

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Second Year Examination : November - 2015

Rasashastra & Bhaishajya Kalpana – II (Ayurvedic Pharmaceutics)

Date: 30-11-2015
Monday

Time: 09:30 A.M. to 12:30 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 the definition of Varti Kalpana and describe Chandrodaya Varti. 10
2. Answer any one out of two questions. 10
 - A. Describe Churna Kalpana and write about Dashana Samskara Churna.
 - B. Describe Vati Kalpana and write about Lavangadi Vati.
3. Answer any Four out of five questions : 20
 - A. Guggulu Kalpana.
 - B. Panaka Kalpana.
 - C. Sitopaladi Churna.
 - D. Samshamani Vati.
 - E. Vasa Avaleha.
4. Answer any Five out of six questions : 10
 - A. Use of Triphala Guggulu.
 - B. Shelf life of Avaleha Kalpana.
 - C. Shelf life of Sharkara Kalpana.
 - D. Ingredients of Gulaba Sharkara.
 - E. Guduchi Satva.
 - F. Dose of Ghana Kalpana.

SECTION-B

5. Hingulottha Parada. 10
6. Write any one out of two questions : 10
 - A. Give the names of Maharasa dravyas and describe Makshika in detail.
 - B. Describe Rasa Parpati with Parpati Paka Pariksha.
7. Answer any Four out of questions : 20
 - A. Patana Samskara of Parada.
 - B. Abhraka Sattvapatana.
 - C. Niruttha Pariksha and Apunarbhava Pariksha.
 - D. Kajjali.
 - E. Bodhana Samskara of Parada.
8. Answer any Five of six questions : 10
 - A. Ingredients of Laghu Vasant Malati Rasa.
 - B. Ingredients of Tribhuvana Kirti Rasa.
 - C. Use of Shweta Parpati.
 - D. Use of Tamra Parpati.
 - E. Give the names of two formulations of Shilajita.
 - F. Tuttha Shodhana.

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Second Year Examination : November - 2015

Dravyaguna – I

Date: 01-12-2015
Tuesday

Time: 09:30 A.M. to 12:30 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 the importance Dhanya Varga as medicine. 10
2. Answer any one out of two questions. 10
 - A. Give definition of Rasa Panchaka and Pancha Bhautika composition of each one.
 - B. Explain classification of Ahara and Aushadha Dravyas according to Sushruta Samhita.
3. Write a short note on any **Four** of the following : 20
 - A. Rasayana.
 - B. Mention difference between Rasa and Vipaka.
 - C. Compare Grahi Karma and Stambhana Karma with examples.
 - D. Dravya : Definition, properties and its importance.
 - E. Explain the concept of Prabhava with examples.
4. Answer any **Five** of the following : 10
 - A. Classify the Dravya according to Karya Karana Bheda.
 - B. Define Madakari Dravya.
 - C. Give short description of two Medhya Dravyas.
 - D. Write definitions of Veerya.
 - E. Write main origin (Yoni) of Audbhid Dravya.
 - F. Define Ruksha Guna with examples.

SECTION-B

5. Describe the Dravya Aamalaki in detail. 10
6. Answer any one out of two questions. 10
 - A. Describe Dashamula in detail.
 - B. Describe any four Vanaspatika Dravyas containing aromatic properties.
7. Write a short note on any **Four** of the following : 20
 - A. Truna Panchamula.
 - B. Write the therapeutic indications and properties with two formulations of Vidanga.
 - C. Write the botanical name and family of Aamra, Changeri, Surana, Kadamba and Vansha.
 - D. Write the variety, habitat and substitute of Kutaja.
 - E. Give short description on Priyangu.
8. Answer any **Five** of the following : 10
 - A. Write the part used of Tila and Vidari.
 - B. Write the main four synonyms of Tulasi.
 - C. Write two formulations with dosage of Ashoka and Arjuna.
 - D. Write short external morphology of Eranda.
 - E. Write the Rasa Panchaka of Ashwagandha.
 - F. Which are the chemical composition of Bhumyalaki ?

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Second Year Examination : November - 2015

Pharmacognosy of Ayurvedic Drugs – I

Date: 02-12-2015
Wednesday

Time: 09:30 A.M. to 12:30 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 Inflorescence ? Classify in detail. 10
2. Answer any one out of two questions. 10
 - A. What is the role of tissue culture in Pharmacy.
 - B. Describe the diagnostic character of Cruciferae family and give morphological characters of any one medicinal plant belongs to it.
3. Answer any **Four** out of five questions : 20
 - A. Discuss various methods of drying of crude drugs.
 - B. Define Spermatophyta. Enumerate it's classification.
 - C. Discuss various types of attachment of anther to the filament.
 - D. Explain compound leaf.
 - E. Give morphological characters of Aparajita.
4. Answer any **Five** out of six questions : 10
 - A. Define Rhizome.
 - B. What is capsule ?
 - C. Define fruit.
 - D. What is twisted aestivation ?
 - E. Functions of bract and bractioles.
 - F. Give botanical name of any two plants belonging to family Apoacynace.

SECTION-B

5. Explain morphological and microscopical classification of crude drugs in detail with suitable examples. 10
6. Answer any **One** out of two questions : 10
 - A. Describe Ayurved and Siddha system of medicine in detail.
 - B. What is carbohydrate ? Discuss in detail.
7. Write any **Four** out of five question : 20
 - A. What is Babbul niryas ? Give it's identity and purity tests.
 - B. Write location of parenchymatons tissue and its various name in different parts of plants.
 - C. What is mucilage ? Discuss in detail and give botanical name of two drugs containing them.
 - D. Give various chemical tests of carbohydrates.
 - E. Explain why Gums are called as pathological products of plants.
8. Answer any **Five** of six questions : 10
 - A. What do you mean by parenchyma ?
 - B. Name te types of trichomes.
 - C. Define Pharmacognosy.
 - D. What are the reagents used to detect starch grains and wood elements ?
 - E. Write biological source and family of Kokilaksha.
 - F. Differentiate organised and unorganised drugs.

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Second Year Examination : November - 2015

Pharmaceutical Biochemistry

Date: 03-12-2015

Thursday

Time: 09:30 A.M. to 12:30 P.M.

Marks: 100

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

SECTION-A

1. Enlist the medical and industrial uses of carbohydrates. 10
2. Answer any one out of two questions. 10
 - A. Explain structural organization of proteins.
 - B. Write a note on vitamins as coenzymes.
3. Answer any **Four** out of five questions : 20
 - A. What is electrophoresis ? Write its applications.
 - B. Give the classification of minerals.
 - C. What is competitive inhibition ? Explain with suitable examples.
 - D. Explain the pathophysiology of atherosclerosis briefly.
 - E. Write a short note on RNA.
4. Answer any **Five** out of six questions : 10
 - A. What are the applications of Biochemistry.
 - B. What are aldose and ketose sugars ?
 - C. Define isoelectric pH with suitable examples.
 - D. What is the function of centrioles in a cell ?
 - E. Define Beer's and Lambert's law.
 - F. Explain the difference between endoenzymes and exoenzymes.

SECTION-B

5. Explain the importance of calcium as a micronutrient in our body. 10
6. Write any **one** out of two questions : 10
 - A. Write a note on urea cycle.
 - B. Describe glycolytic pathway in an erythrocyte.
7. Answer any **Four** out of five questions : 20
 - A. Explain importance of vitamin 'A' in diet.
 - B. Write short note on electron transport chain.
 - C. What are macronutrients ? Why are they called so ?
 - D. Define anti-oxidants. Name five artificial anti-oxidants.
 - E. What is bio-transformation ? Explain it briefly.
8. Answer any **Five** of six questions : 10
 - A. Enlist the enzymes protecting us from free radicals ?
 - B. Name five deficiencies caused by water soluble vitamins.
 - C. Differentiate between type - I and type - II Diabetes Mellitus.
 - D. Why is Iron essential in diet ?
 - E. What is the significance of Cori's cycle in our body ?
 - F. Explain the structure of F_1 and F_0 ATP synthase.

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Second Year Examination : November - 2015

Physical Pharmacy and Pharmaceutics

Date: 04-12-2015
Friday

Time: 09:30 A.M. to 12:30 P.M.
Marks: 100

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

SECTION-A

1. Differentiate first, second and third orders of reaction. 10
2. Answer any one out of two questions. 10
 - A. Give brief introduction of Newtonian and non-Newtonian liquids.
 - B. Describe boiling point determination and vapour pressure of non-ideal solution.
3. Write a short note on any **Four** of the following: 20
 - A. Thermochemistry.
 - B. Freezing point.
 - C. Refractive index.
 - D. Partition co-efficient.
 - E. First law of thermodynamics.
4. Answer any **Five** of the following: 10
 - A. Enthalpy.
 - B. Sublimation.
 - C. Entropy.
 - D. Optical activity.
 - E. Thermochemistry.
 - F. Viscosity.

SECTION-B

5. Define emulsion; write advantages and disadvantages of emulsion. Discuss types of emulsion along with factors affecting stability of emulsion. 10
6. Answer any one out of two questions. 10
 - A. Enumerate derived properties. How are they be evaluated ?
 - B. Describe any three methods of preparation of lyophobic colloids.
7. Write a short note on any **Four** of the following: 20
 - A. Particle and powder characteristics.
 - B. Factors affecting viscosity.
 - C. Enumerate effect of mixing different types of colloids.
 - D. Differentiate flocculated and deflocculated suspension.
 - E. Phase equilibrium.
8. Answer any **Five** of the following: 10
 - A. Surface tension.
 - B. Sedimentation parameter.
 - C. Anderson apparatus.
 - D. Spreading co-efficient.
 - E. Porosity.
 - F. Thixotropy.

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Second Year Examination : November - 2015

Pharmaceutical Analysis of Ayurvedic Drugs

Date: 05-12-2015
Saturday

Time: 09:30 A.M. to 12:30 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 importance of physic-chemical estimation in Ayurvedic drug analysis. 10
2. Answer any **one** out of two questions. 10
 - A. Discuss different sampling techniques adopted in drug analysis.
 - B. Discuss optical parameters used in oil analysis.
3. Write a short note on any **Four** of the following : 20
 - A. Discuss alkaline hydrolysis of oil samples.
 - B. Volatile oil containing drugs and separation of volatile oils.
 - C. Moisture content and effect on stability.
 - D. Ash value and impact of acid insoluble and water soluble ash.
 - E. Friability of tablets.
4. Answer any **Five** of the following : 10
 - A. Ash analysis.
 - B. Specific gravity.
 - C. Extractive values in different solvents.
 - D. Hardness of tablets.
 - E. Moisture content.
 - F. Refractive index.

SECTION-B

5. Discuss different methods of analysis for metallic preparations. 10
6. Answer any one out of two questions. 10
 - A. Enumerate types of sugar present in Asava preparations.
 - B. Avaleha and Pak preparations and its analytical profile.
7. Write a short note on any **Four** of the following : 20
 - A. Physical method used in Asava to evaluate alcohol content.
 - B. Specific tests for Mercury, Iron and Lead after group separation.
 - C. Consistency characteristic.
 - D. Extractive value in organic solvents.
 - E. pH value.
8. Answer any **Five** of the following : 10
 - A. Qualitative tests for Calcium and Sodium.
 - B. Qualitative tests for Chloride and Sulphate.
 - C. Volatile constituents in Avaleha and Pak preparations.
 - D. pH value.
 - E. Flame test for selected elements.
 - F. Compounds of Calcium.

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Second Year Examination : November - 2015

Pharmaceutical Microbiology

Date: 07-12-2015
Monday

Time: 09:30 A.M. to 12:30 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 contribution of 'Louis Pasteur' and 'Robert Koch' in microbiology. 10
2. Answer any one out of two questions. 10
 - A. Write morphological classification of virus. Describe structure and composition of the same.
 - B. Write principle and working of electron microscope.
3. Write a short note on any **Four** of the following : 20
 - A. Nutritional requirements of bacteria.
 - B. Bacterial growth curve.
 - C. Cultivation of fungi.
 - D. Acid fast bacilli.
 - E. PCR.
4. Answer any **Five** of the following : 10
 - A. What is bacterial conjugation ?
 - B. Name two oxidase positive bacteria.
 - C. Name two selective media and their uses.
 - D. Name two thermophilic bacteria.
 - E. What is phototroph and autotroph ?
 - F. Define prokaryotes and eukaryotes.

SECTION-B

5. Describe various methods of sterilization. 10
6. Answer any one out of two questions. 10
 - A. Describe bacteriological techniques for water and food.
 - B. Describe in brief hypersensitivity reactions.
7. Write a short note on any **Four** of the following : 20
 - A. Definition and name of properties of antigen.
 - B. ELISA.
 - C. Immunoglobulins.
 - D. Validation of filters.
 - E. Tyndallization.
8. Answer any **Five** of the following : 10
 - A. What is BOD ?
 - B. Write full form of RWC and CMC ?
 - C. Biological indicator.
 - D. Define bacteriostatic and bactericidal.
 - E. Write full form of ELISA and RIA.
 - F. Name factors affecting disinfectant action.

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Second Year Examination : November - 2015

Dispensing, Community Pharmacy and Hospital Pharmacy

Date: 08-12-2015
Tuesday

Time: 09:30 A.M. to 12:30 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 'Good hygienic condition in dispensing'. 10
2. Answer any one out of two questions. 10
 - A. Explain the parts of prescription.
 - B. Describe about various closures used in pharmacy.
3. Write a short note on any **Four** of the following : 20
 - A. Write the label for 'Gandbaka Malhara'.
 - B. Write on bandages.
 - C. Write about the importance of age and sex written in prescription.
 - D. Role of pharmacist in patients counselling.
 - E. what is Pharmaco vigilance?
4. Answer any **Five** of the following : 10
 - A. Define term posology.
 - B. Define term superscription.
 - C. Define term Tincture.
 - D. Define term 'Incompatibilities'.
 - E. What is Idiosyncrasy?
 - F. Give meaning of Latin words "*bid*" and "*hs*" used in prescription.

SECTION-B

5. Describe drug distribution system in hospital. 10
6. Write a short note on any **Four** of the following : 10
 - A. Explain drug budget.
 - B. Write in brief about processing of tablet.
7. Write a short note on any **Four** of the following : 20
 - A. What is hospital pharmacy ?
 - B. Write about classification of tablet.
 - C. Explain about location and lay out of hospital pharmacy.
 - D. Explain hot air oven.
 - E. Describe community pharmacy.
8. Answer any **Five** of the following : 10
 - A. What is clinical pharmacy ?
 - B. Define the term drug record.
 - C. Define the term 'gaseous sterilization'.
 - D. What is labelling ?
 - E. Write two names of sterilization equipments.
 - F. Write labels for 'Taila'.
