

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Final Year Examination : November - 2015

Pharmaceutical Biochemistry

Date: 30-11-2015
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. Write difference between eukaryotic and prokaryotic cell. 10
2. Answer any one out of two questions. 10
 - A. Write a note on gluconeogenesis.
 - B. Describe in detail the structure of antibody.
3. Write a short note on any **Four** of the following : 20
 - A. Write a note on free radicals and antioxidants.
 - B. Write a note on pI value of amino acids.
 - C. What are the factors affecting the degree of antigenicity of an antigen ?
 - D. Write the differences between plant and animal cell.
 - E. Write a note on riboflavin.
4. Answer any **Five** of the following : 10
 - A. What are the important features of adaptive immunity ?
 - B. Define non-reducing sugar. Give examples.
 - C. What are the differences between RER and SER ?
 - D. What is the pI value of an amino acid ?
 - E. Define positive nitrogen balance and negative nitrogen balance.
 - F. What is facilitated diffusion ? Give examples.

SECTION-B

5. Write a note on liver function test. 10
6. Answer any one out of two questions. 10
 - A. What are xenobiotic ? Write the phase I and II reactions.
 - B. Write a note on replication of DNA in prokaryotes.
7. Write a short note on any **Four** of the following : 20
 - A. Write the classification of fatty acids.
 - B. Describe the signal transduction process in a neuron.
 - C. Write about the various factors affecting enzyme activity.
 - D. Describe the structure of DNA.
 - E. Write a note on iron and potassium as minerals in our body.
8. Answer any **Five** of the following : 10
 - A. Define Km value and give its importance.
 - B. Define codon.
 - C. Define MUFA and PUFA.
 - D. What is depolarisation and hyperpolarisation of neuron ?
 - E. What is the importance of DNA polymerase and DNA ligase. ?
 - F. Write the importance of calcium as an element in our body.

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Final Year Examination: November - 2015

Pharmaceutical Technology of Ayurvedic Drugs - II

Date: 01-12-2015
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. Discuss the importance of pre-formulation studies and aspects involved while formulating a tablet. 10
2. Answer any one out of two questions. 10
 - A. What are the requirements and regulatory aspects for stability study? What are the effects and limits of overages in a product?
 - B. Define and classify tablet with one commercial example each. What are the granulation technique and evolution parameters as per IP 14.
3. Write a short note on any Four of the following : 20
 - A. What is incompatibility?
 - B. Enumerate the excipients used in tablets with examples and limits.
 - C. Advantages of film coating tablets over sugar coated tablets.
 - D. How will you prepare a master manufacturing procedure?
 - E. What are the GMP consideration pilot plant scale up studies?
4. Answer any Five of the following : 10
 - A. What are the coating techniques of tablets?
 - B. What are the organic incompatibilities?
 - C. What is the self-life of powder, granules, tablets and capsules?
 - D. What is the importance of surfactance in pharmaceuticals?
 - E. What are enteric coated tablets?
 - F. How will you rectify a chemical incompatibility?

SECTION-B

5. Describe inserts, implants in aerosols with its advantages-disadvantages. 10
6. Answer any one out of two questions. 10
 - A. Discuss importance of packing material. What are the ideal requirement for closers for glass and plastic containers? How will you evaluate containers?
 - B. Discuss parental dose form elaborately. Draw an ideal layout for production of parenteral product.
7. Write a short note on any Four of the following : 20
 - A. What is an osmotic drug delivery system?
 - B. What is micro encapsulation and techniques to archive micro encapsulation?
 - C. What is a soft gelatine capsule and how we may load actives in it.
 - D. What are the evaluation techniques involved in sustain release products?
 - E. What is floating tablet delivery system?
8. Answer any Five of the following : 10
 - A. What is pyrogen?
 - B. What is biological half life?
 - C. What is the concept behind muco-adhesive drug formulation?
 - D. What is co-acervation in micro encapsulation?
 - E. Draw a flow diagram for aerosol production.
 - F. What are chilled resistance containers?

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Final Year Examination : November - 2015

Pharmacology & Toxicology of Ayurvedic Drugs -II

Date: 02-12-2015

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 pathophysiology and classify drugs used for congestive cardiac failure. 10
2. Answer any **One** out of two questions. 10
 - A. Define hypertension, classify anti-hypertensive agents.
 - B. Enlist respiratory disorders, classify drugs used for asthma and describe their mechanism of action.
3. Write a short note on any **Four** of the following : 20
 - A. Anti-arrhythmic agents.
 - B. Blood clotting mechanism.
 - C. Ayurvedic drugs used in cold and cough.
 - D. Diuretics.
 - E. Angina pectoris.
4. Answer any **Five** of the following : 10
 - A. Ayurvedic drugs used in heart diseases.
 - B. Drugs affecting renal functions.
 - C. Anaemia.
 - D. Central cough suppressants.
 - E. Vasodilators.
 - F. Functions of blood.

SECTION-B

5. Write general mechanism of action of antimicrobial agents. 10
6. Answer any **One** out of two questions. 10
 - A. Anti-viral agents and drugs used for swine-flu.
 - B. Enlist antimalarial agents, explain life cycle of malarial parasites.
7. Write a short note on any **Four** of the following : 20
 - A. Skin diseases and important drugs used for its treatment.
 - B. Non-steroidal anti-inflammatory agents.
 - C. Thyroid hormones.
 - D. Cancer & important anticancer drugs.
 - E. Hormones of hypothalamus.
8. Answer any **Five** of the following : 10
 - A. Ayurvedic drugs used in cancer.
 - B. Ayurvedic drugs used in diabetes mellitus.
 - C. Specific COX-II inhibitors.
 - D. Immunomodulators.
 - E. Antifungal agents.
 - F. Emollients.
