs are included in *Charaka Dashemani*?
 - F. *Dahaprashmana*

SECTION-B

5. Write detail about *Arjuna*. 10
 6. Answer any one out of two questions. 10
 - A Discuss *Dashmoola* and *Vallipanchamoola*.
- OR**
- B Write botanical name, part used, *karma*, *prayoga* and any two synonyms of *Shatavari* and *Ashwagandha*.
 7. Write short notes on any **Four** of the following: 20
 - A. Write uses and formulations of *Gandharvahasta*.
 - B. Discuss *Triphala* and *Trikatu*.
 - C. Write botanical name and family of *Bhringaraja* and *Yasthimadhu*.
 - D. Write the difference between *Panchakola* and *Shadhaushna*.
 - E. Discuss *Sanshamana* and *Shodhana*.
 8. Answer any **Five** of the following :(Botanical name, family, part used and single main action) 10
 - A. *Ikshu*
 - B. *Amra*
 - C. *Surana*
 - D. *Taruni*
 - E. *Priyangu*
 - F. *Ketaki*

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B. PHARM. (AYU.) SECOND YEAR EXAMINATION - August - 2023

PHARMACOGNOSY OF AYURVEDIC DRUGS - I

Date : 05/08/2023

Time : 02:30 P.M. - 05:30 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. Discuss collection, processing and storage of crude drugs in detail. 10
2. What is the importance of tissue culture in pharmaceutical industry ? 10

OR

Describe the diagnostic characters of Apocynaceae family and give the morphological characters of any one medicinal plant belongs to it.

3. Write short notes on any **Four** of the following : 20
A. Discuss plant growth regulators.
B. Discuss plant as a source of drugs.
C. Write botanical description of plant Kumari.
D. Inflorescences.
E. Describe Thallophyta and Bryophyta in detail.
4. Answer any **Five** of the following :(two to three sentences) 10
A. Give uses of Vilayati Bhringraj.
B. Enumerate Margins of leaf.
C. What is Bark ?
D. Define ovule and ovary.
E. Write botanical name of two plants belonging to Rutaceae family.
F. Define Spermatophyta.

SECTION-B

5. Discuss Ayurvedic system of medicine in detail. 10
6. Enumerate simple tissues in detail. 10

OR

Define honey. Discuss its preparation. Mention its chemical constituents, purity tests and uses.

7. Write short notes on any **Four** of the following : 20
A. What is dicot stem ? Draw diagrammatic section of it, label and describe it in short.
B. Identification tests for carbohydrate.
C. Purity test and uses of Gum Ghati.
D. Alphabetical classification of crude drugs.
E. What are the importance of calcium oxalate and calcium carbonate in identification of crud drugs ?
8. Answer any **Five** of the following :(two to three sentences) 10
A. Define trichomes and enumerate its types.
B. Give name of various formulations of Ayurved system.
C. Define crude drug.
D. What is cork ?
E. Define phloem.
F. Give biological source and uses of Kokilaksha.

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B. PHARM. (AYU.) SECOND YEAR EXAMINATION - August - 2023

PHARMACEUTICAL BIOCHEMISTRY

Date : 07/08/2023

Time : 02:30 P.M. - 05:30 P.M.

Monday

Marks : 100

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

SECTION-A

1. Explain in detail the various factors affecting enzyme activity. 10
2. Answer any one out of **two** questions. 10
- A Define and classify lipids.
- OR**
- B Enlist differences between prokaryotes and eukaryotes.
3. Write short notes on any **Four** of the following : 20
 - A. Packaging of DNA in eukaryotes
 - B. Structure and function of mitochondria and chloroplast
 - C. Five commercial uses of carbohydrates
 - D. Active transport mechanism
 - E. Components of colorimeter
4. Answer any **Five** of the following :(two to three sentences) 10
 - A. Define facilitated diffusion. Give examples.
 - B. a. Why nucleus is called as the brain of the cell?
b. Why lysosomes are called as suicidal bags?
 - C. What are exoenzymes? Give examples.
 - D. What is suicidal inhibition?
 - E. Write the full forms of a. DNA b. RPM
 - F. Define reducing sugars. Give examples.

SECTION-B

5. Write a note on Vitamin C. 10
6. Answer any one out of **two** questions. 10
- A Write in detail the glycolysis pathway.
- OR**
- B Write a detailed note on Diabetes mellitus.
7. Write short notes on any **Four** of the following : 20
 - A. Pellagra
 - B. Cori cycle
 - C. Iron as a micro nutrient
 - D. Phase I reactions
 - E. Marasmus
8. Answer any **Five** of the following :(two to three sentences) 10
 - A. Define endogenous and exogenous obesity.
 - B. What is the importance of pentose phosphate pathway?
 - C. What is night blindness?
 - D. Name two natural antioxidants.
 - E. What is atherosclerosis?
 - F. Define hyperkalaemia and hypokalaemia.

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B. PHARM. (AYU.) SECOND YEAR EXAMINATION - August - 2023

PHYSICAL PHARMACY AND PHARMACEUTICS

Date : 08/08/2023

Time : 02:30 P.M. - 05:30 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. Describe the factors which govern the rate of a chemical reaction. 10
2. Answer any one out of two questions. 10
 - A. Explain second law of thermodynamics.
 - B. Why physical properties of matter are important topic in physical pharmacy?
3. Write a short note on any **Four** of the following : 20
 - A. Osmosis and Osmotic pressure.
 - B. Cup and Bob Viscometer.
 - C. Pseudoplastic Flow and Dialatant flow.
 - D. What is the difference between half life and shelf life.
 - E. Refractive index.
4. Answer any **Five** of the following : (two to three sentences) 10
 - A. Vapour pressure.
 - B. Rheology.
 - C. Dielectric constant.
 - D. Non-Newtonian flow.
 - E. Immiscible liquids.
 - F. Dipole moment.

SECTION-B

5. Discuss the methods for determination of interfacial tension. 10
6. Answer any one out of two questions. 10
 - A. Define suspension. Differentiate flocculated and deflocculated suspension.
 - B. Discuss methods of purification of colloidal dispersions.
7. Write a short note on any **Four** of the following : 20
 - A. Give difference between physical and chemical adsorption.
 - B. Discuss evaluation parameters for Emulsion in brief.
 - C. Explain Angle of repose.
 - D. Enlist the various methods for particle size determination and explain any one in brief.
 - E. Explain various Factors affecting flow properties of powders.
8. Answer any **Five** of the following : (two to three sentences) 10
 - A. Cationic surfactant.
 - B. What is HLB?
 - C. Surface tension.
 - D. Porosity.
 - E. Adsorbate.
 - F. Bulk density.

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B. PHARM. (AYU.) SECOND YEAR EXAMINATION - August - 2023

PHARMACEUTICAL ANALYSIS OF AYURVEDIC DRUGS

Date : 09/08/2023

Time : 02:30 P.M. - 05:30 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. Explain weight variation & disintegration time of tablet. 10
2. Answer any one out of two questions. 10
 - A Discuss sampling methodology & importance of sampling in pharmaceutical formulation.
- OR
- B Define iodine value. Explain its determination.
3. Write short notes on any **Four** of the following : 20
 - A. Foreign matter.
 - B. Determination of Acid value.
 - C. Classify oil and fat.
 - D. Moisture content.
 - E. Sampling methods for bulk material of drug.
4. Answer any **Five** of the following :(two to three sentences) 10
 - A. Give significance of refractive Index
 - B. Importance of disintegration test for tablet.
 - C. Define Saponification value.
 - D. Define Total solid.
 - E. Define water soluble Ash.
 - F. Define Specific Gravity.

SECTION-B

5. Determination of alcohol content in Asava and Arishta preparation. 10
6. Answer any one out of two questions. 10
 - A Write down estimation method for mercury.
- OR
- B Discuss different types of extraction method used in Avaleha & Paka preparations.
7. Write short notes on any **Four** of the following : 20
 - A. Classical parameters for evaluation of Bhasma.
 - B. Ash value determination in Avaleha and Paka preparation.
 - C. Determination of volatile constituents.
 - D. Estimation of specific gravity in Asava preparation and its importance.
 - E. Define reducing and non-reducing sugar with examples.
8. Answer any **Five** of the following :(two to three sentences) 10
 - A. Why is lead acetate solution added in estimation of sugar?
 - B. Explain Fehling test for sugar
 - C. Give examples of sulphur containing drug.
 - D. Give qualitative tests for Calcium.
 - E. Write difference between Avleha and Paka.
 - F. Give qualitative tests for Iron.

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B. PHARM. (AYU.) SECOND YEAR EXAMINATION - August - 2023

PHARMACEUTICAL MICROBIOLOGY

Date : 10/08/2023

Time : 02:30 P.M. - 05:30 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. Write a note on Robert Koch and his postulates. 10
2. Answer any one out of two questions. 10
A Write differences between Gram+ve and Gram-ve bacteria.

OR

- B Explain beneficial and harmful effects of fungi with suitable examples.
3. Write short notes on any **Four** of the following: 20
A. Bacterial identification test based on carbohydrate fermentation.
B. Mechanism of Natural transformation.
C. Contributions of Joseph Lister.
D. Principle of Autoclave.
E. Bacterial flagella.

4. Answer any **Five** of the following :(two to three sentences) 10
A. Name two viruses with the diseases they cause.
B. Name the scientists who developed the following processes.
(1) Tyndallisation (2) Pasteurization
C. Give two examples of selective and differential media.
D. Give full forms of the following: (a) SEM (b) MR test
E. Define conjugation.
F. What is the function of bacterial pilli?

SECTION-B

5. Write a note on structure and types of antibodies. 10
6. Answer any one out of two questions. 10
A Explain Indian pharmacopeia microbiological guidance for herbal drugs

OR

- B Which are various methods of evaluation of disinfectants? Explain any one in detail.
7. Write short notes on any **Four** of the following: 20
A. Sterilization by heat.
B. Microbial examination of water
C. Immuno fluorescence
D. Membrane filtration
E. Disc diffusion test for drug sensitivity.

8. Answer any **Five** of the following :(two to three sentences) 10
A. Which organisms cause the following food borne diseases?
(1) Botulism (2) Salmonellosis
B. Write full forms of (a) BOD (b) RIA
C. What is potable water?
D. Define an antibiotic? Give 2 examples
E. Define the terms (a) Bacteriostatic (b) Bactericidal
F. What information phosphatase test gives about milk?
