

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Second Year Examination : May - 2015 (NEW SYLLABUS)

Rasashastra & Bhaishajya Kalpana – II (Ayurvedic Pharmaceutics)

Date: 07-05-2015
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. Describe the types of Vati Kalpana and write about Vyoshadi Vati. 10
2. Answer any one out of two questions. 10
 - A. Describe the types of Guggulu Kalpana and write about Triphala Guggulu.
 - B. Write about Vasa Avaleha in detail.
3. Answer any Four out of five questions : 20
 - A. Describe the difference between Panaka and Sharkara Kalpana.
 - B. Sanshamani Vati.
 - C. Hingvasataka Churna.
 - D. Chandrodaya Varti.
 - E. Avaleha Siddhi Pariksha.
4. Answer any Five out of six questions : 10
 - A. Ingredients of Sitopaladi Churna.
 - B. Shelf life of Avaleha Kalpana.
 - C. Ingredients of Lavangadi Vati.
 - D. Use of Chyavanaprasha Avaleha.
 - E. Dose of Mustadi Pramathya.
 - F. Shelf life of Panaka Kalpana.

SECTION-B

5. Write the Shodhana procedures of Maharasa Dravyas. 10
6. Write any one out of two questions : 10
 - A. Define Parpati and describe Shweta Parpati.
 - B. Give the names of Ashta Samskara of Parada and describe Swedana and Mardana Samskara of Parada.
7. Answer any Four out of questions : 20
 - A. Describe the different Shodhana procedures.
 - B. Explain any one method of Hingulottha Parada.
 - C. Mrita Lauha Pariksha.
 - D. Kajjali.
 - E. Tribhuvana Kirti Rasa.
8. Answer any Five of six questions : 10
 - A. Give the name of two formulations of Shilajita.
 - B. General dose of Parpati Kalpana.
 - C. Ingredients of Laghu Vasant Malati Rasa.
 - D. Makshika Marana.
 - E. Use of Rasa Parpati.
 - F. Abbraka Sattvapatana.

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Second Year Examination : May - 2015 (NEW SYLLABUS)

Dravyaguna – I

Date: 08-05-2015
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. Explain various ancient tools of classification for Dravya. 10
2. Answer any one out of two questions. 10
 - A. Mention the effect of Rasa Panchaka on Dosha and Dhatu.
 - B. Explain classification of Ahara and Aushadha Dravya according to Charaka Samhita.
3. Write a short note on any **Four** of the following : 20
 - A. Sharira Guna.
 - B. Compare Deepana Karma and Pachana Karma with examples.
 - C. Explain the relation between Pancha Mahabhuta & Virechana Dravya.
 - D. Vajikarana.
 - E. Mention difference between Veerya and Prabhava.
4. Answer any **Five** of the following : 10
 - A. Classify Dravya according to Panchabhautika composition.
 - B. Define Hridya with examples.
 - C. Enlist any two Vamana Dravya.
 - D. Write general properties of Anulomana Dravya.
 - E. Write about main origin(Yoni) of Parthiva Dravya.
 - F. Define Sara Guna with examples.

SECTION-B

5. Explain the Dravya Bibhitaki in detail. 10
6. Answer any one out of two questions. 10
 - A. Describe Trijata in detail.
 - B. Describe any three Vanaspatika Dravya which are used as Medhya Dravya.
7. Write a short note on any **Four** of the following : 20
 - A. Laghu Panchamoola.
 - B. Therapeutic indications and properties with two formulations of Vijayasara.
 - C. Write the botanical name and family of Kusha, Kasha, Nala, Darbha & Ikshu.
 - D. Write the variety, habitat and substitute of Chitraka.
 - E. Saireyaka.
8. Answer any **Five** of the following : 10
 - A. Write the part used of Majuphala and PAtala.
 - B. Write the main four synonyms of Gokshura.
 - C. Write two formulations with indications of Kantakari and Agnimantha.
 - D. Write in brief about external morphology of Aaragvadha.
 - E. Write the Rasa Panchaka of Bharangi.
 - F. Which are the chemical composition of Dhattura ?

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Second Year Examination : May - 2015 (NEW SYLLABUS)

Pharmacognosy of Ayurvedic Drugs – I

Date: 09-05-2015
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. What is leaf ? Give it's detail classification with suitable examples. 10
2. Answer any one out of two questions. 10
 - A. What are the sources of drugs ? Explain in detail.
 - B. Describe the diagnostic character of Asteraceae family and give morphological characters of any one medicinal plant belongs to it.
3. Answer any **Four** out of five questions : 20
 - A. Give the Morphological characters of Aparajita.
 - B. Describe Spike and Umbel inflorescence.
 - C. Discuss various types of placentation.
 - D. How drugs are collected ? Discuss its methods with suitable examples.
 - E. Write a note on Aggregate fruits.
4. Answer any **Five** out of six questions : 10
 - A. Define Pteridophyta.
 - B. What is Androceium ?
 - C. Define leaf.
 - D. What is lomentum ?
 - E. What is imbricate aestivation ?
 - F. Give botanical name of any two plants belonging to family Rutaceae.

SECTION-B

5. Explain Alphabeical and taxonomical classification of crude drugs in detail with suitable examples. 10
6. Answer any **One** out of two questions : 10
 - A. What is tissue ? Discuss simple tissue in detail.
 - B. What are starches and Gums ? How they differ from each other and give detail description of one drug of them.
7. Write any **Four** out of five question : 20
 - A. Write a note on Honey.
 - B. Give classification of carbohydrates with examples.
 - C. Discuss Ayurveda; an Indian system of Medicine.
 - D. Give various chemical tests of carbohydrates.
 - E. Give microscopic diagnostic characters of Guduchi stem. Draw diagrammatic T.S. and label.
8. Answer any **Five** of six questions : 10
 - A. Define Phaemacognosy.
 - B. What is the functio of glandulat trichomes ?
 - C. Preparation method of Cape Aloe.
 - D. Write different types of calcium oxalate crystals.
 - E. Define unorganised drugs.
 - F. Give biological source and family of Brihat Gokshura..

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Second Year Examination : May - 2015 (NEW SYLLABUS)

Pharmaceutical Biochemistry

Date: 11-05-2015
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. Define Enzymes. Enumerate enzyme classification. 10
2. Answer any one out of two questions. 10
 - A. What co-relations can you draw between the concept of 'Tridosha' and Biochemistry ?
 - B. Differentiate between a prokaryotic and eukaryotic cell.
3. Answer any Four out of five questions : 20
 - A. Describe active transport with suitable examples.
 - B. Write the different uses of spectrophotometer and colorimeter.
 - C. Explain the effects of heavy metals on human body.
 - D. Write a short note on obesity.
 - E. What is the significance of Gluconeogenesis ?
4. Answer any Five out of six questions : 10
 - A. What are heteropolysaccharides ? Give examples.
 - B. Define carbohydrates.
 - C. Why is nucleus called as the 'Brain' of a cell ?
 - D. Define Km value and give its importance.
 - E. Why is vitamin D called the 'sunshine' vitamin ?
 - F. What is PEM ? Give suitable examples.

SECTION-B

5. Define Xenobiotics ? Describe phase - I and phase - II reactions. 10
6. Write any one out of two questions : 10
 - A. Explain differences between DNA and RNA.
 - B. What are free radicals ? Explain their mechanism of action.
7. Answer any Four out of five questions : 20
 - A. Write a short note on Gout.
 - B. Differentiate between oxidative and substrate level of phosphorylation.
 - C. Enumerate important functions of proteins.
 - D. What are various functions of vitamin 'C' ?
 - E. What are chronic complications of Diabetes Mellitus ?
8. Answer any Five of six questions : 10
 - A. How much ATP is generated when an NADH is oxidized ?
 - B. What is pellagra ?
 - C. What happens if raw eggs are consumed in large number ?
 - D. Why is ammonia toxic to brain ?
 - E. Give examples of essential amino acids.
 - F. What is full form of -
(1) NADPH, (2) PKU, (3) HMP shunt, (4) CAMP.

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Second Year Examination : May - 2015 (NEW SYLLABUS)

Physical Pharmacy and Pharmaceutics

Date: 12-05-2015
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. What is viscosity ? Discuss factors affecting viscosity and methods to determine viscosity of liquids. 10
2. Answer any one out of two questions. 10
 - A. Derive an equation to show that half-life is independent of concentration in a first order reaction.
 - B. Narrate order of reaction and how useful in pharmacy.
3. Write a short note on any **Four** of the following : 20
 - A. Phase equilibrium.
 - B. Refractive index.
 - C. Type of non-Newtonian liquids.
 - D. Thermo chemistry.
 - E. Osmosis and osmotic pressure.
4. Answer any **Five** of the following : 10
 - A. Optical activity.
 - B. Sublimation.
 - C. Concentration units.
 - D. Enthalpy.
 - E. Solution.
 - F. Entropy.

SECTION-B

5. Give detail account on suspension, its types, advantages and disadvantages and factors affecting stability of suspension. 10
6. Answer any one out of two questions. 10
 - A. Describe process of detergency.
 - B. Enumerate derived properties. How they are evaluated ?
7. Write a short note on any **Four** of the following : 20
 - A. Spreading co-efficient.
 - B. Lyophobic colloids.
 - C. Determination of surface tension.
 - D. Advantages and disadvantages of emulsion.
 - E. Factors affecting instability of emulsion.
8. Answer any **Five** of the following : 10
 - A. Cationic surfactant.
 - B. Thixotropic curve for plastic flow.
 - C. Importance of porosity in pharmacy.
 - D. Wetting of particles.
 - E. Anderson apparatus.
 - F. Falling sphere viscometer.

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Second Year Examination : May - 2015 (NEW SYLLABUS)

Pharmaceutical Analysis of Ayurvedic Drugs – I

Date: 13-05-2015
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. Discuss WHO-GMP guideline with respect to sampling of drugs. 10
2. Answer any **one** out of two questions. 10
 - A. Discuss sequence of QC parameter used in oil and fat analysis.
 - B. Solubility parameters adopted in powder drug analysis.
3. Write a short note on any **Four** of the following : 20
 - A. RMPK value and importance in oil samples.
 - B. Peroxide value.
 - C. Iodine value.
 - D. Saponification value.
 - E. Parameters used for tablets.
4. Answer any **Five** of the following : 10
 - A. Moisture content.
 - B. Water soluble ash.
 - C. Refractive index.
 - D. Foreign matter.
 - E. Friability.
 - F. Ash value.

SECTION-B

5. Discuss different methods of analysis for Asava and Arishta preparations. 10
6. Answer any one out of two questions. 10
 - A. List of Calcium containing drugs and method of estimation.
 - B. Qualitative and quantitative estimation of Lead containing drugs.
7. Write a short note on any **Four** of the following : 20
 - A. Name different types of sugar and which type of sugar can be estimated by Fehling's method.
 - B. List methods used to differentiate Kshara and Bhasma
 - C. pH value and pH meters.
 - D. Alcohol extractive value.
 - E. Total solid after solvent extraction.
8. Answer any **Five** of the following : 10
 - A. Solubility in water / acids.
 - B. Qualitative tests for Lead and Tin.
 - C. Qualitative tests for Phosphate and Arsenic.
 - D. Total solid.
 - E. Volatile oil containing Asava preparations
 - F. Compounds of Lead.

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Second Year Examination : May - 2015 (NEW SYLLABUS)

Dispensing, Community Pharmacy and Hospital Pharmacy

Date: 16-05-2015
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. Write an essay on 'Prescription including its various parts and incompatibilities in it'. 10
2. Answer any one out of two questions. 10
 - A. Write in detail on posology.
 - B. Write in detail procedures adopted in dispensing of 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 whole sale pharmacy ?
 - C. Explain Pharmaco vigilance in detail.
 - D. Write about maintenance of drug store.
 - E. Explain packaging of tablets.
4. Answer any **Five** of the following : 10
 - A. Explain the term 'suppository'.
 - B. Write difference between Asava and Arishta.
 - C. What is term 'Retailer'.
 - D. Explain the term closures.
 - E. What is stability ?
 - F. What does the term 'superscription' mean ?

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 concept of sterilization in ayurvedic medicine.
 - E. Write on functions of hospitals.
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 the hospital on the basis of medicine used.
 - F. What is tinctures ?

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Second Year Examination : May - 2015 (NEW SYLLABUS)

Pharmaceutical Microbiology

Date: 15-05-2015
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. Draw a labelled diagram of bacterial cell structure and explain each organs. 10
2. Answer any one out of two questions. 10
 - A. Discuss the importance of staining in microbiology. Classify and explain staining techniques.
 - B. Describe in brief various methods used for counting and cultivation of bacteria.
3. Write a short note on any **Four** of the following : 20
 - A. Differentiate prokaryotes and eukaryotes.
 - B. Differentiate spores and capsules.
 - C. Differentiate Viruses and bacteria.
 - D. Differentiate gram positive and gram negative microbes.
 - E. Selective and differentiate media.
4. Answer any **Five** of the following : 10
 - A. Function of flagella and pilli.
 - B. What is abiogenesis ?
 - C. What is natural transformation ?
 - D. Name acid fast bacilli.
 - E. Z. & N. staining.
 - F. What is virulence power ?

SECTION-B

5. Write down ideal requirements of disinfectant. Enlist factor affecting disinfection process and describe any two in brief. 10
6. Answer any one out of two questions. 10
 - A. What is sterility test ? How do you carry out for herbal drugs ?
 - B. Classify types of immunoglobulins and draw labelled structural diagram of the same.
7. Write a short note on any **Four** of the following : 20
 - A. Ag-Ab reaction.
 - B. Widal test.
 - C. RIA.
 - D. BOD.
 - E. Drug resistance.
8. Answer any **Five** of the following : 10
 - A. Define immunofluorescence.
 - B. Bacteriological evidence of pollution.
 - C. Define antibiotics and drug sensitivity.
 - D. Define antigen and autoimmunity.
 - E. Write full form of MIC and SAL.
 - F. Define disinfection and sterilization.

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Second Year Examination : May - 2015 (OLD SYLLABUS)

Physical Pharmacy and Pharmaceutics

Date: 12-05-2015
Tuesday

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

- Instructions : 1. Every question is compulsory.
2. Draw suitable diagrams wherever necessary.

SECTION-A

1. What are lyophobic colloids ? Describe various methods for the preparation of lyophobic colloid. 10
2. Discuss phase equilibria in three component system. 10

OR

Write influence of temperature and other factors on reaction rates.

3. Answer any **Four** of the following : 20
- A. Thixotropy.
 - B. Porosity & Tortuosity.
 - C. Non Newtonian flow.
 - D. Cone plate viscometer.
 - E. Fluidity.
4. Answer any **Five** of the following : 10
- A. Second law of thermodynamics.
 - B. Boiling point & freezing point.
 - C. Viscosity.
 - D. Density.
 - E. Sedimentation rate.
 - F. Conductivity.

SECTION-B

5. Discuss theory of thermo chemistry with examples. 10
6. Narrate isothermal and adiabatic process in thermodynamics. 10

OR

Explain optical properties in drug molecule.

7. Answer any **Four** of the following : 20
- A. Define term 'Stability' of a pharmaceutical.
 - B. Describe first law of thermodynamics.
 - C. How thermo chemistry useful in Physical Pharmacy ?
 - D. Types of solutions.
 - E. Optical activity.
8. Answer any **Five** of the following : 10
- A. Osmotic pressure.
 - B. Immiscible liquids.
 - C. Entropy.
 - D. Concentration units.
 - E. Sublimation.
 - F. Order of reaction.
