

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Second Year Examination : December - 2017

Rasashastra & Bhaishajya Kalpana – II (Ayurvedic Pharmaceutics)

Date: 14-12-2017
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, general method of preparation, advantages and disadvantages of Churna Kalpana. 10
2. Answer any one out of two questions. 10
 - A. Write the utility of ingredients used for Avaleha preparation. Describe Vasa Avaleha in detail.
 - B. Explain the different preparatory methods, dose, shelf life and advantages of Guggulu Kalpana.
3. Write a short note on any **Four** of the following : 20
 - A. Importance of Vati Kalpana.
 - B. Write Chandrodaya Varti in detail.
 - C. Write difference between Panaka and Sharkara Kalpana.
 - D. Write short note on Pramathya Kalpana with examples.
 - E. Explain Guda Paka Kalpana in detail.
4. Answer any **Five** out of six questions : 10
 - A. Samshamani Vati – dose and use.
 - B. Sitopaladi churna – ingredients and dose.
 - C. Simhanada Guggulu – use and dose.
 - D. Shelf life of Panaka Kalpana.
 - E. Shelf life of Satva Kalpana.
 - F. Gulab Sharkara – dose and use.

SECTION-B

5. Describe Abhraka in detail. 10
6. Write any **one** out of two questions : 10
 - A. Write the importance of Asta Samskara of Parada. Describe any two instruments in detail used in Samskara.
 - B. Describe Rasa Parpati and Trividha Parpati Paka Pariksha.
7. Write a short note on any **Four** of the following : 20
 - A. Define the term Satvapatana and Marana.
 - B. Write any one method for Hingulottha Parada.
 - C. Tribhuvan Kirti Rasa.
 - D. Explain Mrita Lauha Pariksha.
 - E. सुलक्षणः कज्जलाभाऽसौ कज्जलीत्यभिधीयते । – Explain.
8. Answer any **Five** of six questions : 10
 - A. Write the examination of Shilajit.
 - B. Give two formulations of Makshika.
 - C. Write Tuttha Vikara and Nivarana.
 - D. Describe the Shodhana procedure of Rasaka.
 - E. Laghu Vasant Malini Rasa – ingredients and dose.
 - F. Describe Shodhana procedure of Shilajit.

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Second Year Examination : December - 2017

Dravyaguna – I (Ayurvedic Pharmacology)

Date: 15-12-2017
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. Define 'Sapta Padartha' of Dravyaguna Shastra and write about importance of Dravya. 10
2. Answer any one out of two questions. 10
 - A. Describe the Sharira Guna with Panchabhautika composition and its action on Dosha, Dhatu and Mala.
 - B. Define the Veerya and write Vividha Veerya Vada with concluding remarks.
3. Write a short note on any **Four** of the following : 20
 - A. Differentiating characters of Ahara and Aushadha Dravya.
 - B. Prabhava.
 - C. Anulomana.
 - D. Comparison between Langhana and Lekhaniya.
 - E. Shukrajanana, Shukrarechana and Sukrashodhana.
4. Answer any **Five** of the following : 10
 - A. Which is the Ushanattama Rasa ? Write its Panchabhautika composition.
 - B. Action of Madhura Vipaka on Dosha, Dhatu and Mala.
 - C. Examples of Tikshna and Manda Dravyas.
 - D. Enlist any two Krumighna Dravyas.
 - E. Enumerate Katu Rasa Atisevana Janya Vikara.
 - F. Rasoplabdhi Upaya.

SECTION-B

5. Define Kantaka Panchamoola and Madhyama Panchamoola showing their Botanical names and collective action. 10
6. Answer any one out of two questions. 10
 - A. Write Botanical name, external morphology, part used, Rasapanchaka and main indication of Kutaja and Musta.
 - B. Write Botanical name, Rasapanchaka, pharmacological action, dose, dosage form and part used of any two Visha Dravya.
7. Write a short note on any **Four** of the following : 20
 - A. Vallipanchamoola.
 - B. Trumapanchamoola.
 - C. Chaturjata.
 - D. Trikantaka.
 - E. Laghupanchamoola.
8. Answer any **Five** of the following : 10
 - A. Write dosage and dosage form of Nirgundi.
 - B. Write Rasapanchaka of Vibhitaki.
 - C. Write about varieties of Dhatura.
 - D. Write about part used and Veerya of Karamarda.
 - E. Write the synonyms showing morphology of Eranda.
 - F. Write main action of Surana.

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Second Year Examination : December - 2017

Pharmacognosy of Ayurvedic Drugs – I

Date: 16-12-2017
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 fruit ? Classify simple fruit in detail with examples. 10
2. Answer any one out of two questions. 10
 - A. Define leaf. Give detail classification of compound leaf with example.
 - B. Describe the diagnostic characters of Liliacea and give morphological characters of any one medicinal plant belongs to it.
3. Write a short note on any **Four** of the following : 20
 - A. Write a note on pteridophyta and gymnosperm.
 - B. Give description of Apocynaceae.
 - C. How plants are utilised as a source of drug, enumerate your answer with suitable examples.
 - D. How drugs are processed ? Explain.
 - E. Give an account on sclerenchyma tissue.
4. Answer any **Five** out of six questions : 10
 - A. Give the name of family of Bilwa.
 - B. Give the Botanical name of saesap.
 - C. What is tissue culture ?
 - D. Define algae.
 - E. What do you mean by habit of plant ?
 - F. Define seed.

SECTION-B

5. What is carbohydrate ? Give a concept note on it and write an account on any one seed drug belongs to it. 10
6. Write any **one** out of two questions : 10
 - A. Differentiate dicot and monocot root, draw the diagrammatic sketch, label of each class with suitable examples.
 - B. Discuss chemical and pharmacological classification of crud drugs with examples.
7. Write a short note on any **Four** of the following : 20
 - A. Write a note on trichomes.
 - B. Explain why gums are pathological products of plants ?
 - C. Discuss homeopathy system of medicine.
 - D. Describe starch and discuss it's role in pharmacognosy.
 - E. Discuss the method of swelling index.
8. Answer any **Five** of six questions : 10
 - A. Define chlorenchyma.
 - B. What is Dicot seed.
 - C. Importance of honey in Ayurveda.
 - D. Chemical test for lignin.
 - E. Give biological source, chemical constituents and uses of Kokilaksha.
 - F. Give biological source, chemical constituents and uses of Ghati Gum.

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Second Year Examination : December - 2017

Pharmaceutical Biochemistry

Date: 18-12-2017
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. Write about the factors affecting enzyme activity. 10
2. Write differences between eukaryotes & prokaryotes. 10

OR

Define lipids. Write the classification.

3. Write short notes on any **Four** of the following : 20
A. Enlist various functions of proteins.
B. Types of RNA.
C. Anomers of sugars & mutarotation.
D. Structure & functions of mitochondria & golgi bodies.
E. Differences between plant & animal cell.
4. Answer any **Five** of the following :(two to three sentences) 10
A. What are co enzymes ? Give examples.
B. Define Beer's & Lambert's law.
C. Why viruses and RBCs are not called as true cells ?
D. Write differences between R.E.R. & S.E.R.
E. What is the importance of hyaluronic acid ?
F. Define PUFA. Give examples.

SECTION-B

5. Define vitamin. Write in detail about vitamin A and Vitamin K. 10
6. Define and write the process of Beta-oxidation. 10

OR

Define and write the process of glycolysis.

7. Write short notes on any **Four** of the following : 20
A. Cori – cycle
B. Enlist various functions of phosphorus in the body.
C. Glycogenesis.
D. Phase II reactions.
E. Diabetes mellitus.
8. Answer any **Five** of the following :(two to three sentences) 10
A. Define atherosclerosis.
B. Define endogenous & exogenous obesity.
C. What is the importance of gluconeogenesis ?
D. What are the coenzyme forms of riboflavin & Niacin ?
E. Write the functions of vitamin E.
F. Name the pathway that generates five carbon sugars. Write the importance of that sugar.

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Second Year Examination : December - 2017

Physical Pharmacy and Pharmaceutics

Date: 19-12-2017
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. Give a detail account on physical properties of matters. 10
2. Answer any one out of two questions. 10
 - A. Narrate isothermal and adiabatic process in thermodynamics.
 - B. What is the effect of temperature and pressure on solubility.
3. Write a short note on any **Four** of the following : 20
 - A. What is the difference between half life and shelf life ?
 - B. Methods of determination of order.
 - C. Enthalpy.
 - D. Osmosis and osmotic pressure.
 - E. Ostwald viscometer.
4. Answer any **Five** of the following : 10
 - A. Write two applications of chemical kinetics.
 - B. Entropy.
 - C. Dipole moment.
 - D. Tixotropy.
 - E. Name of any two thixotropic agents.
 - F. Rheology.

SECTION-B

5. What are lyophobic colloids ? Describe various methods for the preparation of lyophobic colloids. 10
6. Answer any one out of two questions. 10
 - A. Discuss the methods of determination of surface tension.
 - B. Define micrometrics and explain their application in pharmacy.
7. Write a short note on any **Four** of the following : 20
 - A. Brownian motion.
 - B. Characteristics of dispersion phase.
 - C. Spreading co-efficient.
 - D. Application of surface active agents.
 - E. Bulk density and tap density.
8. Answer any **Five** of the following : 10
 - A. Eutectic mixture.
 - B. List two wetting agents.
 - C. Zeta potential.
 - D. Adsorption.
 - E. Give two examples of lyophilic colloids.
 - F. Give application of intrinsic viscosity.

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Second Year Examination : December - 2017

Pharmaceutical Analysis of Ayurvedic Drugs - I

Date: 20-12-2017
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. Enumerate different physico-chemical parameters you studied and describe any four in detail. 10
2. Describe importance of sampling. How will you sample the herbs having batch size more than 100 kg. and less than 100 kg. 10

OR

What is the significance of iodine value ? How will you perform the iodine value in oils. Describe the procedure.

3. Write short notes on any **Four** of the following : 20
 - A. Classification of oils and fats with examples.
 - B. Saponification value with its significance and procedure.
 - C. Refractive index procedure for Jatyadi ghrita.
 - D. What is Ash ? How will you perform acid insoluble ash ? What it represents ?
 - E. Sampling methods.
4. Answer any **Five** of the following :(two to three sentences) 10
 - A. Foreign matter.
 - B. Chloroform water.
 - C. Name two types of hardness tester.
 - D. Purpose of friability test in tablet.
 - E. Define Acid value.
 - F. R.M.P.K. value.

SECTION-B

5. How will you estimate alcohol from 'Chandanasma' ? Describe procedure with reason. 10
6. Describe analytical profile of Avaleha and Paka preparation. 10

OR

Describe Asava-Arishta preparation and give its analytical profile in detail.

7. Write short notes on any **Four** of the following : 20
 - A. Give classical parameters of bhasma in brief with reason.
 - B. Define reducing sugar and non-reducing sugar. What is total reducing sugar ?
 - C. Estimation of 'Hg' from Parad sample in brief.
 - D. Loss on drying in Chywanprash Avaleha.
 - E. What is the role of lead acetate and sodium oxalate in sugar estimation. Explain.
8. Answer any **Five** of the following :(two to three sentences) 10
 - A. Water soluble ash.
 - B. Enumerate two examples of Asava containing vol. Oils.
 - C. Difference between Avaleha and Paka.
 - D. Qualitative tests for mercury.
 - E. Name two formulation containing Arsenic in ayurveda.
 - F. pH value.

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Second Year Examination : December - 2017

Pharmaceutical Microbiology

Date: 21-12-2017
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. Write about the nutritional requirement of bacteria and classify based on them. 10
2. Answer any one out of two questions. 10
 - A. General structure of bacteria and function of each organelle.
 - B. Draw a labelled diagram of ideal fermenter and explain each part.
3. Write a short note on any **Four** of the following : 20
 - A. Robert Koch and his postulates.
 - B. Structure of viruses.
 - C. Beneficial and harmful effects of fungi.
 - D. Difference between bacteria and viruses.
 - E. Phase contrast microscopy.
4. Answer any **Five** of the following : 10
 - A. Define transduction.
 - B. Give two names of anaerobic bacteria.
 - C. Give two names of disease caused by fungi.
 - D. What is artificial competence ?
 - E. Name two media used for fungal cultivation.
 - F. How will you differentiate gram positive and gram negative bacteria ?

SECTION-B

5. What you mean by control of microbes ? Explain, merit and demerit of membrane filtration. 10
6. Answer any one out of two questions. 10
 - A. Classify types of immunoglobulin and draw labelled diagram of the same.
 - B. Explain microbiological examination of fresh food.
7. Write a short note on any **Four** of the following : 20
 - A. Standard plate count.
 - B. Complement fixation reaction.
 - C. Factors affecting disinfectants.
 - D. Write principle and working of an autoclave with applications.
 - E. Immune cells.
8. Answer any **Five** of the following : 10
 - A. Define bacteriostatic and bactericidal.
 - B. Write the full form of ELISA and RIA.
 - C. Ig-G.
 - D. Define organ specific and systemic autoimmune diseases with examples.
 - E. Type-III, hypersensitivity reaction.
 - F. Cup plate method for antimicrobial activity.
