

B. PHARM
(SEM II) THEORY EXAMINATION 2022-23
HUMAN ANATOMY AND PHYSIOLOGY-II

Total Marks: 75

Time: 3 Hours

Note: 1. Attempt all Sections. If require any missing data; then choose suitably.

10 x 2 = 20

SECTION A

1. Attempt all questions in brief.

- (a) What do you mean by synapse?
- (b) Sequentially enlist different layers of meninges.
- (c) Discuss about brush border enzyme.
- (d) Outline the process of digestion.
- (e) Define vital capacity.
- (f) Determine net filtration pressure.
- (g) Recall any two functions of thyroid gland.
- (h) Differentiate between exocrine and endocrine glands.
- (i) Define spermatogenesis and oogenesis.
- (j) Explain importance of pineal gland.

SECTION B

2. Attempt any two parts of the following:

2 x 10 = 20

- (a) Explain anatomy of spinal cord with the help of a diagram.
- (b) Outline the physical characteristics and composition of normal urine. Discuss the physiology of urine formation.
- (c) Explain anatomy and physiology of female reproductive system.

SECTION C

3. Attempt any five parts of the following:

7 x 5 = 35

- (a) Categorize different parts of the brain. Explain structure of cerebrum and its functional organization.
- (b) Summarize various parts of digestive system and discuss anatomy and physiology of small intestine with structure of microvilli.
- (c) Explain various steps of neurohumoral transmission.
- (d) Explore mechanism of respiration with special emphasis on external and internal respiration.
- (e) Discuss structure of pituitary gland and explain functions of various hormones secreted from pituitary gland.
- (f) Elaborate digestion of carbohydrate, protein and lipid in human body.
- (g) Outline the various phases of pregnancy with detailed explanation on fertilization.



PAPER ID-411813

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Subject Code: BP201T

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BPHARM
(SEM II) THEORY EXAMINATION 2021-22
HUMAN ANATOMY AND PHYSIOLOGY II

Time: 3 Hours**Total Marks: 75****Notes:**

- Attempt all Sections and Assume any missing data.
- Appropriate marks are allotted to each question, answer accordingly.

SECTION-A

Q1.	Attempt All of the following Questions in brief	Marks(10X2=20)
a	Define the term Cerebrum.	
b	Define Glomerular Filtration Rate (GFR).	
c	Enlist the function of hormones.	
d	What do you mean by gametogenesis?	
e	What is the role of the Hydrochloric acid in digestive system?	
f	Give functions of cerebellum.	
g	Draw a well labeled diagram of neuron.	
h	Define tidal volume.	
i	Draw a well labeled diagram of Kidney.	
j	Enlist function of Saliva.	

SECTION-B

Q2.	Attempt ANY Two of the following Questions	Marks(2X10=20)
a	Explain in detail about autonomic nervous system?	
b	Write various parts of digestive system. Discuss the physiology of digestion in detail.	
c	Discuss in detail about endocrine system. Classify Hormones and explain the mechanism of action of Hormones .	

SECTION-C

Q3.	Attempt ANY five following Question	Marks (5X7=35)
a	Describe the mechanism of ATP Formation.	
b	Discuss in detail about structure of liver and role of bile juice in digestion.	
c	Describe different parts and types of Nephron.	
d	Discuss the mechanism of Neurohumoral transmission in CNS.	
e	Explain the physiology of menstruation cycle.	
f	Define the term BMR and how it is determined? Describe various factors affecting BMR.	
g	Explain the anatomy of Respiration and discuss its mechanism in detail	

B PHARM
(SEM-II) THEORY EXAMINATION 2019-20
HUMAN ANATOMY AND PATHOPHYSIOLOGY-II

Time: 3 Hours**Total Marks: 75**

Note: 1. Attempt all Sections. If require any missing data; then choose suitably.
 2. Any special paper specific instruction.

SECTION A

1. Attempt all questions in brief. 10 x 2 = 20

- a. What is an action potential
- b. What are the name of lobes of cerebral hemisphere
- c. What is the role of the mouth in digestive system
- d. Differentiate between vital capacity and total lung capacity.
- e. Define Glomerular Filtration Rate (GFR).
- f. Give the name of disorders of the male reproductive system.
- g. Define asthma and Pneumonia.
- h. Enlist the function of hormones.
- i. Briefly explain cushing syndrome.
- j. Where does the fertilization take place in the female?

SECTION B

2. Attempt any two parts of the following: 2 x 10 = 20

- a. I. Describe cerebrospinal fluid and its circulation
 II. Describe the structure and functions of medulla oblongata.
- b. Define ovulation. Explain different phases of the female reproductive cycle
- c. Describe the mechanism of ATP Formation.

SECTION C

3. Attempt any five parts of the following: 7 x 5 = 35

- a. Explain the events of signal transmission at a chemical synapse.
- b. Describe the surface anatomy of lungs along with suitable diagrams.
- c. Describe the hormones of Pancreas and their physiological role.
- d. Describe different parts and types of Nephron.
- e. What is BMR and how it is determined? Describe various factors affecting BMR.
- f. Write a short note on gland of Emergency.
- g. Define Genetics. Write a short note on chromosomes.

B.PHARM
(SEM-II) THEORY EXAMINATION 2018-19
HUMAN ANATOMY AND PHYSIOLOGY-II

Time: 3 Hours

Total Marks: 75

Note: Attempt all Sections. If you require any missing data, choose suitably.

SECTION A

1. Attempt all questions in brief. 10 x 2 = 20

- a. What do you mean by residual volume and inspiratory reserve volume?
- b. Define autocrine and paracrine gland.
- c. Explain the role of CCK and secretin in intestinal phase of digestion.
- d. Discuss any two functions of cerebellum.
- e. Define net filtration pressure.
- f. Write in brief about brush border enzyme.
- g. Thyroxin hormone is released by _____ cells of _____ gland.
- h. Mention any two functions of hypothalamus.
- i. What do you mean by gametogenesis?
- j. The two hemisphere of cerebrum are connected with a mass of white fibers known as _____.

SECTION B

2. Attempt any two parts of the following: 2 x 10 = 20

- a. Explain mechanism of respiration with special emphasis on transport of oxygen from lungs to other parts of body.
- b. What are the different parts of human brain? Discuss anatomy and physiology of cerebrum.
- c. Outline various parts of digestive system. Discuss the anatomy and physiology of small intestine.

SECTION C

3. Attempt any five parts of the following: 7 x 5 = 35

- a. Discuss the mechanism of Neurohumoral transmission in CNS.
- b. Discuss synthesis, secretion and regulation of acid secretion in stomach.
- c. Write a note on female reproductive cycle (menstrual cycle) & its regulation.
- d. Explain synthesis, storage, secretion and regulation of thyroid hormone.
- e. Discuss in detail about structure of liver and role of bile juice in digestion.
- f. Discuss in detail about Renin Angiotensin Aldosterone System.
- g. Define reflex action. Describe various components of reflex arc.

B PHARM
(SEM II) THEORY EXAMINATION 2017-18
HUMAN ANATOMY AND PHYSIOLOGY- II

Time: 3 Hours

Total Marks: 75

- Note:** 1. Attempt all Sections.
 2. Draw the neat and clean-labeled diagram, if necessary.

SECTION A

- 1. Attempt all questions in brief.** **10 x 2 = 20**
- a. What is Cerebrospinal fluid?
 - b. Write the functions of cerebellum and hypothalamus.
 - c. Define Net Filtration Pressure and GFR.
 - d. What is Basal metabolic rate?
 - e. Define Tidal volume and Residual volume.
 - f. Mention any two functions of liver.
 - g. Enumerate all the endocrine glands present in the body.
 - h. Define Gametogenesis.
 - i. What is Transcription and Translation?
 - j. A graph of a family history for a specific trait or health problem over several generations is termed

SECTION B

- 2. Attempt any two parts of the following:** **2 x 10 = 20**
- a. Explain in detail about Thyroid hormones formation, secretion, storage and release with proper diagram.
 - b. What is Respiration? Discuss in detail about mechanism of respiration and regulation of respiration.
 - c. Explain male reproductive system with well labeled diagram, as well as discuss about ducts of testis.

SECTION C

- 3. Attempt any five parts of the following:** **7 x 5 = 35**
- a. Explain the mechanism of breathing with diagram.
 - b. Describe larynx and pharynx as well as also discuss a note on their functions.
 - c. Write a note on Salivary glands.
 - d. Explain Neurotransmission in brief.
 - e. Describe the pituitary gland along with the hormones secreted by it.
 - f. Write an illustrative note on Physiology of Menstruation.
 - g. How is oxygen transported from the lungs to the other parts of the body?

B PHARM
(SEM II) THEORY EXAMINATION 2022-2023
PHARMACEUTICAL ORGANIC CHEMISTRY-I

Total Marks: 75

Time: 3 Hours

Note: Attempt all Sections. If require any missing data then choose suitably.

SECTION A

10 x 2 = 20

1. Attempt all questions in brief.
- Give structure of the following compounds :-
i) Acetic acid ii) Lactic acid iii) Salicylic acid iv) Succinic acid
 - Enlist qualitative tests for Alcohol.
 - What is Aldol condensation?
 - Explain Acidity of Carboxylic acids and Basicity of Aliphatic Amines.
 - What are SN₁ and SN₂ reactions? Give examples.
 - Explain SP³ hybridization in Alkanes.
 - What is structural isomerism in organic compounds? Give examples.
 - What are Alkyl Halides?
 - Explain in brief Nucleophilic addition.
 - What is Diel-Alder reaction?

SECTION B

2 x 10 = 20

2. Attempt any two parts of the following:
- Explain factors affecting SN₁ and SN₂ reactions in detail.
 - What are E₁ and E₂ reactions? Give Markownikoff's orientation.
 - What is Inductive effect? Give qualitative tests for Carboxylic acid, Amides and Ester.

SECTION C

7 x 5 = 35

3. Attempt any five parts of the following:
- Discuss three methods of preparation of Amines.
 - Explain Saytzeff's rule with suitable examples.
 - Give chemical tests to differentiate between primary secondary and tertiary Alcohols.
 - Write a note on Cannizzaro reaction.
 - Write IUPAC nomenclature rules for the naming of carboxylic acids.
 - Explain Ozonolysis and electrophilic addition reaction of Alkenes.
 - What is IUPAC system of nomenclature of organic compounds?



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BPHARM
(SEM II) THEORY EXAMINATION 2021-22
PHARMACEUTICAL ORGANIC CHEMISTRY I

*Time: 3 Hours**Total Marks: 75*

Note: 1. Attempt all Sections. If require any missing data; then choose suitably.

SECTION A1. Attempt *all* questions in brief.**10 x 2 = 20**

a.	Draw the structure for 3-Methoxypentanoyl chloride.
b.	Give IUPAC name for $\text{CH}_3\text{-CH}(\text{CH}_3)\text{-CO-CH}_2\text{-CH}_3$.
c.	Define "Saytzeff's rule".
d.	Outline the Diels-Alder reaction of conjugated dienes.
e.	Summarize any two reactions of alkyl halide.
f.	Discuss the structure and uses of ethyl alcohol.
g.	Discuss about "Inductive effect".
h.	Describe any two qualitative tests for carbonyl compounds.
i.	Discuss the structure and uses of acetyl salicylic acid.
j.	Show the structure and uses of amphetamine.

SECTION B2. Attempt any *two* parts of the following:**2 x 10 = 20**

a.	Illustrate the mechanism of Markovnikov's and Anti-Markovnikov's orientation of alkene with suitable example.
b.	Discuss the reaction and mechanism of aldol condensation and cross aldol condensation with suitable example.
c.	Illustrate SN_1 versus SN_2 reaction.

SECTION C3. Attempt any *five* parts of the following:**7 x 5 = 35**

a.	Discuss about structural isomerism. Write a note on chain, positional and functional isomerism.
b.	Explain the reaction and mechanism of chlorination of alkane with suitable example.
c.	Explain 1, 2 and 1,4 addition mechanism in conjugated dienes with suitable examples.
d.	Outline the chemical tests for alcohols. Give the structure and uses of glycerol.
e.	Outline the mechanism of Cannizzaro reaction with suitable example.
f.	Discuss the acidity of aliphatic carboxylic acid and the effect of substituents on their acidity.
g.	Define aliphatic amines. Discuss the basicity of aliphatic amines and the effect of substituents on their basicity.

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B PHARM
(SEM II) THEORY EXAMINATION 2019-20
PHARMACEUTICAL ORGANIC CHEMISTRY

Time: 3 Hours

Total Marks: 75

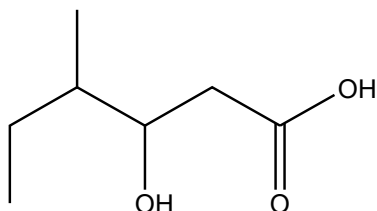
Note: 1. Attempt all Sections. If require any missing data; then choose suitably.

SECTION A

1. Attempt all questions in brief

10 x 2 = 20

- a) Write the chemical structure & uses of succinic and oxalic acid
- b) Define benzoin condensation reaction
- c) Give identification test of aldehydes and alcohol
- d) Differentiate between E₁ and E₂ reaction
- e) Write the two examples and uses of aliphatic amines
- f) Give the IUPAC name of



- g) Discuss uses of vanillin and cinnamaldehyde
- h) Give free radical reactions of alkenes
- i) Give the IUPAC name of following compound-: CH₃CH₂CH₂CH₂COOH
- j) What are electrophile and nucleophile?

SECTION B

2. Attempt any two parts of the following:

2 X 10 = 20

- a) What are SN₁ and SN₂ reactions. Discuss the kinetics, mechanism and factors affecting the SN₁ and SN₂ reactions
- b) Write about vanillin and benzaldehyde.
- c) Give short notes on cannizaro reaction and aldol condensation.

SECTION C

3. Attempt any five parts of the following:

7 X 5 = 35

- a) Define ozonolysis.
- b) Write the structure and uses of chloroform and trichloroethylene.
- c) Explain diels alder reaction with mechanism.
- d) Explain with examples markownikoffs rule.
- e) Write about basicity of aliphatic amines and factors affecting it.
- f) What is isomerism?. Discuss various type of structural isomerism with examples.
- g) Define Nomenclature of organic compounds with examples..

B PHARM
(SEM-II) THEORY EXAMINATION 2018-19
PHARMACEUTICAL ORGANIC CHEMISTRY-I

*Time: 3 Hours**Total Marks: 75***Note:** Attempt all Sections. If you require any missing data, choose suitably.**SECTION A****1. Attempt all questions in brief. 10 x 2 = 20**

- a. Give IUPAC name for $(\text{CH}_3)_2\text{C}=\text{CHC}(\text{C}_2\text{H}_5)=\text{CH}_2$.
- b. Give the structure and uses of Hexamine.
- c. Give the structure and uses of Tartaric acid.
- d. Why chloroacetic acid is more acidic than acetic acid?
- e. Write the structure and uses of Methyl Salicylate.
- f. Why aliphatic amines are more basic than aromatic amines?
- g. Give the structure and uses of Amphetamine.
- h. What is Saytzeff's rule?
- i. What is the effect of base in E_2 reaction?
- j. What is ozonolysis of alkene?

SECTION B**2. Attempt any two parts of the following: 2 x 10 = 20**

- a. What is isomerism? Explain structural isomerism with suitable examples.
- b. Write reaction and mechanism of Aldol condensation and Benzoin condensation.
- c. What are dienes? Explain 1, 2 and 1,4 addition mechanism in conjugated dienes with suitable examples

SECTION C**3. Attempt any five parts of the following: 7 x 5 = 35**

- a. Write a note on Markownikoff's orientation.
- b. Write IUPAC nomenclature rules for the naming of carboxylic acids.
- c. Write a detailed account of SN^1 and SN^2 reactions.
- d. Give the chemical tests for alcohols. Give the structure and uses of glycerol.
- e. Write a note on Cannizzaro reaction.
- f. Write chemical tests for amines. Give the structure and uses of ethanolamine.
- g. Write a note on: i) Perkin condensation reaction ii) Inductive effect

B PHARM
(SEM II) THEORY EXAMINATION 2017-18
PHARMACEUTICAL ORGANIC CHEMISTRY-I

*Time: 3 Hours**Total Marks: 75***Note: 1.** Attempt all Sections.**SECTION A**

- 1. Attempt all questions in brief. 10 x 2 = 20**
- Write down the structure of 2,2,4-trimethylpentane and amyl alcohol
 - What are chiral and achiral compounds?
 - Discuss any two method of preparation of alkanes.
 - What is Hybridization?
 - Define structure and uses of Chloroform and Ethyl alcohol.
 - What is Vector Meyer's test?
 - Discuss the preparation of ketone from geminal di halides.
 - Define crossed aldol condensation.
 - What do you mean by nucleophile?
 - Define structure and uses of Acetic acid and Lactic acid,

SECTION B

- 2. Attempt any two parts of the following: 2 x 10 = 20**
- Differentiate E^1 and E^2 reactions with their kinetics and order of reactivity of alkyl halides. Explain factors affecting E^1 and E^2 reactions.
 - Give the methods of preparation of alkyl halides. Discuss about SN^1 and SN^2 reactions in detail.
 - What is carbonyl compound? Explain their qualitative test and methods of preparation.

SECTION C

- 3. Attempt any five parts of the following: 7 x 5 = 35**
- Give the detailed classification of organic compounds
 - Define Sp^3 hybridization in alkanes. Explain halogenation reaction of alkanes.
 - Describe Markovnikov and Anti-Markovnikov rule with suitable examples.
 - Discuss methods of preparation and reactivity of conjugated dienes.
 - Describe a detailed account of nucleophilic addition reaction of carbonyl compounds.
 - Explain Cannizzaro and Perkin reaction with mechanism.
 - Give the methods of preparation and reactivity of carboxylic acids. Explain the acidity of carboxylic acid.

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**B PHARM
(SEM II) THEORY EXAMINATION 2022-2023
BIOCHEMISTRY**

Time: 3 Hours

Total Marks: 75

Note: Attempt all Sections. If require any missing data, then choose suitably.

SECTION A

10 x 2 = 20

1. Attempt all questions in brief.
 - a. Define Glycogenesis and Glycogenolysis
 - b. How many ATP are produced in Glycolysis and TCA cycle?
 - c. Define co-enzyme and Electron Transport Chain.
 - d. Define Enthalpy and Entropy.
 - e. What is Allosteric inhibition?
 - f. Define HMP-shunt.
 - g. Define the condition and reason of Gout.
 - h. What are Phospholipids? Give examples.
 - i. What is Oxidative Phosphorylation?
 - j. Define Genetic code with examples

SECTION B

2. Attempt any two parts of the following:
 - a. Give the derivation of Michaelis-Menton equation and also explain various factors affecting enzyme activity.
 - b. Describe disorders of Lipid metabolism in detail.
 - c. Explain structure of DNA and RNA and their functions.

SECTION C

3. Attempt any five parts of the following:
 - a. Discuss in detail about urea cycle. Also give the significance of urea cycle.
 - b. Write a short note on :- i). Genetic code ii). Hypercholesterolemia
 - c. Write a note on β - oxidation of saturated fatty acids.
 - d. Write the biosynthesis of ketone bodies and their utilization.
 - e. Describe Coenzyme with its structure and biological function.
 - f. Discuss in detail about the De novo synthesis of fatty acids.
 - g. What is reducing sugar? Explain the cyclic structure of Glucose.



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BPHARM
(SEM II) THEORY EXAMINATION 2021-22
BIOCHEMISTRY

*Time: 3 Hours**Total Marks: 75***Note:** 1. Attempt all Sections. If require any missing data; then choose suitably.**SECTION A****1. Attempt all questions in brief.****10 x 2 = 20**

a.	Explain the term Phospholipids with examples.
b.	Define essential and non-essential amino acids.
c.	Discuss the term Transamination giving an example.
d.	Define genetic code with suitable example.
e.	Define Enthalpy and Entropy.
f.	Enlist two diseases associated with glycogen metabolism.
g.	Define ketone bodies and ketoacidosis.
h.	Differentiate between Apoenzyme and Holoenzyme
i.	Define electron transport chain and ATP.
j.	Write down the biological role of Nucleic Acid.

SECTION B**2. Attempt any twoparts of the following:****2 x 10 = 20**

a.	Demonstrate the kinetics of enzymes with derivation of Michaelis-Menton Equation.
b.	Explain the salvage pathway of purine and pyrimidine biosynthesis.
c.	What are ketone bodies? Explain the reactions involved in formation of ketone bodies with suitable example.

SECTION C**3. Attempt any fiveparts of the following:****7 x 5 = 35**

a.	What is oxidative phosphorylation with its mechanism.
b.	Write a note on β -oxidation of saturated fatty acid.
c.	What is enzyme? Discuss effect of temperature and pH on properties of enzyme.
d.	Discuss DNA repair mechanism.
e.	Describe urea cycle with the reactions involved.
f.	Illustrate the steps involved in biosynthesis of cholesterol.
g.	Explain the structure of DNA and RNA.

B. PHARM
(SEM-II) THEORY EXAMINATION, 2019-20
BIOCHEMISTRY

Time: 3 Hours**Total Marks: 75****Note: 1.** Attempt all Sections. If require any missing data; then choose suitably.**SECTION A****1. Attempt all questions in brief.****10 x 2 = 20**

a.	Define electron tranport chain?
b.	Define free energy?
c.	What is hyperbilirubinemia?
d.	Define redox potential?
e.	What is jaundice?
f.	Define vitamin D?
g.	What are the full form of NADH,ATP,TPP,UDP.UTP,NADPH?
h.	Define gout?
i.	Draw the structure of ATP?
j.	Define cholestrol?

SECTION B**2. Attempt any twoparts of the following:****2 x 10 = 20**

a.	Write the classification of protein?
b.	Write the pathway of glycolysis and its energetics?
c.	Define lipids with its classification?

SECTION C**3. Attempt any fiveparts of the following:****7 x 5 = 35**

a.	Define enzyme kinetics and write down the properties of enzymes?
b.	Write the structure of DNA and RNA?
c.	Write a note on conversion of cholestrol into bile acid and its role?
d.	Write a short note on i).Genetic code ii).Hypercholesterolemia
e.	Describe Coenzyme with its structure and biological function?
f.	Write glycogen metabolism pathway ?
g.	Write the biosynthesis of ketone bodies and their utilization?

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150297

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**B PHARM
(SEM-II) THEORY EXAMINATION 2018-19
BIOCHEMISTRY**

Time: 3 Hours

Total Marks: 75

Note: Attempt all Sections. If you require any missing data, choose suitably.

SECTION A

- 1. Attempt all questions in brief. 10 x 2 = 20**
- a. What are Phospholipids? Give examples.
 - b. What are energy rich compounds? Give examples.
 - c. Define Glycogenesis and Glycogenolysis.
 - d. Write the hormones involved in the regulation of blood glucose level.
 - e. What do you understand by the term Transamination? Give example.
 - f. What is Allosteric inhibition?
 - g. Define Genetic code with examples.
 - h. Write down the synthesis of 5-HT (5-hydroxytryptamine) from Tryptophan.
 - i. Write down the biological role of Nucleic Acid.
 - j. Define Enthalpy and Entropy.

SECTION B

- 2. Attempt any two parts of the following: 2 x 10 = 20**
- a. What is gluconeogenesis? Give an outline of reactions. How are these reactions controlled? What is biological importance of these reactions?
 - b. Give the derivation of Michaelis-Menton equation and also explain factor affecting enzyme activity.
 - c. Describe the process of DNA replication in detail.

SECTION C

- 3. Attempt any five parts of the following: 7 x 5 = 35**
- a. Describe Embden Meyerhof pathway (glycolysis) in the body with energetic.
 - b. Enumerate the ketone bodies. Describe the formation and utilization of ketone bodies in the body.
 - c. Discuss in detail about urea cycle. Also give the significance of urea cycle.
 - d. Write in detail the mode of protein biosynthesis with schematic representations.
 - e. What are enzymes? Describe various processes of inhibition of enzymes activity.
 - f. Write down the biosynthesis and biological significance of Dopamine, Noradrenaline and Adrenaline.
 - g. Discuss in detail about the De novo synthesis of fatty acids.

B PHARM
(SEM II) THEORY EXAMINATION 2017-18
BIOCHEMISTRY

*Time: 3 Hours**Total Marks: 75*

SECTION A

1. Attempt *all* questions in brief.**10 x 2 = 20**

- a) Define mutarotation.
- b) Differentiate endergonic & exergonic reactions.
- c) What is phosphorolysis?
- d) Define essential & non-essential amino acid.
- e) How many ATP are produced in glycolysis and TCA cycle?
- f) Briefly describe hypercholesterolemia.
- g) Write a short note on nucleic acid.
- h) Define nitrogenous bases with structure.
- i) What is active center?
- j) Define coenzyme and Electron transport chain.

SECTION B

2. Attempt any *two* parts of the following:**2 x 10 = 20**

- a) What is monosaccharide? Discuss the glycolysis pathway and its energetics.
- b) Write a note on enzyme inhibition. Explain Michaelis-Menton plot of enzyme kinetics.
- c) What are ketone bodies? Give the reactions of formation of ketone bodies.

SECTION C

3. Attempt any *five* parts of the following:**7 x 5 = 35**

- a) What is reducing sugar? Explain the cyclic structure of glucose.
- b) Give the oxidative phase of HMP pathway. Discuss its significance.
- c) Write a note on β -oxidation of saturated fatty acid.
- d) What is deamination? Discuss the metabolic disorder of phenylalanine.
- e) What is isoenzyme? Discuss its diagnostic applications.
- f) Explain Gout disease. Give the structure of DNA & RNA.
- g) What is oxidative phosphorylation? Discuss its mechanism.

**B PHARM
(SEM II) THEORY EXAMINATION 2022-23
PATHOPHYSIOLOGY**

Total Marks: 75

Time: 3 Hours

Note: Attempt all Sections. If require any missing data, then choose suitably.

SECTION A

10 x 2 = 20

1. Attempt all questions in brief.

- (a) Define the term Homeostasis with example
- (b) What are the causes of cell injury.
- (c) What is congestive Heart failure. Differentiate between Forward and Backward Heart failure
- (d) Illustrate risk factors of COPD.
- (e) Differentiate between Type I and Type II Diabetes.
- (f) Give the Etiology of Alzheimer disease.
- (g) What is Rheumatoid Arthritis. Give its signs and symptoms.
- (h) Define Gout and write its types.
- (i) Illustrate Causative agent, sign and symptoms of Tuberculosis
- (j) Explain the Etiology of Syphilis.

SECTION B

2. Attempt any two parts of the following:

2 x 10 = 20

- (a) Discuss the components and type of Feedback system.
- (b) Elaborate Pathophysiology of Acute and Chronic Renal failure.
- (c) Explain the etiology, types and pathogenesis of Diabetes Mellitus.

SECTION C

3. Attempt any five parts of the following:

7 x 5 = 35

- (a) Discuss basic Mechanism involved in the process of inflammation.
- (b) Explain Pathophysiology of Hypertension.
- (c) Illustrate different types of epilepsy. Explain its pathogenesis.
- (d) Describe basic principle of wound healing in skin.
- (e) Explain the pathophysiology of AIDS.
- (f) Discuss causative agent, Mode of transmission and pathogenesis of Leprosy
- (g) What is Peptic Ulcer. Discuss its pathogenesis.



PAPER ID-411585

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BPHARM
(SEM II) THEORY EXAMINATION 2021-22
PATHOPHYSIOLOGY

*Time: 3 Hours**Total Marks: 75***Note:** 1. Attempt all Sections. If require any missing data; then choose suitably.**SECTION A****1. Attempt all questions in brief. 10 x 2 = 20**

a.	Differentiate between hypertrophy and hyperplasia with examples.
b.	Discuss in brief megaloblastic anemia.
c.	Define hepatitis and write its various types.
d.	Enlist the causes of cell injury.
e.	Define seizures and classify its types.
f.	Discuss the types of osteoporosis with emphasis on its cause.
g.	Outline the clinical signs of inflammation.
h.	Define myocardial infarction.
i.	Write the risk factors of atherosclerosis.
j.	Define hemophilia.

SECTION B**2. Attempt any two parts of the following: 2 x 10 = 20**

a.	Write in detail the pathogenesis of cell injury.
b.	Explain the pathophysiology of cancer.
c.	Classify hypertension. Illustrate its pathogenesis and complications.

SECTION C**3. Attempt any five parts of the following: 7 x 5 = 35**

a.	Discuss the pathophysiology of peptic ulcer.
b.	Illustrate types of diabetes and write their pathophysiology.
c.	Write a detailed note on AIDS.
d.	Explain the feedback systems involved in homeostasis.
e.	Write an exhaustive note on pathophysiology of asthma.
f.	Discuss the pathophysiology of Parkinson Disease.
g.	Classify types of tuberculosis. Explain its pathogenesis.

B. PHARM
(SEM-II) THEORY EXAMINATION 2019-20
PATHOPHYSIOLOGY

Time: 3 Hours

Total Marks: 75

Note: 1. Attempt all Sections. If require any missing data; then choose suitably.

SECTION A

- 1. Attempt all questions in brief. 10 x 2 = 20**
- a. Define cellular adaptations.
 - b. What are intracellular accumulations?
 - c. Describe Myocardial infarction in brief.
 - d. Give a short note on Hemophilia.
 - e. Define Angiogenesis.
 - f. Write a note on role of interleukins in inflammation process.
 - g. Give a short note on hypothyroidism and possible reasons for its development.
 - h. Tuberculosis.
 - i. Short note on ulcerative colitis.
 - j. Discuss the sign and symptoms of Leprosy.

SECTION B

- 2. Attempt any two parts of the following: 2 x 10 = 20**
- a. Write in detail the pathophysiology of Parkinson's disease. Explain intrinsic and extrinsic pathways.
 - b. Discuss the pathophysiology of atherosclerosis and hypertension.
 - c. Explain the process of apoptosis. Elaborate extrinsic and intrinsic pathways.

SECTION C

- 3. Attempt any five parts of the following: 7 x 5 = 35**
- a. Give the pathophysiology of Asthma.
 - b. Define Anemia. Elaborate Iron Deficiency Anemia.
 - c. Give the pathophysiology of Epilepsy. Explain its various types.
 - d. Define Ulcers. Explain the process of ulcer development.
 - e. Differentiate between rheumatoid and osteoarthritis. Explain the pathophysiology of osteoarthritis.
 - f. Describe the pathways of development of cancer.
 - g. Explain the pathophysiology of AIDS.

Paper Id:

150298

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B.PHARM
(SEM - II) THEORY EXAMINATION 2018-19
PATHOPHYSIOLOGY

Time: 3 Hours**Total Marks: 75****Note:** Attempt all Sections. If you require any missing data, choose suitably.

SECTION A

- 1. Attempt all questions in brief. 10 x 2 = 20**
- a. Write a short note on feedback systems.
 - b. Define chemotaxis.
 - c. Write a note on acute renal failure.
 - d. Define Schizophrenia.
 - e. Define Neoplasm.
 - f. Discuss the role of Xanthine oxidase in development of gout.
 - g. Give a short note on Grave's disease.
 - h. Define Stroke and Hemorrhage.
 - i. Discuss the underlying causes for development of Jaundice.
 - j. Give causative agent and sign of Leprosy.

SECTION B

- 2. Attempt any two parts of the following: 2 x 10 = 20**
- a. Discuss in detail the pathophysiology of Asthma.
 - b. Write descriptive notes on CHF and Angina.
 - c. Elaborate the pathways of cellular apoptosis.

SECTION C

- 3. Attempt any five parts of the following: 7 x 5 = 35**
- a. Give the pathophysiology of Tuberculosis.
 - b. Explain the pathophysiology of diabetes.
 - c. Elaborate the pathways involved in the development of depression.
 - d. Define Ulcers. Explain the process of ulcer development.
 - e. Discuss Thalasemia and Sickle cell Anemia.
 - f. Define cancer. Describe the pathophysiology of cancer.
 - g. Explain the pathophysiology of AIDS.

B. PHARM.
(SEM II) THEORY EXAMINATION 2017-18
PATHOPHYSIOLOGY (THEORY)

Time: 3 Hours

Total Marks: 75

Note: 1. Attempt all Sections. If require any missing data; then choose suitably.

SECTION A

1. Attempt all questions in brief. 10 x 2 = 20

- a. What are the two types of feedback system?
- b. Define atrophy.
- c. Define COPD.
- d. What are the causes of ischemic heart disease?
- e. Define megaloblastic anemia.
- f. What is healing?
- g. Enlist the types of cancer.
- h. What are the causes of osteoporosis?
- i. What is the causative agent of typhoid?
- j. The causative agent of syphilis is.....

SECTION B

2. Attempt any two parts of the following: 2 x 10 = 20

- a. Write a descriptive note on hypoxia mediated reversible OR irreversible cell injury.
- b. Write a note on iron deficiency anemia.
- c. Define hepatitis. What are its various types? Explain them in detail.

SECTION C

3. Attempt any five parts of the following: 7 x 5 = 35

- a. Write a note on mediators of inflammation.
- b. Explain the pathophysiology of asthma OR congestive heart failure.
- c. Write a note on Alzheimer's disease.
- d. Write a descriptive note on pathophysiology of peptic ulcer.
- e. What is rheumatoid arthritis? Explain its pathophysiology in detail.
- f. Write a note on leprosy OR goiter.
- g. Write an exhaustive note on AIDS.