GUJARAT AYURVED UNIVERSITY, JAMNAGAR

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

Rasashastra & Bhaishajya Kalpana – II (Ayurvedic Pharmaceutics)

Date: 24-12-2018
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. Define Vati. Write about its method of preparation, packing, storage and current trends. 10

2. What is Varti kalpana ? Describe Chandrodaya varti. 10

OR

Describe Avleha paka-pariksha in detail. Also state the packing, storage and shelf life of this kalpana.

3. Write short notes on any **Four** of the following : 20
   A. Simhanada guggulu.
   B. Shankhapushpi sharkara – method of preparation, dose and use.
   C. Sitopaladi churna.
   D. Panak kalpana.
   E. Preparation dose, anupana and use of guduchi satva.

4. Answer any **Five** of the following :(two to three sentences) 10
   A. Shelf life of guggulu kalpana.
   B. Ingredients of Sanashamani vati.
   C. Dose, anupana and use of Chyvanprash avleha.
   D. Types of Churna kalpana.
   E. Ingredients of Hingvastak churna.
   F. Colour and taste of Guduchi satva.

SECTION-B

5. Describe in detail Bhasma-pariksha. 10

6. What is Jaran and why is it done ? 10

OR

Describe in detail – Shodhan and Maran.

7. Write short notes on any **Four** of the following : 20
   A. Tamra parpati.
   B. Tribhuvankirti rasa.
   C. Lohitikaran and Amrutikaran of Abhrak bhasma.
   D. Makshika.
   E. Importance of Asta samskar of Parada.

8. Answer any **Five** of the following :(two to three sentences) 10
   A. Colour and specific tests for Abhrak bhasma.
   B. Dose, anupan and use of Laghuvasantmalti rasa.
   C. Shodhan of Tutha.
   D. Which paka of parpati is used for medicinal purpose ?
   E. What is Satvapatan ?
   F. Grahya Tutha.

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GUJARAT AYURVED UNIVERSITY, JAMNAGAR

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

Dravyaguna – I (Ayurvedic Pharmacology)

Date: 26-12-2018
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. Describe importance of Dravya as well as Dravyaguna Vigyan. 10

2. Answer any one out of two questions. 10
   A. Give definition and types of Rasa Panchaka individually.
   B. Explain classification of Dravya (Aahara and Aushadha) according to Bhavaprakasha Nighantu.

3. Write a short note on any **Four** of the following : 20
   A. Compare Bruhaniya Karma and Lekhaniya Karma with examples.
   B. Vipaka.
   C. Aahara Dravyas according to Acharya Charaka.
   D. Enumeration of Veerya.
   E. Explain relation between Pancha Mahabhuta and Vamana Dravya.

4. Answer any **Five** of the following : 10
   A. Classify the Dravya according to Yoni Bheda.
   B. Define Bhedaniya Dravya.
   C. Give short description of two Virechana Dravyas.
   D. Write definitions of Rasa with various aspects.
   E. Write main origin (Yoni) of Jangama Dravya.
   F. Define Snigdha Guna with examples.

SECTION-B

5. Explain the Dravya Haritaki in details. 10

6. Answer any one out of two questions. 10
   A. Describe Panchakola in detail.
   B. Describe any four Vanaspitaka Dravya which are used in Pathological condition of digestive system.

7. Write a short note on any **Four** of the following : 20
   A. Bruhat Panchamula.
   B. Write the therapeutic indications and properties with two formulations of Shatavari.
   C. Write the therapeutic indications and pharmacological actions of Sunthi and Aadraka.
   D. Describe family characters of Piperceae with three examples.
   E. Give short description on Ankola.

8. Answer any **Five** of the following : 10
   A. Write the part used of Bhringaraja and Yashtimadhu.
   B. Write the main four synonyms of Nirgundi.
   C. Write two formulations with dosage of Mushali and Shatavari.
   D. Write short external morphology of Arka.
   E. Write the Rasa Panchaka of Gambhari.
   F. Which are the chemical composition of Shyonaka ?

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GUJARAT AYURVED UNIVERSITY, JAMNAGAR

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

Pharmacognosy of Ayurvedic Drugs – I

Date: 27-12-2018
Thursday

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 carbohydrates ? Classify it with suitable examples, add identification tests and their uses. 10

2. Give detail how raw drugs are classified according to morphology with suitable examples. 10

OR

Give geographical source of honey, collection, preparation, constitutes, adulterants, chemical tests and uses.

3. Write short note on any **Four** of the following : 20
   A. Stomatal index and stomatal number.
   B. Calcium oxalate crystals in plants.
   C. Mucilages.
   D. Chemotexonomical classification of raw drugs.
   E. Ethnomedicinal plants.

4. Give botanical sourse, family, part used, chemical constituents and uses of the following (any **Five**) : 10
   A. Kokilaksha.
   B. Ghattigum.
   C. Kumari.
   D. Ashwagola.
   E. Guduchi.
   F. Methika.

SECTION-B

5. Define glycosides, give classification, add note on flavonoids with examples, chemical tests for flavonoids and their uses. 10

6. What are substitutes and adulterants, give at least ten substitute examples for each. 10

OR

Give detail account on crude drug evaluation as per pharmacopeial standards.

7. Write short note on any **Four** of the following : 20
   A. Cyanogenic glycosides and cardiac glycoside.
   B. Leaf drug powder evaluation.
   C. Isothiocyanate.
   D. Significance of pharmacopeias.
   E. Coumarins.

8. Give botanical sourse, family, part used, chemical constituents and uses of the following (any **Five**): 10
   A. Padmakashta.
   B. Bhallataka.
   C. Manjishtha.
   D. Laghu Gokshura.
   E. Vanapalandu.
   F. Bharangi.

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GUJARAT AYURVED UNIVERSITY, JAMNAGAR

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

Pharmaceutical Biochemistry

Date: 28-12-2018
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. Define carbohydrates. Write the Classification. 10

2. Draw the structure of DNA & describe it with types of DNA. 10

OR

Define proteins. Write the classification.

3. Write short notes on any **Four** of the following : 20

   A. Structural organisation of proteins.
   B. Different types of RNA.
   C. Structure & function of cell membrane.
   D. Diffusion across the membrane.
   E. Enzyme classification.

4. Answer any **Five** of the following :(two to three sentences) 10

   A. Define lipids. Give examples.
   B. pI value of amino acids.
   C. Lysosomes.
   D. Principle of colorimeter.
   E. Endo enzyme & exoenzyme.
   F. Km Value of enzymes.

SECTION-B

5. Write a note on Vitamin C. 10

6. Define & explain pentose Phosphate pathway. 10

OR

Define & explain Gluconeogenesis.

7. Write short notes on any **Four** of the following : 20

   A. Phase I reactions.
   B. Gout
   C. Calcium as a micro nutrient.
   D. Maras mus.
   E. Cori cycle.

8. Answer any **Five** of the following :(two to three sentences) 10

   A. Write full form of PEM & TCA.
   B. Write the normal range of blood glucose.
   C. Write the importance of Cori's Cycle.
   D. How many ATP's are generated when one NADH & $FADH_2$ are oxidised.
   E. What are the uses of phospholipids.
   F. Give names of two enzymes which protect us from free radicals.

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GUJARAT AYURVED UNIVERSITY, JAMNAGAR

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

Physical Pharmacy and Pharmaceutics

Date: 29-12-2018 Time: 09:30 A.M. to 12:30 P.M.
Saturday Marks: 100

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

SECTION-A

1. Give brief introduction of Newtonian and non-Newtonian liquids. 10

2. Answer any one out of two questions. 10
   A. Narrate order of reaction and its importance in pharmacy.
   B. Explain term thermo chemistry and differentiate exothermic and endothermic reactions.

3. Write a short note on any **Four** of the following : 20
   A. Refractive index.
   B. Half life and shelf life.
   C. Enthalpy and Entropy.
   D. Types of solution.
   E. Kirchoff's equation.

4. Answer any **Five** of the following : 10
   A. Boiling point.
   B. Freezing point.
   C. Sublimation.
   D. Dipole moment.
   E. Adiabatic process.
   F. Concentration unit.

SECTION-B

5. Define suspension. Discuss types, advantages and disadvantages along with stability of suspension. 10

6. Answer any one out of two questions. 10
   A. Discuss methods of determination of surface tension.
   B. Discuss non-Newtonian types of flow with rheograms, mechanisms, and examples.

7. Write a short note on any **Four** of the following : 20
   A. Cup and Bob viscometer.
   B. Optical properties of colloids.
   C. Surface active agent and HLB.
   D. Angle of repose.
   E. Bulk density and tap density.

8. Answer any **Five** of the following : 10
   A. Rheology.
   B. Plastic flow.
   C. Brownian motion.
   D. Porosity.
   E. Interface.
   F. Cationic surfactant.

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GUJARAT AYURVED UNIVERSITY, JAMNAGAR

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

Pharmaceutical Microbiology

Date: 01-01-2019
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 a note on bacterial structures present external to the cell wall. 10

2. Explain structure and morphology of viruses. 10

OR

Explain DNA transfer mechanisms in bacteria.

3. Write short notes on any **Four** of the following : 20
   A. Write about the contributions of Joseph Lister in development of modern Microbiology.
   B. Differences between Electron and light microscopy.
   C. Enlist beneficial & harmful effects of fungi.
   D. Describe the structure of gram negative cell wall.
   E. Describe bacterial identification based on enzyme secretion.

4. Answer any **Five** of the following :(two to three sentences) 10
   A. Define competent cell.
   B. What is the difference between selective & differential medium. Give example.
   C. What are thermophiles ? Give examples.
   D. Name two viral diseases with their causative organisms.
   E. What is a bacterial spore. Name-two sporulating organisms.
   F. Enumerate applications of P.C.R.

SECTION-B

5. Describe the structure of antibody. Enlist the types with their major function in the body. 10

6. Write a note on precipitation reactions. 10

OR

Explain the methods used to know zone of inhibition of any chemical / drug.

7. Write short notes on any **Four** of the following : 20
   A. Describe the various factors effecting disinfection.
   B. RIA
   C. Mechanism of autoimmune disorders.
   D. Adaptive immunity.
   E. Botulism.

8. Answer any **Five** of the following :(two to three sentences) 10
   A. Define antibiotics. Give examples.
   B. What is phosphatase test ?
   C. Define innate immunity.
   D. Write the full forms of : B.O.D. & ELISA.
   E. Define primary & acquired resistance in bacteria.
   F. Name the anti bodies : (a) Found in body secretions
   (b) Responsible for hypersensitivity

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