

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Second Year Examination : May - 2018

Rasashastra & Bhaishajya Kalpana – II (Ayurvedic Pharmaceutics)

Date: 17-05-2018
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 types of process, packing, storage and shelf life of Guggulu. 10
2. State importance and shelf life of Churna kalpana. Describe Sitopaladi churna in detail. 10

OR

Define Avaleha. Describe the method, paka-pariksha, dose and use of Vasa-avaleha.

3. Write short notes on any **Four** of the following : 20
A. Drakshadi gutika.
B. Triphala guggulu.
C. Guduchi Satva.
D. Khandpaka.
E. Gulab Sharkar.
4. Answer any **Five** of the following :(two to three sentences) 10
A. Medias used for Guggulu shodhan.
B. Define Panak and give an example.
C. Shelf life and packing of Avleha kalpana.
D. Dose, Anupan and use of Sanshamani Vati.
E. What precaution should be taken while administering Guggulu Yoga (formulations).
F. Ingredients of Mudvika avleha.

SECTION-B

5. Describe Parpati kalpana in detail. 10
6. What is Makshika ? Describe it in detail. 10

OR

Describe the Maharasa - Sasyaka.

7. Write short notes on any **Four** of the following : 20
A. Kharaliya Rasayan with an example.
B. Abhrak shodhan and maran.
C. Jaran.
D. Kajjali Pariksha.
E. Methods of Hingulotha Parada.
8. Answer any **Five** of the following :(two to three sentences) 10
A. Describe any two Bhasma pariksha.
B. Ingredients of Laghuvasantmalti rasa.
C. Enlist the Maharasa dravyas with the English names.
D. Define shodhan and state shodhan of Rasak.
E. Why and for which dravya is Amrutikaran done ?
F. What is the pill size (weight) and colour of Tribhuvankirti rasa ?

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Second Year Examination : May - 2018

Dravyaguna – I (Ayurvedic Pharmacology)

Date: 18-05-2018
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. Describe Ashtavidha Veeryavada in detail. 10
2. Answer any one out of two questions. 10
 - A. Write essay on any two Karmas related to Vajikarana.
 - B. Describe classification of Ahara & Aushadha Dravya according to Sushruta Samhita.
3. Write a short note on any **Four** of the following : 20
 - A. Compare Langhana and Bruhana Karma with examples.
 - B. Write effect of Ruksha and Snigdha Guna on Tridosha & Trimala.
 - C. Give detail description of Tikta Rasa.
 - D. Write about Prabhava.
 - E. What is the importance of Dravya.
4. Answer any **Five** of the following : 10
 - A. Give four examples of Parthiva Dravya.
 - B. Write about of Madakari Dravya.
 - C. Explain Panchabhautika Samgathana of Vamana Dravya.
 - D. Enlist any two Dravyas having Amla Rasa.
 - E. Give any four names of Tridosha Shamka Dravyas.
 - F. Enlist any two Kandughna Dravya.

SECTION-B

5. Write essay on Dashamula in detail. 10
6. Answer any one out of two questions. 10
 - A. Write botanical name, family, part used and main action of Ankola, Babula, Karmarda, Shrungataka and Kasani.
 - B. Explain five Dravyas having Ushna Veerya and Madhura Vipaka with their botanical name and family.
7. Write a short note on any **Four** of the following : 20
 - A. Write essay on Erand.
 - B. Describe two Dravyas from Piperaceae family.
 - C. Chaturjata.
 - D. Write external morphological of Tamalpatra with its habitat.
 - E. Write note on Arjuna.
8. Answer any **Five** of the following : 10
 - A. Write four synonyms of Bilwa.
 - B. Write ingredients of Trikantaka.
 - C. Write Rasapanchaka of Bharangi.
 - D. Write about dose & formulations (any two) of Aparajita.
 - E. Write about varieties of Kutaja.
 - F. Write chemical composition of Bhumyalaki.

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Second Year Examination : May - 2018

Pharmacognosy of Ayurvedic Drugs – I

Date: 19-05-2018
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. Describe the diagnostic characters of Malvaceae family and give the morphological characters of any one medicinal plant belongs to it. 10
2. Describe cultivation of crude drugs in detail with suitable examples. 10

OR

Discuss Tissue culture as a source of drugs.

3. Write short notes on any **Four** of the following : 20
 - A. Describe pteridophytes and spermatophytes in detail.
 - B. Aestivation.
 - C. Fleshy fruits.
 - D. Give botanical description of plant Datura.
 - E. What do you mean by compound leaf ? Classify them in detail with suitable examples.
4. Answer any **Five** of the following :(two to three sentences) 10
 - A. Give uses of Bilva.
 - B. Give name of two plants belonging to Asteraceae family.
 - C. What is Regma ?
 - D. What are Genus and Species ?
 - E. Define Wood.
 - F. Write botanical name of Chakramarda and Aparajita.

SECTION-B

5. Give a detail account on mucilage and discuss any one drug containing them. 10
6. Differentiate dicot and monocot leaf. 10

OR

Define vascular bundle and give detail account on it.

7. Write short notes on any **Four** of the following : 20
 - A. Discuss pericarp in detail.
 - B. What do you mean by swelling factor ?
 - C. Morphological classification of crude drugs.
 - D. What are the importance of starch grains in identification of crude drugs ?
 - E. Write a note on Mocharas.
8. Answer any **Five** of the following :(two to three sentences) 10
 - A. Define pharmacognosy.
 - B. What is Siddha system of medicine ?
 - C. Define collenchyma.
 - D. Define organized drugs.
 - E. Give biological source and uses of Babbula.
 - F. Identification test for honey.

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Second Year Examination : May - 2018

Pharmaceutical Biochemistry

Date: 21-05-2018
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. What is β -oxidation ? Describe the pathway. 10
2. Answer any one out of two questions. 10
 - A. Describe active transport with suitable examples.
 - B. Give a detailed note on DNA.
3. Write a short note on any **Four** of the following : 20
 - A. Calcium as a mineral.
 - B. Factors affecting enzyme activity.
 - C. Explain the structure and functions of F_1-F_0 ATP synthase.
 - D. Classification of proteins based on nutritional importance.
 - E. State significance of Gluconeogenesis.
4. Answer any **Five** of the following : 10
 - A. Define Osmosis.
 - B. Define enzyme - Give examples.
 - C. State the difference between lysozyme and lysosome.
 - D. Explain ligases and lyases.
 - E. Enlist the functions of sodium.
 - F. Define anti-oxidant and give examples.

SECTION-B

5. Describe enzyme inhibition giving suitable examples. 10
6. Answer any one out of two questions. 10
 - A. Define xenobiotics. Describe in detail.
 - B. Write a note on atherosclerosis.
7. Write a short note on any **Four** of the following : 20
 - A. State the differences between colorimeter and spectrophotometer.
 - B. Define lipids. Write a note on various functions of lipids.
 - C. What are heteropolysaccharides ?
 - D. Write a note on Cori's cycle.
 - E. Write about various roles vitamin C has inside body.
8. Answer any **Five** of the following : 10
 - A. What is the pI value of Amino Acids ?
 - B. Draw the structure of Triacylglycerol.
 - C. What is the biochemical role of hyaluronic acid ?
 - D. Give structural detail of lactose and sucrose.
 - E. Justify Mitochondria is of maternal origin.
 - F. State the difference between type-I and type -II diabetes mellitus.

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Second Year Examination : May - 2018

Physical Pharmacy and Pharmaceutics

Date: 22-05-2018
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. Define viscosity. Discuss factor affecting viscosity and methods to determine viscosity. 10
2. Answer any one out of two questions. 10
 - A. Narrate isothermal and adiabatic process.
 - B. Explain methods of determination of boiling point and freezing point.
3. Write a short note on any **Four** of the following : 20
 - A. Types of non-Newtonian liquids.
 - B. Thermochemistry.
 - C. Osmosis and osmotic pressure.
 - D. Refractive index.
 - E. Types of solution.
4. Answer any **Five** of the following : 10
 - A. Optical activity.
 - B. Dipole moment.
 - C. Concentration unit.
 - D. Half life.
 - E. Shelf life.
 - F. Enthalpy.

SECTION-B

5. Discuss various methods to determine surface tension of liquid. 10
6. Answer any one out of two questions. 10
 - A. Define emulsion. Write advantages and disadvantages along with types of emulsion.
 - B. Explain in detail/methods of particle size determination.
7. Write a short note on any **Four** of the following : 20
 - A. Phase equilibrium.
 - B. Differentiate flocculated and deflocculated suspension.
 - C. Bulk density and tap density.
 - D. Describe the process of detergency.
 - E. Optical properties of colloids.
8. Answer any **Five** of the following : 10
 - A. Eutectic mixture.
 - B. Angle of repose.
 - C. Surface tension.
 - D. Spreading co-efficient.
 - E. HLB.
 - F. Zeta potential.

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Second Year Examination : May - 2018

Pharmaceutical Analysis of Ayurvedic Drugs - I

Date: 23-05-2018
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. Narrate oil and fat samples with special respect to analytical parameters. 10
2. Answer any **one** out of two questions. 10
 - A. Newer amendment for sampling in WHO guideline.
 - B. Narrate types of analysis adopted in physical analysis of drugs.
3. Write a short note on any **Four** of the following : 20
 - A. Instrumental methods for analysis for oil samples.
 - B. Extractive value in different solvents and its role in analysis.
 - C. Friability and hardness of tablet.
 - D. Physical examination of solid dosage forms.
 - E. Parameter used to find out unsaturation in oil samples.
4. Answer any **Five** of the following : 10
 - A. Ash value.
 - B. Acid insoluble ash.
 - C. Total solid.
 - D. Fluorescence analysis.
 - E. Disintegration time of tablets.
 - F. Specific gravity.

SECTION-B

5. Discuss different methods for Avaleha and Pak preparations. 10
6. Answer any one out of two questions. 10
 - A. Narrate different mercurial preparation and analytical methods.
 - B. Impact of fermentation variation in analytical profile in Asava preparations.
7. Write a short note on any **Four** of the following : 20
 - A. Discuss role of lead acetate and sodium oxalate in sugar estimation.
 - B. Volatile constituents of Avaleha and Pak.
 - C. Extractive value in organic solvents.
 - D. Define reducing sugar and its examples.
 - E. Specific gravity and its importance to define physical characters of samples.
8. Answer any **Five** of the following : 10
 - A. Qualitative tests for Copper and Aluminium.
 - B. Qualitative tests for Gold and Silver.
 - C. Consistency characteristics for Avaleha
 - D. Alcohol content
 - E. Refractance and its importance.
 - F. Compounds of Mercury

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Second Year Examination : May - 2018

Pharmaceutical Microbiology

Date: 24-05-2018
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 contributions of Louis Pasteur and Robert Koch in the development of Microbiology. 10
2. Write a note on design of an ideal fermenter. 10

OR

Write about the different types of culture media used for bacterial & fungal cultivation.

3. Write short notes on any **Four** of the following : 20
 - A. Differences between Gram+ve & gram-ve bacteria.
 - B. Explain principle and application of dark field microscopy.
 - C. Write a short note on size, shape & arrangement of bacteria.
 - D. Write a note on salient features of fungi.
 - E. What is transformation ? Write about artificial transformation process.
4. Answer any **Five** of the following :(two to three sentences) 10
 - A. Define fermentation. Give examples.
 - B. Define transduction & conjugation.
 - C. What are mesophiles ? Give examples.
 - D. Write the role of baffles and sparger in a fermenter.
 - E. Name any two bacterial diseases with their causative organisms.
 - F. What are the contributions of Antonie van Leuwenhoek & John Tindal in Microbiology.

SECTION-B

5. Explain in detail the ELISA method. 10
6. Explain Type I & Type II hypersensitivity reactions. 10

OR

Write a note on antibiotic susceptibility testing on solid & liquid media.

7. Write short notes on any **Four** of the following : 20
 - A. Write a note on tests used for microbial contamination of water.
 - B. Write a note on Rideal-walker test.
 - C. Sterilization by dry heat.
 - D. Inflammation.
 - E. Complement fixation test.
8. Answer any **Five** of the following :(two to three sentences) 10
 - A. Define sterilization & disinfection.
 - B. Name two food intoxication diseases.
 - C. Define epitope and antigen.
 - D. Write the full form of : RIA and MIC.
 - E. Define tyndallisation.
 - F. Write the full form of : T_H Cell and EMB media.