

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Second Year Examination : April - 2016

Rasashastra & Bhaishajya Kalpana – II (Ayurvedic Pharmaceutics)

Date: 18-04-2016
Monday

Time: 02:30 P.M. to 5:30 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 different stages of Avaleha Kalpana. Write the preparatory method, dose and use of Chyavanaprasha. 10
2. Answer any one out of two questions. 10
 - A. Describe the preparatory method of Sharkara Kalpana with Paka Pariksha, storage and shelf life.
 - B. Describe the synonyms, types and preparatory method of Vati Kalpana.
3. Write a short note on any **Four** of the following : 20
 - A. Hingvashtaka Churna.
 - B. Explain the types of Churna Kalpana according to modern pharmaceutics.
 - C. Describe the precaution while taking Guggulu Kalpana.
 - D. Samshamani Vati.
 - E. Describe the types, preparation method and use of Varti Kalpana.
4. Answer any **Five** out of six questions : 10
 - A. Shelf life of Panaka Kalpana.
 - B. Dose of Guduchi Satva.
 - C. Ingredients of Triphala Guggulu.
 - D. Use of Drakshadi Gutika.
 - E. Gudapaka Pariksha.
 - F. Shankhpushpi Sharkara – ingredients and use.

SECTION-B

5. Describe Shilajit in detail. 10
6. Write any **one** out of two questions : 10
 - A. Write the Shodhana and Marana process of Maharasa Dravya.
 - B. Hingulottha Parada.
7. Write a short note on any **Four** of the following : 20
 - A. Dhanyabhraka.
 - B. What is Shodhana ? Describe its importance.
 - C. Write short notes on Amritakarana and Satvapatana.
 - D. Describe any two Samskara of Parada.
 - E. Trividha Parpati Paka Pariksha.
8. Answer any **Five** of six questions : 10
 - A. Abhraka Bhasma Pariksha.
 - B. Write Rekhapurna examination with its importance.
 - C. Enlist the names of Ashta Samskara of Parada.
 - D. Rasa Parpati – dose and use.
 - E. Kajjali – ingredients and use.
 - F. Give two formulations of Tuttha.

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B. Pharm(Ayu.) Second Year Examination : April - 2016

Dravyaguna - I

Date: 19-04-2016
Tuesday

Time: 02:30 P.M. to 5:30 P.M.
Marks: 100

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

SECTION-A

1. Mention importance of Dravyaguna Vigyana in present era. 10
2. Answer any one out of two questions. 10
 - A. Write action of Sharira Guna on Dosha ad Mala.
 - B. Give detail description of Rasayana and Vajikarana Karma.
3. Write a short note on any Four of the following : 20
 - A. Write about tools regarding classification of Dravya.
 - B. Vipaka.
 - C. Compare Dipana nad Pachana Karma with examples.
 - D. Define Ahara Dravyas and Aushadha Dravya.
 - E. Give detail description of Katu Rasa.
4. Answer any Five of the following : 10
 - A. Write about Panchabhautika Samgathana of Virechana Karma.
 - B. Give two examples having Amla Vipaka.
 - C. Enlist any two Prabhavajanya Karma.
 - D. Give two examples of Chakshushya Dravya.
 - E. Enlist any two Dravyas having Kashaya Rasa.
 - F. Give four examples of Anushna Veerya.

SECTION-B

5. Describe Haritaki in detail. 10
6. Answer any one out of two questions. 10
 - A. Write about five Dravyas which act through Prabhava with their Botanical name and family.
 - B. Write botanical name, family, part used and main action of Japa, Nala, Nill, Mundi and Vata.
7. Write a short note on any Four of the following : 20
 - A. Any two Dravyas from Leguminosae family.
 - B. Vidari Kanda.
 - C. Shadushana.
 - D. Yashtimadhu.
 - E. External morphological description of Vijaysara with its habitat.
8. Answer any Five of the following : 10
 - A. Write dose and two formulations of Ashoka.
 - B. Write ingredients of Trimada.
 - C. Write Rasa Panchaka of Gambhari.
 - D. Chemical composition of Musta.
 - E. Write about varieties of Tulsi.
 - F. Write four synonyms of Kantakari.

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B. Pharm(Ayu.) Second Year Examination : April - 2016

Pharmacognosy of Ayurvedic Drugs – I

Date: 21-04-2016
Thursday

Time: 02:30 P.M. to 5:30 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 Spermatophy to in detail with suitable examples. 10
2. Answer any one out of two questions. 10
 - A. Describe the diagnostic characters of Malvaceae family and give morphological characters of any one medicinal plant belongs to it.
 - B. Discuss the role of tissue culture in pharmacy.
3. Write a short note on any **Four** of the following : 20
 - A. Write a note on vegetative cultivation of plants.
 - B. Discuss raceme and verticillaster inflorescence with suitable examples.
 - C. Explain basal and free central placentation in detail.
 - D. Discuss minerals as a source of drug.
 - E. Give a note on bryophytes and pteridophytes.
4. Answer any **Five** out of six questions : 10
 - A. What is Lichen ?
 - B. Give the Botanical name and family of Bala..
 - C. What is artificial drying ?
 - D. Define Root.
 - E. What is binomial nomenclature ?
 - F. Give floral key of Fabaceae.

SECTION-B

5. Give an account on Ayurvedic system of medicine. 10
6. Write any **one** out of two questions : 10
 - A. Explain microscopic and chemical classification with suitable examples.
 - B. Discuss and differentiate Dicot and monocot stem by giving drug examples, draw the diagrammatic sketch and label.
7. Write a short note on any **Four** of the following : 20
 - A. What is parenchyma ? Discuss in detail and draw its various shapes found in different drugs.
 - B. Explain morphological classification with suitable examples.
 - C. Discuss scope of pharmacognosy in detail.
 - D. Write note on xylem elements.
 - E. What is stomata ? Explain in detail.
8. Answer any **Five** of six questions : 10
 - A. Define Phloem.
 - B. Define stone cells.
 - C. What do you mean by starch ?
 - D. Define Pharmacognosy.
 - E. Give biological source, chemical constituents and uses of Tragacanth.
 - F. Give biological source, chemical constituents and uses of Brihat Gookshura.

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B. Pharm(Ayu.) Second Year Examination : April - 2016

Pharmaceutical Biochemistry

Date: 22-04-2016
Friday

Time: 02:30 P.M. to 5:30 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 Lipids. Classify Lipids. 10
2. Answer any one out of two questions. 10
 - A. Which are the criteria of defining a cell. Give the structural and functional aspects of any five cell organelles.
 - B. Explain the significance of DNA packaging and describe in brief its structure.
3. Answer any **Four** out of five questions : 20
 - A. What is uncompetitive inhibition ? Give suitable examples.
 - B. Write a short note on ultra centrifuge.
 - C. Write short note on folic acid.
 - D. Explain the separation of different lipoproteins.
 - E. What is oxidative stress ? Which are the naturally occurring anti-oxidants ?
4. Answer any **Five** out of six questions : 10
 - A. What is cell theory ?
 - B. Explain osmosis.
 - C. Define Katal and turnover number.
 - D. Mention any four nucleotides that act as coenzyme.
 - E. What is hyperparathyroidism ?
 - F. Draw a labelled diagram of mitochondria.

SECTION-B

5. Describe β oxidation of even chain fatty acids and its regulations. 10
6. Write any **one** out of two questions : 10
 - A. What are the various bio-chemical roles of calcium ?
 - B. What are Ketone bodies ? What are the effects of increased levels of Ketone bodies in body ?
7. Answer any **Four** out of five questions : 20
 - A. Write a short note on Kwashiorkor.
 - B. Describe phase - I reaction of biotransformation.
 - C. Explain significance of urea cycle.
 - D. Write short note on fats as a Macronutrients.
 - E. Enlist food resources and mention RDA values of fat soluble vitamins.
8. Answer any **Five** of six questions : 10
 - A. Define hypertrophic and hyperplastic obesity.
 - B. Why ETC and Oxidative Phosphorylation process are called coupled rxns ?
 - C. Which are the hallmarks of type - II D.M. ?
 - D. How do heavy metals enter our body ?
 - E. What is pellagra ?
 - F. Write the full form of given abbreviations -
(1) PEM, (2) TCA, (3) LDH, (4) cGMP

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Second Year Examination : April - 2016

Physical Pharmacy and Pharmaceutics

Date: 23-04-2016
Saturday

Time: 02:30 P.M. to 5:30 P.M.
Marks: 100

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

SECTION-A

1. Narrate order of reaction and its importance in pharmacy. 10
2. Answer any one out of two questions. 10
 - A. What is viscosity ? Discuss factor affecting viscosity and methods to determine viscosity.
 - B. Explain methods of determination of boiling point and freezing point.
3. Write a short note on any **Four** of the following : 20
 - A. Difference between half-life and shelf life.
 - B. Enthalpy and entropy.
 - C. Kirchoff's reaction.
 - D. Refractive index.
 - E. Osmosis and osmotic pressure.
4. Answer any **Five** of the following : 10
 - A. Adiabatic process.
 - B. Immiscible liquids.
 - C. Types of solutions.
 - D. Concentration unit.
 - E. Sublimation.
 - F. Dipole moment.

SECTION-B

5. Describe any three methods of preparation of lyophobic colloids. 10
6. Answer any one out of two questions. 10
 - A. Discuss various methods to determine surface tension.
 - B. Define suspension. Discuss types advantages and disadvantages of suspension.
7. Write a short note on any **Four** of the following : 20
 - A. Spreading coefficient.
 - B. Application of surface active agent.
 - C. Flocculated and deflocculated suspension.
 - D. Partical size and powder characteristics.
 - E. CMC and Kraft point.
8. Answer any **Five** of the following : 10
 - A. Interface.
 - B. Thixotropy.
 - C. Brownian motion.
 - D. Bulk density.
 - E. Eutectic mixture.
 - F. Porosity.

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B. Pharm(Ayu.) Second Year Examination : April - 2016

Pharmaceutical Analysis of Ayurvedic Drugs - I

Date: 25-04-2016
Monday

Time: 02:30 P.M. to 5:30 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 oils and fats classification with important analytical parameters. 10
2. Answer any one out of two questions. 10
 - A. Discuss analysis parameters for powder drugs preparations.
 - B. Sampling methods for liquid preparations.
3. Write a short note on any **Four** of the following : 20
 - A. Importance of iodine value and peroxide value in oils.
 - B. Instruments used for physical methods of analysis.
 - C. Moisture in solid samples.
 - D. Differential disintegration and dissolution of tablets.
 - E. Discuss solvent effect with respect to extractive value.
4. Answer any **Five** of the following : 10
 - A. Water soluble Ash.
 - B. Friability.
 - C. Fluorescence analysis.
 - D. Total solid in Avaleha preparation.
 - E. Weight variation test for tablets.
 - F. Specific gravity.

SECTION-B

5. Discuss different methods of analysis for metallic and mineral preparations. 10
6. Answer any one out of two questions. 10
 - A. Narrate special analytical parameters for preparation with fermentation.
 - B. Discuss analysis for preparations with heat exposure and additional sugar load.
7. Write a short note on any **Four** of the following : 20
 - A. Qualitative and quantitative estimation of lead containing drugs.
 - B. Differentiate Kshara and Bhasma.
 - C. Analysis of powder drugs with heat exposure.
 - D. How solubility affects when sample treated with weak acids.
 - E. Optical methods for sodium and potassium.
8. Answer any **Five** of the following : 10
 - A. Qualitative tests for phosphate and arsenic.
 - B. Consistency characteristics in Avaleha and Paka preparations.
 - C. Volatile oil in Ayurvedic preparations.
 - D. Water extractive parameters.
 - E. Quantitative estimation of chloride and sulphate.
 - F. Sugar content.

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B. Pharm(Ayu.) Second Year Examination : April - 2016

Pharmaceutical Microbiology

Date: 26-04-2016
Tuesday

Time: 02:30 P.M. to 5:30 P.M.
Marks: 100

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

SECTION-A

1. Louis Pasteur and John Tyndall. 10
2. Answer any one out of two questions. 10
 - A. Counting and cultivation of bacteria.
 - B. Explain transformation with mechanism.
3. Write a short note on any **Four** of the following : 20
 - A. PCR.
 - B. Test for metabolism of carbohydrates.
 - C. Applications of fermentation.
 - D. Difference between Prokaryotes and eukaryotes.
 - E. Structure and properties of viruses.
4. Answer any **Five** of the following : 10
 - A. Salient features of fungi.
 - B. Give two names of aerobic bacteria.
 - C. Classify enzymes.
 - D. What is conjugation ?
 - E. Parameters of ideal fermenter.
 - F. Write the importance of capsule and spore in a bacteria.

SECTION-B

5. What are disinfectant ? Explain method of testing stability after dilution. 10
6. Answer any one out of two questions. 10
 - A. Explain the types of immunity, definition and properties of antigen.
 - B. What is drug resistance ? Explain the type, mechanism and genetic origin of drug resistance.
7. Write a short note on any **Four** of the following : 20
 - A. Biochemical oxygen demand.
 - B. Ag-Ab reaction method through precipitation.
 - C. Widal test.
 - D. RIA.
 - E. ELISA.
8. Answer any **Five** of the following : 10
 - A. Define autoimmunity with example.
 - B. Define bacteriostatic and bactericidal.
 - C. Define immunity and classify.
 - D. Name two diseases caused by food borne intoxication.
 - E. Ig-D.
 - F. Define wet heat sterilization and dry-heat sterilization.

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Second Year Examination : April - 2016 (OLD SYLLABUS)

Dispensing, Community Pharmacy and Hospital Pharmacy

Date: 27-04-2016
Wednesday

Time: 02:30 P.M. to 5:30 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 an essay on prescription including its various parts. 10
2. Answer any one out of two questions. 10
 - A. Write in detail on posology.
 - B. Write in detail on procedures adopted in dispensing Asava and Arishta.
3. Write a short note on any **Four** of the following : 20
 - A. Write about the contribution of pharmacist in community health care education.
 - B. What are the requirements for wholesale pharmacy ?
 - C. Explain Pharmaco vigilance in detail.
 - D. Write about maintenance of drug store.
 - E. Explain on packaging of tablets.
4. Answer any **Five** of the following : 10
 - A. Explain the term incompatibility.
 - B. Write difference between Asava and Arishta.
 - C. What is term 'Retailer' ?
 - D. Explain the term 'closer'.
 - E. What is stability ?
 - F. What does the term 'superscription' ?

SECTION-B

5. Write an essay on Hospital pharmacy. 10
6. Write a short note on any **Four** of the following : 10
 - A. Write in detail on drug distribution system in hospital.
 - B. Write in detail on processing of syrup.
7. Write a short note on any **Four** of the following : 20
 - A. Write in detail on drug information service.
 - B. Write about drug budget.
 - C. What is surgical dressing ?
 - D. Write on concepts of sterilization in Ayurvedic Medicines.
 - E. Write on functions of hospital.
8. Answer any **Five** of the following : 10
 - A. Write on use wise classification of tablets.
 - B. Write on types of capsules.
 - C. Define the term 'chemical sterilization'.
 - D. What is the use of hot air oven.
 - E. Write the classification of hospital on the basis of medicine used.
 - F. What is Tinctures ?
