

GUJARAT AYURVED UNIVERSITY

JAMNAGAR

B. Pharm(Ayu.) Final Year Examination May-2014

Ayurvediya Aushadha Nirmana Shastra - IV

Date: 24-05-2014
Saturday

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 is Sandhana Kalpana ? Provide details on ingredients, method of preparation and Siddhi Lakshanas of any one Arishta ? 10
2. Define Varti. How many types of Vartis are described in Ayurvedic classics and what are the utilities in present era ? Describe in detail. 10

OR

What is the importance of Ayaskriti ? Describe its method of preparation in detail.

3. Answer any **Four** of the following : 20
- A. Method of preparation of Kshara Sutra.
B. Standardization of herbo-mineral formulations.
C. Importance of Kawala and Gandusha.
D. Uses of different types of Lepa.
E. Importance of nasal preparations.
4. Answer any **Five** of the following : 10
- A. Shatadhauta Ghrita : preparation and uses.
B. Lepa Gutti : preparation and ingredients.
C. Shadbindu Taila : ingredients and uses.
D. Loha Samanya Shodhana.
E. Pravala Pisti preparation.
F. Panchamrita Parpati.

SECTION-B

5. Describe Bhasma Pariksha in detail. 10
6. Importance of Rasa Bandha, types and their role in preparation of Rasa Aushadhis. 10

OR

Describe Shodhana of Ratna, their utility and relation with Graha.

7. Answer any **Four** of the following : 20
- A. Tamra Bhasma and Somanathi Tamra Bhasma.
B. Rasa Parpati and Rasa Sindura.
C. Sudha Varga and Sikata Varga.
D. Ratna and Uparatna.
E. Preparation of Draksharishta.
8. Answer any **Five** of the following : 10
- A. Mandura Bhasma preparation.
B. Yashada Jarana process.
C. Shankha Vati ingredients.
D. Pravala Panchamrita Rasa ingredients.
E. Bilwadi Taila.
F. Chandrodaya Varti.

GUJARAT AYURVED UNIVERSITY

JAMNAGAR

B. Pharm(Ayu.) Final Year Examination May-2014

Forensic Pharmacy, Act, Rules and Regulation Pharmacy Management

Date: 26-05-2014
Monday

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. Write brief note on manufacturing of Drugs and kind of license required for manufacturing of drugs under Drug & Cosmetic Act. 10

2. Write objectives of Pharmacy act. What are functions of State Pharmacy Council ? 10

OR

Write down the requirements for import, possession and sale of poison under poison act – 1919 & rule there under.

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

- A. Spurious drug.
- B. Labelling of Ayurvedic drug.
- C. Drug Inspector.
- D. Functions of State Pollution Board.
- E. Packaging of drugs.

4. Answer any **Five** of the following : 10

- A. Ayurvedic drug.
- B. Magic remedies.
- C. Advertisement.
- D. Licensing authority.
- E. Pharmacovigilance.
- F. Patent & Proprietary medicine.

SECTION-B

5. State the various medias of advertisement in detail. 10

6. What is Marketing ? Explain 4 P's of marketing. 10

OR

Write down the note on factors which affecting purchasing.

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

- A. Types of Plant Layout.
- B. Selection procedure of employee.
- C. Sources of recruitment.
- D. Sales Promotion.
- E. Techniques of training supervisor.

8. Answer any **Five** of the following : 10

- A. Inventory Control.
- B. Site Selection.
- C. Compensation to worker.
- D. Piece Rate Wage System.
- E. Apprentice training.
- F. Promotion Policies.

GUJARAT AYURVED UNIVERSITY

JAMNAGAR

B. Pharm(Ayu.) Final Year Examination May-2014

Pharmaceutical Technology of Ayurvedic Drugs - II

Date: 27-05-2014
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 is the need of stability study for Ayurvedic formulations ? Discuss in detail. 10
2. Which aspects of preformulation studies you carried out for Triphala Churna ? 10

OR

Discuss relevant aspects required to perform pilot plan scale up of Dasamula Kwatha.

3. Answer any **Four** of the following : 20
A. Sugar coating for tablets.
B. Classification of incompatibilities.
C. Processing of pastilles.
D. Preparations of master manufacturing procedure.
E. Fine particle characterisation.
4. Answer any **Five** of the following : 10
A. What is bulk density ?
B. What is general shelf life for powder formulations ?
C. Which are Ayurvedic formulations consist of prolonged shelf life ?
D. What is lozenges ?
E. What do you mean by capping in tablets ?
F. What is preformulation ?

SECTION-B

5. Discuss the concept of nano particles. Write advantages and disadvantages of aerosols. 10
6. Explain factors affecting design of sustained release drug delivery system. 10

OR

What is parenteral ? Discuss its evaluation methods in detail.

7. Answer any **Four** of the following : 20
A. Packaging materials for semi solid formulations.
B. Pan coating for micro encapsulations.
C. Ideal requirements for packaging materials.
D. Evaluation methods for capsules.
E. Osmotic drug delivery system.
8. Answer any **Five** of the following : 10
A. How many types of capsules do you know ?
B. Define aerosol.
C. What is pyrogen ?
D. Give two limitations of glass containers.
E. What is biological half life ?
F. Give the principle of mucoadhesive drug formulations.

GUJARAT AYURVED UNIVERSITY

JAMNAGAR

B. Pharm(Ayu.) Final Year Examination May-2014

Pharmaceutical Biochemistry

Date: 19-05-2014
Monday

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. Write a note on innate immune system. 10
2. Write the details of glycolysis pathway. 10

OR

Write a note on vitamin-D.

3. Write short note on any **Four** of the following : 20
A. Difference between innate and adaptive immunity.
B. Role of Vitamin-C in our body.
C. Structural organization of proteins.
D. Define active transport with suitable examples.
E. Marasmus.
4. Answer any **Five** of the following : 10
A. Symptoms of diabetes.
B. Difference between R.E.R. and S.E.R.
C. Importance of urea cycle in our body.
D. Define basal metabolic rate. Write its importance.
E. pI value of amino acids.
F. Coenzyme forms of niacin, riboflavin, folic acid and pyridoxine.

SECTION-B

5. What are xenobiotics ? Write phase I and phase II reactions. 10
6. Write about the classification of lipids. 10

OR

Biochemical tests to assess cardiac function.

7. Write short note on any **Four** of the following : 20
A. Role of calcium in our body.
B. Termination of transcription in prokaryotes.
C. Detailed structure of neuron.
D. Functions of liver.
E. Types and significance of R.N.A.
8. Answer any **Five** of the following : 10
A. Define P.U.F.A. Give examples.
B. Draw and explain action potential graph.
C. Define leading and lagging strands.
D. What are coenzymes and cofactors ? Give examples.
E. Role of potassium in our body.
F. Define free acidity, combined acidity and total acidity.

GUJARAT AYURVED UNIVERSITY

JAMNAGAR

B. Pharm(Ayu.) Final Year Examination May-2014

Pharmacology & Toxicology of Ayurvedic Drugs -II

Date: 20-05-2014
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. Describe in detail the mechanism of action of drugs used in the treatment of cough along with their classification. 10
2. Give detailed account of drugs used in the treatment of anaemia. Give example of ayurvedic drugs used for its treatment. 10

OR

Write classification of anti arrhythmic drugs with their mechanism of action.

3. Answer any **Four** of the following : 20
 - A. Thrombolytics.
 - B. Anti coagulant drugs.
 - C. Classification of drugs used in treatment of asthma.
 - D. Diuretics.
 - E. Classification of drugs used in treatment of congestive cardiac failure.
4. Answer any **Five** of the following : 10
 - A. Anti diuretic drugs.
 - B. Ayurvedic drugs used in treatment of hypertension.
 - C. Antiplatelet drugs.
 - D. Antianginal drugs.
 - E. Ayurvedic drugs used in treatment of asthma.
 - F. Ayurvedic drugs used as diuretics.

SECTION-B

5. Discuss patho-physiology of rheumatoid arthritis. Classify drugs used in its treatment along with their mechanism of action. 10
6. Discuss drug therapy of psoriasis. 10

OR

Drugs used in the treatment of malaras along with their mechanism of action.

7. Answer any **Four** of the following : 20
 - A. Keratolytics.
 - B. Anti fungal agents.
 - C. Oral hypoglycaemic agents.
 - D. Anti inflammatory drugs.
 - E. Hypothalamic hormones.
8. Answer any **Five** of the following : 10
 - A. Ayurvedic drugs used as immunomodulators.
 - B. Anti cancer agents.
 - C. Ayurvedic drugs used in inflammation.
 - D. Antiviral drugs.
 - E. Ayurvedic drugs used in treatment of skin diseases.
 - F. Anti bacterial drugs.

GUJARAT AYURVED UNIVERSITY

JAMNAGAR

B. Pharm(Ayu.) Final Year Examination May-2014

Pharmaceutical Microbiology

Date: 22-05-2014

Thursday

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

Marks: 100

Instructions Every question is compulsory.

SECTION - A

1. Discuss about Robert Koch and Koch's Postulates. 10
2. Discuss morphology of bacteria. 10

OR

Discuss various methods of identification of bacteria.

3. Write short note on any **four** of the following - 20
 - A. Selective media.
 - B. Anaerobiosis.
 - C. Motility of bacteria.
 - D. Cultivation of viruses.
 - E. Heterotrophic bacteria.
4. Answer any **five** of the following - 10
 - A. What is plasmid ?
 - B. What is role of natural transformation ?
 - C. What are thermophilics ?
 - D. What is mordant ?
 - E. Name acid fast bacilli.
 - F. Name enriched media.

SECTION - B

5. Discuss various Antigen-Antibody reactions. 10
6. Discuss microbial examination of food. 10

OR

Laboratory diagnosis of hepatitis.

7. Write short note on any **four** of the following - 20
 - A. Auto clave.
 - B. V.D.R.L. Test.
 - C. Bacteria virulence.
 - D. R.I.A.
 - E. Sterilization by dry heat.
8. Answer any **five** of the following - 10
 - A. How u.v. rays inhibit bacterial growth ?
 - B. Define antigen.
 - C. Define sterilization and disinfection.
 - D. What is phosphatase test ?
 - E. What is B.O.D. ?
 - F. What is significance of Str. faecalis in water.

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GUJARAT AYURVED UNIVERSITY

JAMNAGAR

B. Pharm(Ayu.) Final Year Examination May-2014

Pharmaceutical Analysis of Ayurvedic Drugs –III (Q.C., Std., GMP)

Date: 23-05-2014
Friday

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 is GMP ? Explain its importance in Ayurvedic drug industry. What are the requirements for factory premises as per GMP ? 10
2. What are the standardization parameters of Taila and Ghrita preparation ? How will you estimate saponification value ? 10

OR

Describe pharmacopoeial method of determining volatile oil in Ayurvedic raw drug.

3. Write short note on any Four of the following : 20
 - A. Determination of loss on drying in Avaleha.
 - B. Determination of water soluble extractives in Churna.
 - C. Standardization parameters for Vati.
 - D. Determination of refractive index of an oil.
 - E. GLP for glasswares and chemicals.
4. Answer any Five of the following : 10
 - A. Define SOP.
 - B. Method of sampling for liquid preparations.
 - C. Define iodine value.
 - D. Define mesh number.
 - E. What is unsaponifiable matter ?
 - F. Define Quality control.

SECTION-B

5. Describe instrumentation and applications of NMR spectroscopy. 10
6. What is AAS ? Draw and explain the working of components of AAS. 10

OR

Explain with diagram the working of a UV-spectrophotometer. What are electronic transitions ?

7. Write short note on any Four of the following : 20
 - A. What are different vibrations in IR-spectroscopy ?
 - B. How will you determine reducing sugar in honey ?
 - C. What are water insoluble vitamins ?
 - D. Give the chemical structure and nature of vitamin – E.
 - E. Determination of caffeine in coffee beans.
8. Answer any Five of the following : 10
 - A. Light source in IR-spectroscopy.
 - B. Define filters and monochromators.
 - C. What are the test for artificial invert sugar ?
 - D. Source and uses of vitamin – A.
 - E. Why milk spills over the vessels while boiling ?
 - F. What is transducer ?