

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Final Year Examination : April - 2016

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

Date: 18-04-2016
Monday

Time: 02:30 P.M. to 5:30 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 do you understand by quality control of Ayurvedic drugs ? How will you establish Q.C. parameters for Avaleha preparations ? 10
2. Answer any one out of two questions. 10
 - A. Give analytical profile of Taila preparation. How will you determine saponification value of Bala Taila.
 - B. How will you standardise the Chandanasava ? Explain alcohol content from Chandanasava in detail.
3. Write a short note on any **Four** of the following : 20
 - A. Give in-process control for Jatyadi Ghrita preparation.
 - B. Loss on drying with special reference to Avaleha preparation.
 - C. Classical parameters for Bhasma preparation with probable scientific reasoning.
 - D. S.T.P. according to G.L.P.
 - E. Sampling of raw materials according to G.L.P.
4. Answer any **Five** of the following : 10
 - A. Validation.
 - B. B.M.R.
 - C. Monograph.
 - D. Acetyl value.
 - E. Peroxide value.
 - F. Refractive index of Ghrit.

SECTION-B

5. Explain the principle of double beam U.V. spectrophotometer with instrumentation. 10
6. Answer any one out of two questions. 10
 - A. Importance of S.O.P. in Ayurvedic drug industry.
 - B. Records of market complaints as per G.M.P.
7. Write a short note on any **Four** of the following : 20
 - A. Nitrogen content in Tea leaves.
 - B. Applications of N.M.R. in brief.
 - C. Enumerate types of raw material for AYUSH drug industry and how will you store them ?
 - D. Applications of U.V. spectroscopy.
 - E. Enumerate different parts of mass-spectroscopy instrument.
8. Answer any **Five** of the following : 10
 - A. Source of light of A.A.S.
 - B. A.G.M.P.
 - C. Test for artificial invent sugar.
 - D. Source of vitamin K.
 - E. Diseases caused due to deficiency of vitamin A.
 - F. P.M.T.

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Final Year Examination : April - 2016

Pharmaceutical Biochemistry

Date: 19-04-2016
Tuesday

Time: 02:30 P.M. to 5:30 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 mitochondria. Explain the symbiont hypothesis. 10
2. Answer any one out of two questions. 10
 - A. Describe the Hexose monophosphate shunt.
 - B. Enumerate various fates of Pyruvate.
3. Write a short note on any **Four** of the following : 20
 - A. Write short note on precipitation reaction of proteins.
 - B. Describe structure and function of chloroplast.
 - C. Describe briefly oligosaccharides.
 - D. What is uncompetitive inhibition ? Give examples.
 - E. Write a note on active transport.
4. Answer any **Five** out of six questions : 10
 - A. Define nuclotide and nucleoside. Give examples.
 - B. Mention the symptoms of hypervitaminosis A.
 - C. Define free acidity and combined acidity.
 - D. Define calorie and joule.
 - E. Describe the structure of B cell.
 - F. What is mutarotation ?

SECTION-B

5. Explain structural organization of proteins. 10
6. Write any **one** out of two questions : 10
 - A. What are microglial cells ? Mention their functions.
 - B. Describe CAMP mediated signal transduction.
7. Write a short note on any **Four** of the following : 20
 - A. Write a short note on thyroid function test.
 - B. What are ketone bodies ? State their clinical importance.
 - C. Write a short note on RNA.
 - D. Write a short note on oxidative stress.
 - E. Explain phagocytosis and its significance.
8. Answer any **Five** of six questions : 10
 - A. Define cofactors.
 - B. Define xenobiotics.
 - C. Explain leading strand and lagging strand.
 - D. What happens when a raw egg is consumed in large amount.
 - E. Write any four functions of sodium as mineral inside our body
 - F. Define ADDC.

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Final Year Examination : April - 2016

Forensic Pharmacy, Act, Rules and Regulation Pharmacy Management

Date: 21-04-2016

Time: 02:30 P.M. to 5:30 P.M.

Thursday

Marks: 100

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

SECTION-A

1. Discuss in length about Drug and Magic Remedies Act. 10
2. Answer any one out of two questions. 10
 - A. Write in detail about code of pharmaceutical ethics.
 - B. Write the requirements for imports, possession and sale of poison under Poison Act 1919.
3. Write a short note on any **Four** of the following : 20
 - A. Labelling of Ayurvedic drugs.
 - B. Function of state pollution board.
 - C. Shops and Establishment Act.
 - D. Preparation of dossier.
 - E. Spurious drugs.
4. Answer any **Five** of the following : 10
 - A. Qualification and duty of drug inspector.
 - B. Pharmacovigilance.
 - C. BMR record.
 - D. Narcotic drugs.
 - E. Advertisement.
 - F. Patent and proprietary medicine.

SECTION-B

5. Discuss factors affecting location of industry along with layout of building. 10
6. Answer any one out of two questions. 10
 - A. State the various factors affecting purchasing.
 - B. What is marketing ? Explain 4 P's of marketing.
7. Write a short note on any **Four** of the following : 20
 - A. Role of wholesaler and retailer.
 - B. Techniques of training supervisor.
 - C. Quality control.
 - D. Job evaluation.
 - E. Source of recruitment.
8. Answer any **Five** of the following : 10
 - A. Budget.
 - B. Detailing.
 - C. Sampling.
 - D. Promotion policies.
 - E. Trade identification marks.
 - F. Piece rate wage system.

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Final Year Examination : April - 2016

Pharmaceutical Microbiology

Date: 22-04-2016
Friday

Time: 02:30 P.M. to 5:30 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 in short about the contributions of Louis Pasteur in the field of Microbiology. 10
2. Answer any one out of two questions. 10
 - A. List the different methods used for measurement of Bacterial growth. Explain any one direct method used for counting.
 - B. Write in brief about different techniques used for cultivation of virus.
3. Write a short note on any **Four** of the following : 20
 - A. Write a note on various bacteriological media.
 - B. Write a note on biochemical tests based on carbohydrate utilization by the bacteria.
 - C. Write a note on an ideal fermenter.
 - D. Write a short note on continuous fermentation.
 - E. Write a short note on Griffith's Experiment for Bacterial transformation.
4. Answer any **Five** out of six questions : 10
 - A. What is Bacteriostatic and Bactericidal ?
 - B. Define Microbiology.
 - C. Write the function of cell wall.
 - D. Write the properties of Agar.
 - E. Differentiate Flagella and Pili.
 - F. What is Antibiotic ?

SECTION-B

5. Write down list of different sterilization methods. Explain chemical method of sterilization in detail. 10
6. Write any **one** out of two questions : 10
 - A. Discuss food Borne Intoxication.
 - B. Write in detail about ELISA.
7. Write a short note on any **Four** of the following : 20
 - A. Define immunity. Write about different types of immunity.
 - B. Write a note on sterility testing of pharmaceutical products.
 - C. Write about physical methods of sterilization.
 - D. Write a short note on modes of spread of Infection.
 - E. Write a note on Botulism.
8. Answer any **Five** of six questions : 10
 - A. Define Immunology.
 - B. What is monoclonal Antibody.
 - C. Write the full form of ELISA and RIA.
 - D. What is Incineration ?
 - E. Explain Pasteurization.
 - F. Define Auto immunity.

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Final Year Examination : April - 2016

Ayurvediya Aushadha Nirmana Shastra : IV

Date: 23-04-2016
Saturday

Time: 02:30 P.M. to 5:30 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 standardization method of Herbal and Herbomineral drugs. 10
2. Answer any one out of two questions. 10
 - A. Explain ophthalmological preparations according to Ayurveda and mention precautionary measures for its manufacture.
 - B. How Kshara Sutra are prepared now a days ?
3. Write a short note on any Four of the following : 20
 - A. Ayaskriti.
 - B. Varti.
 - C. Shat Dhaut Ghrita.
 - D. Kavala.
 - E. Lepa Kalpana.
4. Answer any Five out of six questions : 10
 - A. Method to preserve Sarjarasa Kalpana.
 - B. Ingredients of Saurashtri Netrabindu.
 - C. Write uses of Kshara Sutra.
 - D. Why Lepa should not be used during night ?
 - E. Siddhi Lakshanas of Asava – Arishta.
 - F. Chemical formula of any Asava – Arishta.

SECTION-B

5. What is meant by 'Dhatu' ? Explain any one Dhatu in detail. 10
6. Write any one out of two questions : 10
 - A. Write name of Kshara Varga and explain any one Kshara in detail.
 - B. Enlist name of Shuddha Varga and explain any one Suddha dravya in detail.
7. Write a short note on any Four of the following : 20
 - A. Shodhana – Marana of Taura.
 - B. Shodhana – Marana of Vajra.
 - C. Shodhana – Marana of Shukti.
 - D. Shodhana – Marana of Yashada.
 - E. Shodhana – Marana of Godanti.
8. Answer any Five of six questions : 10
 - A. Therapeutic dose and indications of Loha Bhasma.
 - B. Specific tests for Tamra Bhasma.
 - C. Melting point and boiling point of Swarna.
 - D. Melting point and boiling point of Parada.
 - E. Colour of Rajata and Loha Bhasma.
 - F. Chemical formula of Tankana.

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Final Year Examination : April - 2016

Pharmaceutical Technology of Ayurvedic Drugs - II

Date: 25-04-2016

Monday

Time: 02:30 P.M. to 5:30 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 brief note on principle areas of pre-formulation studies. 10
2. Answer any one out of two questions. 10
 - A. Classification and types of tablets in detail.
 - B. Explain formulation of pills in detail.
3. Write a short note on any **Four** of the following : 20
 - A. Preparation of master manufacturing procedures.
 - B. Binding and disintegrating agents for tablets.
 - C. Chemical incompatibilities.
 - D. I.P.Q.C. tests for tablets.
 - E. G.M.P. consideration for pilot plant scale up.
4. Answer any **Five** of the following : 10
 - A. Two preservatives for tablets.
 - B. Mixture of camphor and menthol is which type of incompatibility ?
 - C. Define lozenges.
 - D. What is mottling in case of tablets ?
 - E. Two diluents used for tablets.
 - F. Define crystallization.

SECTION-B

5. Explain about soft gelatine capsule in detail. 10
6. Answer any one out of two questions. 10
 - A. Explain the theory of sustain release drug delivery system.
 - B. Explain the methods of evaluation for parenteral preparations.
7. Write a short note on any **Four** of the following : 20
 - A. Ideal requirements for packaging materials.
 - B. Implants as N.D.D.S.
 - C. General formulation of parenteral products.
 - D. Theory of sustained released drug delivery system.
 - E. Pan coating for micro encapsulation.
8. Answer any **Five** of the following : 10
 - A. Name of two vehicles used in parenteral formulations.
 - B. Define microencapsulation.
 - C. Name the additives used in capsule filling.
 - D. Limitations of plastic containers.
 - E. How many types of parenteral formulations ?
 - F. Storage requirements for capsules.

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Final Year Examination : April - 2016

Pharmacology & Toxicology of Ayurvedic Drugs -II

Date: 26-04-2016
Tuesday

Time: 02:30 P.M. to 5:30 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 in detail about pathophysiology of cardiac arrhythmia and classify antiarrhythmic drugs. 10
2. Answer any one out of two questions. 10
 - A. Pathophysiology of heart failure.
 - B. Anti hypertensive agents.
3. Write a short note on any **Four** of the following : 20
 - A. Drugs used in cough and cold.
 - B. Drugs used for anaemia.
 - C. Angina pectoris.
 - D. Diuretics.
 - E. Ayurvedic drugs used for anaemia.
4. Answer any **Five** out of six questions : 10
 - A. Herbal drugs used in cardio vascular system.
 - B. Vasodilators.
 - C. Anti tussives and expectorants.
 - D. Anti platelet drugs.
 - E. Drugs affecting renal functions.
 - F. Non steroidal anti inflammatory agents.

SECTION-B

5. Enlist some important antibiotics with its medicinal role. 10
6. Write any **one** out of two questions : 10
 - A. Role of immuno suppressants in organ transplantation.
 - B. Write a note on Diabetes mellitus.
7. Write a short note on any **Four** of the following : 20
 - A. Enlist oral hypoglycaemic agents.
 - B. Thyroid disorders.
 - C. Anti fungal agents.
 - D. Anti viral agents.
 - E. Anti cancer agents.
8. Answer any **Five** of six questions : 10
 - A. Mention insulin preparations.
 - B. Mention name of semi synthetic Penicillins.
 - C. Herbal drugs used in cough and cold.
 - D. Herbal drugs used in malaria.
 - E. Enlist Haematinics.
 - F. Distinguish antibiotic and chemotherapeutic agents.
