Total No. of Questions : 6]

SEAT No. : ____

PC-4992

[Total No. of Pages : 2

[6374]-111
F.Y.Pharm.D
1.1 : HUMAN ANATOMY AND PHYSIOLOGY
(2019 Pattern)

Time : 3 Hours] ***[Max. Marks : 70***

Instructions to the candidates :

1) ***All questions are compulsory.***
2) ***Neat, labeled diagrams must be drawn wherever necessary.***
3) ***Figures to the right indicate full marks.***

SECTION - I

Q1) **Long Answers (Any 1 out of 2) :** **[1 × 10 = 10]**

a) Draw a neat, labeled diagram of different types of tissue and write their function in detail.

b) Write Anatomy and functions of the cardiovascular system.

Q2) **Short Answers (Any 5 out of 7) :** **[5 × 3 = 15]**

a) Write a note on bones of face and cranium.

b) Write a note on internal respiration.

c) Define Angina Pectoris, Atherosclerosis and Congestive heart failure.

d) Write a note on ECG

e) Write a note on blood pressure and its maintenance.

f) Write a note on functions of platelets and enlist various disorders of coagulation.

g) Write components of Lymphatic system and add a note on Composition and function of Lymph.

Q3) **Medium Answers (Any 2 out of 4) :** **[2 × 5 = 10]**

a) Explain anatomy and functions of respiratory organs.

b) Write a note on Osseous system including anatomy and functions.

c) Write a note on Vertebral column and draw a neat, labeled diagram of different types of vertebrae.

d) Write a note on different types of circulations.

P.T.O.

SECTION - II

Q4) **Long Answers (Any 1 out of 2) :** **[1 × 10 = 10]**

a) Draw a neat labeled diagram of pituitary gland. Describe the different hormones secreted by pituitary gland.

b) Draw a neat labeled diagram of brain and discuss about the functional areas of cerebrum.

Q5) **Short Answers (Any 5 out of 7) :** **[5 × 3 = 15]**

a) What is reflex action? Draw a neat labeled diagram of T.S of spinal cord.

b) Explain the various stages in oogenesis.

c) Explain the different phases of digestion.

d) Write a note on Adrenal gland.

e) Differentiate between sympathetic and parasympathetic nervous system.

f) Explain the functions of digestive system.

g) What is the effect of hormone ADH, ANP and PTH on kidney?

Q6) **Medium Answers (Any 2 out of 4) :** **[2 × 5 = 10]**

a) Explain the physiologyof hearing with help of neat labeled diagram.

b) Describe the process of urine formation.

c) Explain the mechanical and chemical digestion in small intestine.

d) Explain the internal structure of kidney with help of neat labeled diagram.

♦ ♦ ♦

Total No. of Questions : 6]

SEAT No. :

PC-4993

[Total No. of Pages : 2

[6374]-112
F.Y.Pharm.D
1.2 T : PHARMACEUTICS
(2019 Pattern) (Semester - I)

Time : 3 Hours] ***[Max. Marks : 70***

Instructions to the candidates :

1) ***All questions are compulsory.***
2) ***Neat, labeled diagrams must be drawn wherever necessary.***
3) ***Figures to the right indicate full marks.***

SECTION - I

Q1) **Attempt any one of the followings (Any 1 out of 2)** **[1 × 10 = 10]**

a) Define and classify emulsion with example. Write in detail about adjurants use in formulation of emulsion.

b) Define and classify dosage forms. Discuss in detail various dosage forms.

Q2) **Attempt any five of the followings (Any 5 out of 7)** **[5 × 3 = 15]**

a) What is maceration?

b) Define synergism with suitable example.

c) What is phase inversion? How it can be prevented?

d) Define and classify powders.

e) What is the importance of inscription in prescription?

f) Describe ideal characteristics of a suppository bases.

g) Give the metric equivalents for the following.

i) One grain

ii) One ounce

iii) one teaspoonful

Q3) **Attempt any two of the followings (Any 2 out of 4)** **[2 × 5 = 10]**

a) Discuss in detail about sutures and ligatures.

b) Define displacement value. Explain the importance of displacement value in formulation of suppository.

c) Explain various semi-solid dosage forms.

d) Elaborate the factors influencing dose selection.

P.T.O.

SECTION - II

Q4) **Attempt any one of the followings (Any 1 out of 2)** **[1 × 10 = 10]**

a) Define and classify suppositories. Write in detail about various types of bases used in formulation of suppositories.

b) Define suspension. Elaborate methods of preparation and evalution of suspension.

Q5) **Attempt any five of the followings (Any 5 out of 7)** **[5 × 3 = 15]**

a) What is difference between hypotonic and hypertonic solution?

b) Write a short note on tinctures.

c) Discuss on surgical dressings.

d) What is the metric system? Explain with suitable example.

e) What are throat paints?

f) Short note on emulsifying agensts.

g) Calculate the actual strength of 25° o.p.(over proof)

Q6) **Attempt any two of the followings (Any 2 out of 4)** **[2 × 5 = 10]**

a) Describe the formulation aspects of liniments and lotions.

b) Discuss the various methods of preparation of emulsion with suitable example.

c) Write a short note on Indian pharmacopoeia.

d) Explain the standardization of surgical catgut.

♦ ♦ ♦

Total No. of Questions : 6]

SEAT No. : ____

PC-5003

[Total No. of Pages : 2

[6374]-113
First Year Pharm. D.
1.3 : MEDICINAL BIOCHEMISTRY
(2019 Pattern)

Time : 3 Hours] ***[Max. Marks : 70***

Instructions to the candidates :

1) ***All questions are compulsory. Internal choices are given.***
2) ***Figures to the right indicate full marks.***
3) ***Draw neat diagrams, cycles and structures wherever necessary.***

SECTION - I

Q1) **Answer any 1 out of 2 :** **[1 × 10 = 10]**

a) Define glycolysis? Describe the biochemical pathway for the breakdown of glucose to pyruvate and lactate. Write about the energetics.

b) Define an enzyme? Classify of enzymes with suitable examples. Explain the mechanism of enzyme action and factors affecting enzyme activity.

Q2) **Answer any 5 out of 7 :** **[5 × 3 = 15]**

a) What is fatty liver? Name the two causes responsible for fatty liver?

b) Discuss the biochemical role and deficiency symptoms of vitamin B2 and B6.

c) Discuss the glucose tolerance test with its significance.

d) Discuss nitrogen balance of human body.

e) What is ETC, Discuss uncouplers of ETC?

f) What is ketosis?

g) What is Line-Weaver Burk plot? Give its significance.

P.T.O.

Q3) **Answer any 2 out of 4 :** **[2 × 5 = 10]**

a) Define enzyme inhibition and discuss the different types of enzyme inhibitions.

b) Explain Citric acid cycle (TCA cycle) with net energy calculation.

c) Explain the β-oxidation of saturated fatty acids.

d) Outline the various biochemical reactions involved in HMP shunt pathway and write its significance.

SECTION - II

Q4) **Answer any 1 out of 2 :** **[1 × 10 = 10]**

a) Discuss the Urea cycle and the metabolic disorders related to Urea Cycle. Add a note on Urea clearance test.

b) Enlist various liver function tests. Elaborate on various tests and their importance in diagnosis of Jaundice.

Q5) **Answer any 5 out of 7 :** **[5 × 3 = 15]**

a) Explain the abnormal urine constituents.

b) Discuss the hormonal regulation of electrolyte balance in the biological fluids.

c) Explain phenylketonuria.

d) Explain transamination with examples.

e) Explain Mutation and its repair mechanism.

f) Explain the dye test and prothrombin test.

g) What are bile acids? Brief the importance.

Q6) **Answer any 2 out of 4 :** **[2 × 5 = 10]**

a) Discuss Enzyme Linked Immuno Sorbent Assay (ELISA).

b) Explain DNA structure and its replication.

c) Explain Creatinine clearance test and its importance.

d) Write a note on gout and its treatment.

▽▽▽▽

Total No. of Questions : 6]

SEAT No. : ____

PC-5004

[Total No. of Pages : 2

[6374]-114
F.Y. Pharm. D.
1.4T : PHARMACEUTICAL ORGANIC CHEMISTRY
(2019 Pattern)

Time : 3 Hours] ***[Max. Marks : 70***

Instructions to the candidates :

1) ***All questions are compulsory.***
2) ***Figures to the right indicate full marks.***
3) ***Answer to the two sections should be written in separate books.***
4) ***Draw well labeled diagrams wherever necessary.***
5) ***Do not write anything on question paper except seat number.***

SECTION - I

Q1) Discuss Reaction mechanism, Kinetics of Substitution Nucleophilic bimolecular reaction with suitable example. Differentiate between SN_1 and SN_2. **[10]**

OR

Discuss rule for orientation in elimination reactions with suitable example. Add a note on hydrogen isotope effect in E_2 elimination.

Q2) **Attempt any five :** **[15]**

a) Write a note on Intermolecular forces and polarity of molecule.

b) Define with example.
   i) Lewis acid
   ii) Protic solvent
   iii) Isomer

c) Draw the structures of,
   i) 2-propanone
   ii) 1, 2-dichloro-3-methoxypentane
   iii) ethyl-2-oxobutanoate

d) Discuss Williamson synthesis with suitable example.

e) Write the medicinal uses of,
   i) Dimethyl pthalate,
   ii) Sodium lauryl sulphate,
   iii) Saccharin sodium

f) Discuss resonance effect with example.

g) Explain allylic rearrangement.

P.T.O.

Q3) **Attempt any Two :** **[10]**

a) Write a note on Cannizzaro reaction and crossed Cannizzaro reaction.

b) Discuss in detail Knoevenagel and benzoin condensation.

c) Write a note on Sandmeyer's reaction and Michael addition.

d) Discuss mechanism of nitration of Toluene. Justify the orientation.

SECTION - II

Q4) Enlist activating and deactivating groups for Aromatic Electrophilic Substitution Reaction. Explain how Amino group is activating and Nitro group is deactivating for the reaction. **[10]**

OR

Explain the Markownikoff's Rule for addition of hydrogen halides to the Carbon-Carbon double bond. Add a note on its Mechanism and the effect of peroxides on the addition.

Q5) **Attempt any Five :** **[15]**

a) Write a note on acidity of phenols.

b) Discuss carbocation and their stability.

c) Explain the diazotization and coupling reaction of amines with examples.

d) Discuss in brief nucleophilic aromatic substitution.

e) Explain free radical substitution in alkanes.

f) Give examples of conversion of acid to acid chloride, esters.

g) Explain Friedel craft acylation mechanism.

Q6) **Attempt any Two :** **[10]**

a) Write Reaction & Mechanism of following reactions.

   i) Aldol Condensation.

   ii) Claisen Condensation.

b) Discuss Acidity of carboxylic acids and effect of substituents on Acidity.

c) Explain why halogens are deactivating yet ortho-para directing in Aromatic electrophilic substitution.

d) Explain mechanism of E_1 elimination.

▽▽▽▽

Total No. of Questions : 6]

SEAT No. : ____

PC-5005

[Total No. of Pages : 2

[6374]-115
F.Y.Pharm.D
1.5 : PHARMACEUTICAL INORGANIC CHEMISTRY
(2019 Pattern)

Time : 3 Hours] ***[Max. Marks : 70***

Instructions to the candidates :

1) ***All questions are compulsory.***
2) ***Figures to the right indicate full marks***
3) ***Draw well labelled diagrams wherever necessary.***
4) ***Do not write anything on question paper except seat number.***

SECTION - I

Q1) **Write any one out of two :** **[1 × 10 = 10]**

a) Classify different types of indicators used in volumetric analysis and explain in detail theory of indicators.

b) State the principle of complexometric titration. Elaborate complexometric titration.

Q2) **Attempt any five out of Seven.** **[5 × 3 = 15]**

a) Discuss aprotic solvents in non- aqueous titration.

b) What is error? How can we minimize errors during analysis?

c) Differentiate between primary standard and secondary standard solutions.

d) What are the oxidizing and reducing agents?

e) What is the acid base titration? Explain with example.

f) Explain titration curve for strong acid vs strong base.

g) Discuss Mohr's method in precipitation titration.

Q3) **Write any two out of four.** **[2 × 5 = 10]**

a) Summarize equipment's used in volumetric analysis.

b) Explain oxidation number method to balance redox reaction.

c) What is precipitation titration? Explain Volhard's and Modified Volhard's method.

d) Discuss methodology involved in gravimetric analysis.

P.T.O.

SECTION - II

Q4) **Write of any one out of two.** **[1 × 10 = 10]**

a) Define electrolytes. Explain calcium and potassium for replacement therapy.

b) Discuss mechanism of action of antimicrobial agent. Discuss pharmaceutical compounds which act as antimicrobial agent.

Q5) **Attempt any five out of seven.** **[5 × 3 = 15]**

a) What is limit test? Explain limit test for sulphate.

b) Explain Zinc as essential trace element.

c) Short note on Limit test for chloride.

d) Differentiate between systemic and non-systemic antacid.

e) What is cathartics?

f) What is acidifiers? Explain with example

g) Discuss anti-caries agents.

Q6) **Write any two out of four.** **[2 × 5 = 10]**

a) Discuss medicinal uses of medical air and Carbon dioxide.

b) Discuss ideal properties for an antacid preparation and explain side effects of long term antacid therapy.

c) Classify and explain different pharmaceutical aids.

d) What is radiopharmaceuticals? Explain precaution for handling of radioactive substances.

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Total No. of Questions : 6]

SEAT No. : ____

PC2131

[Total No. of Pages :2

[6374]-121

S.Y. Pharm. D.

2.1T : PATHOPHYSIOLOGY

(2019 Pattern)

Time : 3 Hours] ***[Max. Marks : 70***

Instructions to the candidates:

1) ***All questions are compulsory.***
2) ***Answers to the two Sections should be written in separate books.***
3) ***Draw a neat, labeled diagram wherever necessary.***
4) ***Figures to the right indicate full marks.***

SECTION - I

Q1) Attempt any one of the following (Any 1 out of 2): **[1×10=10]**

a) Discuss detailed pathophysiology of malignancy.

b) Explain in detail glycogen storage diseases with examples.

Q2) Attempt any five of the following (Any 5 out of 7): **[5×3=15]**

a) Explain the process of healing by Primary Intention.

b) Explain the mechanism of autoimmunity.

c) Explain the biological effects of radiation.

d) Give two examples each for direct and indirect-acting carcinogens.

e) Define Pyknosis, Karyorrhexis and Karyolysis.

f) Define Inflammation. What are cardinal signs of inflammation?

g) Explain the process of phagocytosis.

Q3) Attempt any two of the following (Any 2 out of 4): **[2×5=10]**

a) Discuss the etiology and pathogenesis of shock.

b) Explain the pathogenesis of Reversible cell Injury.

c) Discuss briefly types of necrosis.

d) Explain the pathogenesis of chronic inflammation.

P.T.O.

SECTION - II

Q4) Attempt any one of the following (Any 1 out of 2): **[1×10=10]**

a) Define angina pectoris. Briefly discuss types and pathogenesis of angina.

b) Define; classify Hypertension and explain its pathophysiology in detail.

Q5) Attempt any five of the following (Any 5 out of 7): **[5×3=15]**

a) Define and enlist type of Hepatitis.

b) Write the diagnostic tests for Typhoid, Pneumonia.

c) Define COPD & explain its causes.

d) Differentiate between Marasmus and Kwashiorkor.

e) Name two fat-soluble vitamins and their function.

f) Enlist air pollutants and their effects.

g) Discuss signs, symptoms and risk factors of depression.

Q6) Attempt any two of the following (Any 2 out of 4): **[2×5=10]**

a) What are metabolic disorders? Explain the pathogenesis of type II diabetes mellitus.

b) Explain the Pathogenesis of acute renal failure.

c) Define stroke. Explain the pathogenesis of Stroke.

d) Explain the pathogenesis and clinical symptoms of cirrhosis.

Total No. of Questions : 6]

SEAT No. : [ ]

PC2132

[Total No. of Pages : 2

[6374]-122

Second Year Pharm.D

2.2 PHARMACEUTICAL MICROBIOLOGY

(2019 Pattern)

Time : 3 Hours] ***[Max. Marks : 70***

Instructions to the candidates:

1) ***All questions are compulsory.***
2) ***Answers to the two sections should be written in separate answer book.***
3) ***Neat labelled diagram must be drawn wherever necessary.***
4) ***Figures to the right indicate full marks.***

SECTION - I

Q1) Attempt any one of the followings (Any 1 out of 2) **[1×10=10]**

a) Define sterilization. Enlist different methods of sterilization. Discuss dry & moist heat sterilization.

b) Discuss in details the role of microbes in the pharmaceutical and medical field.

Q2) Attempt any five of the followings (Any 5 out of 7): **[5×3=15]**

a) Name the major divisions of microbial world.

b) Discuss morphological features of mold.

c) How to maintain culture in laboratory?

d) Define validation and explain the validation process.

e) Write contributions of Alexander Fleming.

f) Give note on enriched media.

g) How to sterilise thermolabile pharmaceutical formulations? Justify it.

Q3) Attempt any two of the followings (Any 2 out of 4): **[2×5=10]**

a) Write a note on sterility indicators.

b) Discuss applications of cell culture in pharma industry.

c) Explain different types of medium and methods to isolate the Bacteria.

d) Describe the sterility testing for different Pharmaceutical preparations.

P.T.O.

SECTION - II

Q4) Attempt any one of the following (Any 1 out of 2) **[1×10=10]**

a) Define antibody. Explain in detail different types of antibodies.

b) What is microbiological assay? Discuss in detail general methods used for microbial assays of antibiotics

Q5) Attempt any five of the followings (Any 5 out of 7): **[5×3=15]**

a) Differentiate between active and passive immunity.

b) Discuss the procedure and interpretation of Mantaux test

c) Explain in detail about symptoms, source and control of typhoid?

d) Explain in detail about preparation of vaccine?

e) Explain in detail about role of complement system in host defence mechanism?

f) Discuss in detail the Agglutination reaction?

g) What is MIC? Explain the method for its determination.

Q6) Attempt any two of the following (Any 2 out of 4): **[2×5=10]**

a) Define and classify immunity? Explain any two types?

b) Describe in detail chemical agents as disinfectants.

c) Explain about meningitis.

d) Explain in detail about precipitation reaction.

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Total No. of Questions : 6]

SEAT No. :

PC2133

[Total No. of Pages : 3

[6374]-123

S.Y.Pharm D.

2.3 T : PHARMACOGNOSY AND PHYTOPHARMACEUTICALS

(2019 Pattern)

Time : 3 Hours] *[Max. Marks : 70*

Instructions to the candidates:

1) ***All questions are compulsory.***
2) ***Draw a neat, labeled diagram wherever necessary.***
3) ***Figures to the right indicate full marks.***

SECTION-I

Q1) Attempt any one of the followings (Any 1 out of 2) **[1×10=10]**

a) Explain the cell inclusions in detail.

b) Define cultivation. Explain methods of cultivation with suitable examples.

Q2) Attempt any five of the followings (Any 5 out of 7) **[5×3=15]**

a) Define

i) Pharmacognosy

ii) Crude drug

b) Explain the process of collection of crude drug.

c) Give synonym, biological source and uses of neem.

d) Describe Unani system of medicine.

e) Elaborate the significance of drying with suitable example.

f) Enlist the constituents of cell wall with their function.

g) Explain chemical classification of crude drug with suitable examples.

P.T.O.

Q3) Attempt any two of the followings (Any 2 out of 4) **[2×5=10]**

a) Write Pharmacognosy of Tobacco in detail.

b) Explain processing and storage of crude drug.

c) Describe the scope of Pharmacognosy in detail

d) Explain powder microscopy of organized crude drug

SECTION-II

Q4) Attempt any one of the followings (Any 1 out of 2) **[1×10=10]**

a) Define volatile oil and fixed oil with suitable example. Explain methods of extraction of volatile oil.

b) Define lipid. Explain methods of analysis of lipids.

Q5) Attempt any five of the followings (Any 5 out of 7) **[5×3=15]**

a) Give biological source, chemical constituents and uses of Acacia

b) Define

i) Adulteration

ii) Fibers

c) Write the significance of adulteration.

d) What is substitution with vegetative matter? Explain with suitable examples.

e) Give biological source, chemical constituents and identification test for starch.

f) Explain properties of plant fibers.

g) Give details on cell constituents.

Q6) Attempt any two of the followings (Any 2 out of 4) **[2×5=10]**

a) Explain Pharmacognosy of Isapgoal in detail.

b) Define carbohydrates. Explain its classification with suitable examples.

c) Describe the methods of extraction of lipids.

d) Explain the chemistry of Proteins.

Total No. of Questions : 6]

SEAT No. :

PC-2134

[Total No. of Pages : 2

[6374]-124
Second Year Pharm D
2.4. - PHARMACOLOGY - I
(2019 Pattern)

Time : 3 Hours] *[Max. Marks : 70*

Instructions to the candidates:

1) ***All questions are compulsory.***
2) ***Neat labelled diagrams must be drawn wherever necessary.***
3) ***Black figures to the right indicates full marks.***

SECTION - I

Q1) **Long Answers (Any 1 out of 2) :** **[1 × 10 = 10]**

a) Define and classify anticholinergic drugs. Add a note on Pharmacology of Acetylcholine.

b) Discuss the routes of administration of drugs with advantages and disadvantages of each route of drug administration. Add a note on factors influencing the choice of route of drug administration.

Q2) **Short Answers (Any 5 out of 7) :** **[5 × 3 = 15]**

a) What is drug distribution? Enlist factors affecting distribution and add a note on Volume of distribution.

b) Write Pharmacology of acetylcholine.

c) Write pharmacological account of antianginal drugs.

d) Define and classify drug interactions with suitable examples.

e) Classify Drugs used for hyperlipidaemias with suitable examples.

f) Classify antihypertensive drugs with suitable examples and MoA.

g) Give pharmacological account of anti-adrenergics.

Q3) **Medium Answers (Any 2 out of 4) :** **[2 × 5 = 10]**

a) Write a note on Enzyme Induction with suitable example.

b) Define Bioavailability and explain the methods of determination of bioavailability in short.

c) Write a short note on factors affecting drug effects.

d) Define Pharmacology and write a note on scope of Pharmacology.

P.T.O.

SECTION - II

Q4) **Long Answers (Any 1 out of 2) :** **[1 × 10 = 10]**

a) Discuss biosynthesis, mechanism of action, pharmacological actions and therapeutic uses of testosterone.

b) Classify Bronchodilators Discuss mechanism of Action, Pharmacological action, therapeutic uses and adverse effects of salbutamol.

Q5) **Short Answers (Any 5 out of 7) :** **[5 × 3 = 15]**

a) Define hypnotics and give two examples of each.

b) Describe biosynthesis, storage, release & action of thyroid hormone?

c) Classify anti-tussive. Add a note on anti-histaminics.

d) Add note on bioassay of oxytocin.

e) Define general anesthetics & explain pre-anesthetic medication.

f) What are CNS stimulants? Write their examples and uses.

g) Describe physiological effect of glucagon.

Q6) **Short Answers (Any 2 out of 4) :** **[2 × 5 = 10]**

a) Explain the Pharmacological effects, adverse effects & therapeutic uses of Paracetamol.

b) Define and classify antipsychotic drugs. Write uses, MOA & ADR of triiodothyronine (T3).

c) Elaborate pharmacology of gonadotropins.

d) Classify anti-Parkinsonian drugs with examples. Explain the pharmacology of Levodopa.

Total No. of Questions : 6]

SEAT No. : ____

PC-2135

[Total No. of Pages : 2

[6374]-125
S.Y. Pharm.D.
2.5.T - COMMUNITY PHARMACY
(2019 Pattern)

Time : 3 Hours] ***[Max. Marks : 70***

Instructions to the candidates:

1) ***All questions are compulsory.***
2) ***Neat diagrams must be drawn wherever necessary.***
3) ***figures to the right indicates full marks.***

SECTION - I

Q1) **Attempt any one of the following (Any 1 out of 2): [1 × 10 = 10]**

a) Enlist various methods of inventory control. Explain any one method in detail.

b) Enlist advantages and disadvantages of patient counseling. Add a note on design and layout of leaflets.

Q2) **Attempt any five of the following (Any 5 out of 7): [5 × 3 = 15]**

a) Define community Pharmacist. Discuss in brief role of community pharmacist.

b) Discuss objectives of patient counseling.

c) Define prescription. Explain various parts of prescription.

d) Enlist sources of drug interaction checkers.

e) What is Lead time and reorder level?

f) Explain counseling tips for Aspirin in pregnancy.

g) Discuss use of computers and softwares in community pharmacy.

Q3) **Attempt any two of the following (Any 2 out of 4): [2 × 5 = 10]**

a) Discuss different methods to overcome patient counseling barriers.

b) Define pharmaceutical care. Write in detail about the principles of pharmaceutical care.

c) Explain role of pharmacist in improving medication adherence.

d) Explain the layout of community pharmacy.

P.T.O.

SECTION - II

Q4) **Attempt any one of the following (Any 1 out of 2): [1 × 10 = 10]**

a) Define Health screening services. Discuss importance of health screening services. Add a note on methods for screening of blood pressure.

b) Define Balanced diet. Write note on vitamin deficiency disorders and its prevention.

Q5) **Attempt any five of the following (Any 5 out of 7): [5 × 3 = 15]**

a) Define OTC medication. Enlist OTC medications.

b) Explain role of community pharmacist in rational drug therapy.

c) Discuss concept of trade of Pharmacy

d) Elaborate any two methods used for screening of cholesterol levels.

e) Discuss common drug therapy for pyrexia.

f) Explain role of pharmacist in family planning.

g) Discuss common drug therapy for worm infestations.

Q6) **Attempt any two of the followings (Any 2 out of 4): [2 × 5 = 10]**

a) Define communicable disease. Discuss the role of community pharmacist in preventing communicable diseases.

b) Discuss code of ethics for community pharmacists towards pharmacy profession.

c) Elaborate causative agents and methods for prevention of tuberculosis.

d) Discuss causative organism for malaria. Explain life cycle of plasmodium species.

Total No. of Questions : 6]

SEAT No. : ____

PC-2136

[Total No. of Pages : 2

[6374]-126
S.Y. Pharm.D.
2.6 - PHARMACOTHERAPEUTICS - I
(2019 Pattern)

Time : 3 Hours] ***[Max. Marks : 70***

Instructions to the candidates:

1) ***All questions are compulsory.***
2) ***Write answers for section I and section II in separate answer sheets.***
3) ***Draw neat, labelled diagram wherever necessary.***
4) ***Figures to the right indicate full marks.***

SECTION - I

Q1) Define HTN. Give the management of HTN with compelling indication. **[10]**

OR

Define Heart failure. Explain in detail the management of heart failure with reduced ejection fraction. **[10]**

Q2) **Solve any five:** **[5 × 3 = 15]**

a) Write down the advantages and disadvantages of different formulations of nitrates.

b) Classify Insulin and its analogues.

c) Differentiate between asthma & COPD.

d) Define: FEV1, FVC, Inspiratory reserve volume.

e) Write NYHA classification of Angina.

f) Write the GOLD classification of COPD.

g) What is first dose phenomenon?

Q3) **Write short note on any two:** **[2 × 5 = 10]**

a) Management of Acute attack of asthma.

b) Management of NSTEMI.

c) Hypertensive crisis.

d) Statins in dyslipidemia.

P.T.O.

SECTION - II

Q4) What is DKA? Explain its pathophysiology, clincal symptoms and management. **[10]**

OR

What are the various preparations of insulins present in the market explain its utilistaion pattern for the pateints. **[10]**

Q5) **Solve any five:** **[5 × 3 = 15]**

a) How does the pharmacokinetic changes in pregnanat females affect the prescribing pattern?

b) What is the importance of EML?

c) What are the various screening test used for dignosing osteoporosis?

d) In which conditions are the oral contraceptives given.Explain with examples.

e) What are the various steps taken for monitoring rational prescibing?

f) Differentiate various bacterial and viral conjinctivitis

g) What is thyrotoxicosis?

Q6) **Write short notes on any two:** **[2 × 5 = 10]**

a) Glaucoma and treatment.

b) Rational preparations in market and role of pharmacist.

c) Prescribing in geratrics

d) Prescribing in lactation