

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Second Year Examination : May - 2019

**Rasashastra & Bhaishajya Kalpana – II (Ayurvedic Pharmaceutics)**

Date: 20-05-2019  
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. What is churna ? State the ingredients, method, dose, use, shelf life packing and storage of Hingvastak churna. 10
  2. Describe Vyoshadi vati in detail. 10
- OR**
- Write method of preparation of Simhanada guggulu, its dose and use.
3. Write short notes on any **Four** of the following : 20
    - A. Mudvika avleha.
    - B. Guggulu Shodhan.
    - C. Current trends of Vati kalpana.
    - D. Packing, storage and shelf life of Guggulu kalpana and Avleha Kalpana.
    - E. Varti Kalpana.
  4. Answer any **Five** of the following :(two to three sentences) 10
    - A. Paka-pariksha of Vasa-avleha.
    - B. Ingredients of Drakshadi gutika.
    - C. Use of Chandrodaya varti.
    - D. Sitopaladi churna – ingredients with proportion.
    - E. Pathya-apathya of guggulu kalpana.
    - F. Dose, anupan and use of Triphala guggulu.

**SECTION-B**

5. Enlist the Maharasa dravyas and describe in detail Abhrak maran along with its dose, anupan and use. 10
  6. Describe Rasaparpati in detail. 10
- OR**
- What is Kharaliya rasayan ? Write about Tribhuvankirti rasa.
7. Write short notes on any **Four** of the following : 20
    - A. Trividha patan samskar of Parada.
    - B. Laghuvasantmalti rasa.
    - C. Makshika shodhan and maran.
    - D. Shilajatu shodhan.
    - E. Sveta parpati.
  8. Answer any **Five** of the following :(two to three sentences) 10
    - A. Colour of Kajjali and its use.
    - B. Vikar nivaran of Tutha.
    - C. Ideally, how much Parada can be obtained from Hingul in Hingulotha Parada ?
    - D. Give two formulations of Shilajit.
    - E. Grahya Abhraka.
    - F. What is Parpati kalpa prayoga ?

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GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Second Year Examination : May - 2019

**Dravyaguna – I (Ayurvedic Pharmacology)**

Date: 21-05-2019  
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. Describe Rasapanchaka along with its Effect on Doshas. 10
2. Answer any one out of two questions. 10
  - A. Write classification of Aushadha dravya according to Charaka.
- OR**
- B. Give definition, detail description about Madakari and Medhya.
3. Write short notes on any **Four** of the following : 20
  - A. What is Prabhava? Explain Prabhava with suitable examples.
  - B. Yoni bheda
  - C. Explain Rasa and Anurasa.
  - D. What is Dravyaguna and explain importance of Dravyaguna Shastra.
  - E. Balya
4. Answer any **Five** of the following :(two to three sentences) 10
  - A. Enlist dravya according to Viryabheda
  - B. Which Rasas are considering as Saumya and Agney Rasas?
  - C. Chakshushya
  - D. Difference between Rasa and Vipak
  - E. Ahar dravya according to Shushrut.
  - F. Shukrarechan

**SECTION-B**

5. Give detail note on Ashwgandha. 10
6. Answer any one out of two questions. 10
  - A. Define Dashmoola with its Latin name and collective actions.
- OR**
- B. Write botanical name, synonyms, Rasapanchak, part used and main action of Amalaki and Haritaki.
7. Write short notes on any **Four** of the following : 20
  - A. Give Part used, family, synonyms, formulations and habit of Arjuna.
  - B. Give botanical name, family, part used, veerya and main action of Changeri.
  - C. Give Part used, family, synonyms, dose and habitat of any one Deepan dravya.
  - D. Panchkola
  - E. Give botanical name, family, part used, veerya and main action of Twak.
8. Answer any **Five** of the following :(two to three sentences) 10
  - A. Rasapanchaka and main action of Marich.
  - B. Formulation and morphology of Chitraka
  - C. Main action and Latine name of Nili.
  - D. Trikantaka
  - E. Rasapanchak of Sunthi and Adraka.
  - F. Veery and botanical name of Darbha.

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GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Second Year Examination : May - 2019

**Pharmacognosy of Ayurvedic Drugs – I**

Date: 22-05-2019  
Wednesday

Time: 02:30 P.M. to 05:30 P.M.  
Marks: 100

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

**SECTION-A**

1. Define Leaf & give its detail classification with suitable examples. 10
  2. Answer any one out of two questions. 10
    - A. Discuss Tissue Culture as a source of drugs.
- OR**
- B. Describe the diagnostic characters of Malvaceae family and give the morphological characters of any one medicinal plant belonging to it.
3. Write short notes on any **Four** of the following : 20
    - A. Types of root.
    - B. Shapes of leaf.
    - C. Asexual method of propagation with advantages and disadvantages.
    - D. Give botanical description on plant Datura.
    - E. Schizocarpic fruit.
  4. Answer any **Five** of the following :(two to three sentences) 10
    - A. Describe pteridophyta.
    - B. Define leaf.
    - C. Nut
    - D. Spike
    - E. Give uses of Chakramard.
    - F. Biological source of Kumari.

**SECTION-B**

5. Discuss in detail Homeopathy system of medicine. 10
  6. Answer any one out of two questions. 10
    - A. Define crude drugs. How they are classified? Discuss each classification in detail with suitable examples.
- OR**
- B. Define honey. Discuss its preparation. Mention its chemical constituents, purity test and uses.
7. Write short notes on any **Four** of the following: 20
    - A. Discuss epidermis & cork in detail.
    - B. Discuss phloem in detail.
    - C. Identification tests for carbohydrate.
    - D. Role of trichomes in Pharmacognosy
    - E. Gado satwa.
  8. Answer any **Five** of the following :(two to three sentences) 10
    - A. What is Yoga and Naturopathy?
    - B. Define organized drugs.
    - C. Define Testa.
    - D. Biological source and uses of Ashwagol.
    - E. Preparation of Karaya gum.
    - F. Biological source and uses of Babbula.

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GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Second Year Examination : May - 2019

**Pharmaceutical Biochemistry**

Date: 23-05-2019  
Thursday

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. Define and classify carbohydrates. 10
2. Answer any one out of two questions. 10
  - A. Enlist differences between eukaryotes and prokaryotes.
- OR**
- B. Write about the various factors effecting enzyme activity.
3. Write short notes on any **Four** of the following : 20
  - A. Differences between colorimeter and spectrophotometer
  - B. Structure and function of cell membrane
  - C. Enzyme classification
  - D. Active transport
  - E. Different types of RNA
4. Answer any **Five** of the following :(two to three sentences) 10
  - A. What is pI value of an amino acid?
  - B. Define PUFA. Give examples.
  - C. What is the difference between R.E.R. and S.E.R.?
  - D. Define Beer's and Lambert's law.
  - E. What are coenzymes? Give examples.
  - F. Define epimers. Give examples.

**SECTION-B**

5. Write a note on urea cycle. 10
6. Answer any one out of two questions. 10
  - A. What are xenobiotics? Write the phase I and phase II reactions.
- OR**
- B. Write a note on obesity.
7. Write short notes on any **Four** of the following : 20
  - A. Folic acid
  - B. Cori's cycle
  - C. Type I Diabetes
  - D. Chlorine as a mineral
  - E. Antioxidants
8. Answer any **Five** of the following :(two to three sentences) 10
  - A. What is PEM? Name two diseases caused by it.
  - B. What is the importance of gluconeogenesis pathway?
  - C. What is hypernatremia and hyponatremia?
  - D. What are the coenzyme forms of niacin, riboflavin, folic acid and pyridoxine?
  - E. What are the classical symptoms of riboflavin deficiency?
  - F. Name the pathway that generates five carbon sugars? Give the importance of that sugar.

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GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Second Year Examination : May - 2019

**Physical Pharmacy and Pharmaceutics**

Date: 24-05-2019  
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 non-newtonian type of flow with rheograms mechanism and suitable 10 examples.
2. Answer any one out of two questions. 10
  - A. Write influence of temperature and other factor on reaction rates.
  - B. Write the difference between dielectric control and dipole moment.
3. Write a short note on any **Four** of the following : 20
  - A. Refractive index.
  - B. Note on second law of thermodynamics.
  - C. Explain work of expansion.
  - D. Theory of thermochemistry.
  - E. Write the principle and working of Ostwald viscometer.
4. Answer any **Five** of the following : 10
  - A. Self life.
  - B. Entropy.
  - C. Dielectric constant.
  - D. Concentration units.
  - E. Plastic flow.
  - F. Sublimation.

**SECTION-B**

5. Discuss methods of purification of colloid dispersions. 10
6. Answer any one out of two questions. 10
  - A. Explain in detail the term interfacial tension their factors affecting.
  - B. Narrate methods for particle size determination.
7. Write a short note on any **Four** of the following : 20
  - A. Explain effect of Brownian movement.
  - B. Describe the process of detergency.
  - C. Difference between physical and chemical adsorption.
  - D. Particle and powder characteristics.
  - E. Angle of repose.
8. Answer any **Five** of the following : 10
  - A. Porosity.
  - B. True density.
  - C. Zeta potential.
  - D. Adsorbate.
  - E. Give two examples of lyophobic colloids.
  - F. Write two advantages of suspensions.

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# GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Second Year Examination : May - 2019

## Pharmaceutical Analysis of Ayurvedic Drugs - I

Date: 25-05-2019  
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. Explain the importance of sampling. Discuss sampling methods for different types of formulations in Ayurveda in brief. 10
2. Answer any one out of two questions. 10
  - A. Explain different methods for evaluation of quality of tablets.
  - B. What are oils and fats chemically? Classify them and explain any two parameters in detail.
3. Write a short note on any **Four** of the following : 20
  - A. Refractive index in ayurvedic preparation.
  - B. Explain Foreign matter with its significance in ayurvedic manufacturing .
  - C. Alcohol soluble extractive value.
  - D. Acid insoluble ash with its significance.
  - E. What is RMPK values? Explain in brief.
4. Answer any **Five** of the following : (two to three sentences) 10
  - A. Define: - Acid value.
  - B. Who invented pH scale? Enumerate methods of pH determination.
  - C. Define: - Saponification value.
  - D. Enumerate 5 drugs containing volatile oil.
  - E. Which instrument is used for determination of volatile oil?.
  - F. Enumerate two apparatus used to determine specific gravity.

### SECTION-B

5. How many types of sugars you know in Ayurveda? Name the procedure you adopt for estimation of sugar and explain how will you estimate reducing sugar. 10
6. Answer any one out of two questions. 10
  - A. What do you understand by herbo-mineral formulation? Give procedure for quantitative estimation of calcium in bhasma preparation.
  - B. How do Asva and Arishta differ? Explain determination of alcohol content in Ashokarishta.
7. Write a short note on any **Four** of the following : 20
  - A. L.O.D with special reference to avaleha preparation.
  - B. Qualitative tests for calcium and sodium.
  - C. Explain different classical tests for evaluation of bhasma.
  - D. Total solid content as quality control tool.
  - E. Ash value with its significance.
8. Answer any **Five** of the following : (two to three sentences) 10
  - A. Enumerate 10 different formulations containing sugar in Ayurveda.
  - B. Qualitative tests for Mercury.
  - C. Which table you used for determination of sugar percentage?
  - D. Difference between avleha and paka.
  - E. Enumerate calcium containing 4 formulations.
  - F. Role of lead acetate in sugar estimation.

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GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Second Year Examination : May - 2019

**Pharmaceutical Microbiology**

Date: 27-05-2019  
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. Write differences between Prokaryotes & Eukaryotes. 10
2. Write about the technique P.C.R. 10

**OR**

Bacterial identification on the basis of carbohydrate metabolism.

3. Write short notes on any **Four** of the following : 20
  - A. Write a note on bacterial motility.
  - B. Define transformation and write the mechanism of DNA transfer.
  - C. Draw the structure & explain the Gram +ve cell wall.
  - D. Anaerobic cultivation of organisms.
  - E. Describe different types of virus morphology.
4. Answer any **Five** of the following :(two to three sentences) 10
  - A. Write the principle of phase contrast microscopy.
  - B. Who is the father of bacteriology & modern microbiology ?
  - C. Name two acid fast organisms.
  - D. Name two gram+ve & gram-ve bacteria.
  - E. Name any two fungal diseases with causative organisms.
  - F. Why bacteria cannot grow on SDA ?

**SECTION-B**

5. Write a note on innate immune system. 10
6. Discuss the various methods of food preservation. 10

**OR**

Define and write a note on Physical methods of sterilization.

7. Write short notes on any **Four** of the following : 20
  - A. Write a note on drug resistance in bacteria.
  - B. Write a note on sterilization by dry heat.
  - C. What are the properties of disinfectants ?
  - D. What are the mechanisms for autoimmunity ?
  - E. Membrane filtration process.
8. Answer any **Five** of the following :(two to three sentences) 10
  - A. Define adaptive immunity.
  - B. What is the full form of R W Test & C M test ?
  - C. Define pasteurization.
  - D. Why water is treated with alum & Chlorine ?
  - E. Define autoimmune diseases.
  - F. Define bacteriostatic & bactericidal agents.

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