



**ARKAJAIN**  
University  
Jharkhand

**END TERM EXAMINATION**  
School of Health & Allied Science

Branch	B.Pharmacy	Program	Pharmacy
Subject Name	Computer Applications in Pharmacy	Semester	II
		Year	2023/ Even
Time: 2 Hour Max. Marks : 50	<ul style="list-style-type: none"> <li>• Start writing from 2nd page onwards; <b>don't Write on the 1st Page Backside</b></li> <li>• Answer Any Two out of Three of Section A</li> <li>• Answer Any Six out of Eight of Section B</li> <li>• Possession of <b>Mobile Phones</b> or any kind of <b>Written Material, Arguments with the Invigilator or Discussing with Co-Student</b> will comes under <b>Unfair Means</b> and will <b>Result</b> in the <b>Cancellation of the Papers.</b></li> </ul>		
Knowledge Level (KL)	K1 : Remembering	K3 : Applying	K5 : Evaluating
	K2 : Understanding	K4 : Analysing	K6 : Creating

**Section A Answer any TWO out of THREE [2x10 =20 Marks]**

Q. N1	QUESTIONS	Marks	COs	KL	PO
1	What do you mean by Drug Information Retrieval? What are the Major Components of Drug Information Retrieval using computers? Explain in details.	10	CO5	K4	PO1
2	Write down the concept of Information Gathering. What are the various information gathering tools? Explain with the help of example.	10	CO4	K1	PO2
3	What do you mean Lab Diagnostic System? List and explain the different diagnostic tests.	10	CO6	K4	PO2

**Section B Answer any SIX out of EIGHT [6x5= 30 Marks]**

Q. No.	QUESTIONS	Marks	Cos	KL	PO
4	Write down the applications of Barcode in Healthcare industry	5	CO5	K1	PO2
5	Define System requirement. What are the various types of system requirement? Explain in details.	5	CO3	K2	PO9
6	Write down the characteristics of questionnaire.	5	CO6	K2	PO1
7	Explain the concept of Feasibility Analysis of Software System.	5	CO2	K1	PO1

8	What is DFD? Name the three types of icon used in a DFD. What are the different types of DFD? Explain in brief	5	CO2	K2	PO9
9	What do you mean by BINARY ADDITION and BINARY SUBTRACTION? Explain with example.	5	CO1	K4	PO2
10	What is website and webpage? Explain the format of html webpage.	5	CO6	K3	PO9
11	Write a short note on: a) Patient monitoring system. b) Pharmacy information system.	5	CO2	K2	PO9

CO- Course Outcomes,

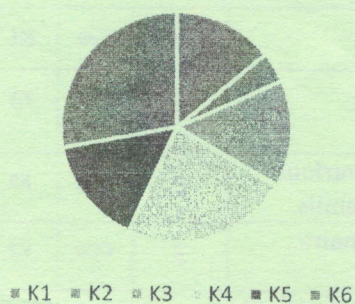
KL- Knowledge Level,

PO – Program Outcome

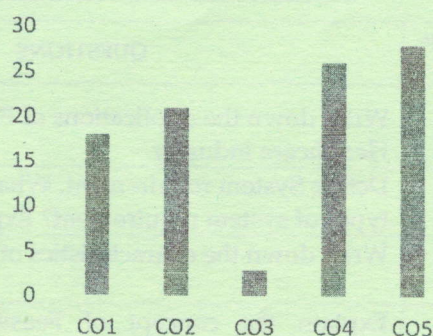
Course Outcomes	CO1	Apply the knowledge of mathematics and computing fundamentals to pharmaceutical applications for any given requirement
	CO2	Discuss about computers (I/O devices), binary conversion, applications of computers in pharmacy.
	CO3	Describe Concept of common languages in computers, algorithm flow chart, solution of problems based on biostatistics and other simple problems of pharmaceutical interest.
	CO4	Explain MS Word, MS Excel, MS Power Point.
	CO5	Explain Concept of ISIS, RASMOL, CHEMSKETCH
	CO6	Know the web-based tools for pharmacy practice. Apply the knowledge to design and develop digital tools for pharmaceutical application

#### GRAFICAL REPRESENTATION

Bloom's Level wise Marks Distribution



Course Outcome Wise Marks Distribution





Branch	B.Pharmacy	Program	Pharmacy
Subject Name	Environmental Sciences	Semester	II
		Year	2023/ Even
Time: 2 Hour Max. Marks : 50	<ul style="list-style-type: none"> <li>Start writing from 2nd page onwards; <b>don't Write on the 1st Page Backside</b></li> <li>Answer Any <i>Two</i> out of <i>Three</i> of Section A</li> <li>Answer Any <i>Six</i> out of <i>Eight</i> of Section B</li> <li>Possession of <u>Mobile Phones</u> or any kind of <u>Written Material, Arguments with the Invigilator or Discussing with Co-Student</u> will comes under <u>Unfair Means</u> and will <u>Result</u> in the <u>Cancellation of the Papers.</u></li> </ul>		
Knowledge Level (KL)	K1 : Remembering	K3 : Applying	K5 : Evaluating
	K2 : Understanding	K4 : Analysing	K6 : Creating

**Section A Answer any Two out of Three [2 x 10 = 20 Marks]**

Q. No	QUESTIONS	Marks	COs	KL	PO
1	Discuss the Characteristics, Structure and Functions of Forest Ecosystem.	10	CO1	K1,2	PO7
2	What do you mean by Sewage? Discuss about Waste Water Management	10	CO2	K3	PO5
3	How do you define natural resources? Describe Land resources in detail.	10	CO6	K1,2	PO7

**Section B Answer any Six out of Eight [6 x 5 = 30 Marks]**

Q. No	QUESTIONS	Marks	COs	KL	PO
4	What are the methods of water conservation and management?	5	CO3	K1	PO7
5	Describe the aquatic ecosystem.	5	CO1	K5	PO4
6	Describe the construction and operation of Bag House Filter.	5	CO5	K3	PO5
7	How does acid rain form? What consequences does acid rain have?	5	CO2	K1	PO5
8	Write a short note on Biotic Components of an Ecosystems.	5	CO6	K2,4	PO4
9	What are the Man-made Sources for Air Pollution?	5	CO3	K1,2	PO5
10	Describe stratification.	5	CO1	K1	PO7
11	Write a short note on Causes of Soil Pollution.	5	CO2	K1	PO7

CO- Course Outcomes,

KL- Knowledge Level,

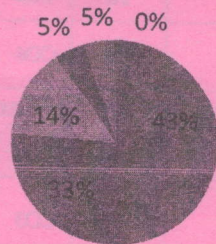
PO – Program Outcome

Course Outcomes	CO1	Create the awareness about environmental problems among learners.
	CO2	Impart basic knowledge about the environment and its allied problems.
	CO3	Develop an attitude of concern for the environment.
	CO4	Motivate learner to participate in environment protection and environment improvement.
	CO5	Acquire skills to help the concerned individuals in identifying and solving environmental problems.
	CO6	Strive to attain harmony with Nature.

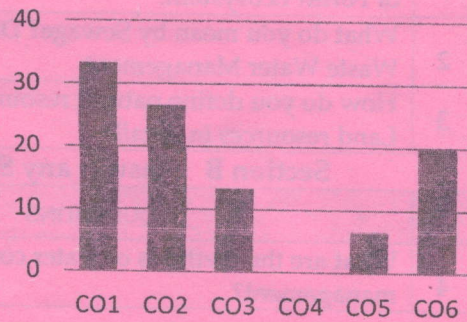
**GRAPHICAL REPRESENTATION**

**Bloom's level wise Marks distribution**

■ K1 ■ K2 ■ K3 ■ K4 ■ K5 ■ K6



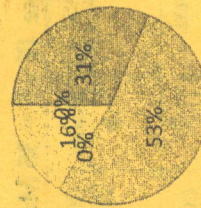
**Course Outcome wise Marks Distribution**



CO1	Understand the gross morphology, structure and functions of various organs of the human body.
CO2	Describe the various homeostatic mechanisms and their imbalances.
CO3	Identify the various tissues and organs of different systems of human body.
CO4	Perform the hematological tests like blood cell counts, haemoglobin estimation, bleeding/clotting time etc and also record blood pressure, heart rate, pulse and respiratory volume
CO5	Appreciate coordinated working pattern of different organs of each system
CO6	Appreciate the interlinked mechanisms in the maintenance of normal functioning (Homeostasis) of human body.

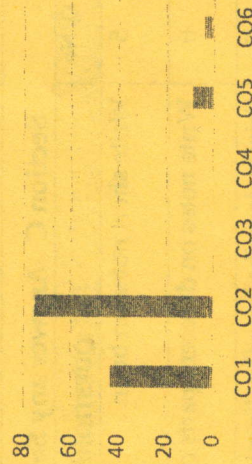
## GRAPHICAL REPRESENTATION

## Bloom's Level wise Marks Distribution



■ K1 ■ K2 ■ K3 ■ K4 ■ K5 ■ K6

## Course Outcome Wise Marks Distribution



Branch	School of Pharmacy	Program	B. Pharmacy
Subject Name	Human Anatomy and Physiology-II	Semester	II
		Year	2023/ Even
Time: 3 Hour Max. Marks : 75	<ul style="list-style-type: none"> <li>Start writing from 2nd page onwards; <b>don't Write on the 1st Page Backside</b></li> <li>Answer all Questions of Section A (Compulsory)</li> <li>Answer Any <b>Two</b> out of <b>Three</b> of Section B</li> <li>Answer Any <b>Seven</b> out of <b>Nine</b> of Section C</li> <li>Possession of <b>Mobile Phones</b> or any kind of <b>Written Material, Arguments with the Invigilator or Discussing with Co-Student will come under Unfair Means</b> and will <b>Result</b> in the <b>Cancellation of the Papers.</b></li> </ul>		
Knowledge Level (KL)	K1 : Remembering K2 : Understanding	K3 : Applying K4 : Analysing	K5 : Evaluating K6 : Creating

## Section A (Each question Carry 02 Marks from Q1-i to Q1-xx) – 20 Marks

Q. N1	QUESTIONS	Marks	COs	KL	PO
i	What is the weight of average human brain? a) 10 gram b) 100gram c) 1000gram d) 1400 gram	1	CO1	K1	PO2
ii	Glossopharyngeal nerve _____? a) Cranial nerve xii b) Cranial nerve ix c) Cranial nerve x d) Cranial nerve vi	1	CO1	K4 K2	PO1
iii	Which part is a part of diencephalon? a) Mid brain b) Cerebrum c) Medulla oblongata d) Thalamus	1	CO1 CO2	K1 K2	PO1
iv	Number of cranial nerves found in human body? a) 24 b) 30 c) 12 d) 14	1	CO2	K2	PO2
v	Which of the following is synthesized and stored in the liver cells? a) Galactose b) Lactose c) Glycogen d) Arabinose	1	CO2 CO6	K1 K2	PO9
vi	Protein is transformed after digestion into _____? a) Glucose b) Sucrose c) Fat d) Amino acid	1	CO5 CO1	K1 K4	PO1
vii	Which hydrolytic enzymes reacts in a low pH environment? a) Peroxidases b) Proteases c) Amylases d) Hydrolases	1	CO5	K4	PO2

viii	Voice box is also known as- a) Trachea c) Oesophagus	1	CO2	K4	PO1
ix	Which cell synthesized and secrete the testicular hormone in male? a) Sertoli cell c) Leydig cell	1	CO1	K1	PO1
x	Tip of the sperm is consist of a) Chromosome c) Both a & b	1	CO6	K2 K4	PO2
xi	What is female sex hormone? a) androgen c) LH	1	CO5 CO6	K4	PO9
xii	Which of the following is works by filtering out and keeping the dirt and mucus away from the lungs? a) Hairs in the lungs c) Alveoli	1	CO2 CO6	K4	PO9
xiii	Which hormone triggers the male sperms to generate sperms and in females triggers the follicular development in every month? a) Prolactin c) FSH	1	CO5 CO2	K2	PO9
xiv	The hormone responsible for "fight-flight" response? a) Thyroxine and melatonin b) Insulin and glucagon c) Epinephrine and nor epinephrine d) Oestrogen and progesterone	1	CO2 CO1	K1	PO1
xv	Which is not an endocrine gland? a) Adrenal c) Lacrimal	1	CO1	K1	PO1
xvi	Action of parathormone in human body? a) Decrease sodium level b) Increase sodium level c) Decrease calcium level d) Increase calcium level	1	CO2	K2	PO1
xvii	What is male sex hormone? a) Aldosterone c) Pheromones	1	CO1	K1	PO1

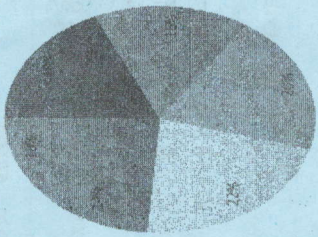
xviii	Which is not a female reproductive organ? a) Oviducts c) Epididymis	1	CO1	K4	PO1
xix	Which hormone is responsible for the onset of puberty in females? a) Prolactin c) FSH	1	CO2	K2	PO9
xx	GnRH is released by the _____ a) Pituitary gland c) Gonads	1	CO1 CO2	K1 K2	PO9
<b>Section B Answer any Two out of Three [2 x 10 = 20 Marks]</b>					
Q. No.	QUESTIONS	Marks	COs	KL	PO
2	Draw neat labelled diagram of urinary system and briefly explain the physiology of urine formation.	10	CO1 CO2	K1 K2	PO1
3	What is endocrine and exocrine glands, write notes on pituitary gland	10	CO2	K2 K4	PO2
4	Briefly describe the parts of male and female reproductive system with labelled diagram.	10	CO1 CO2	K1 K2	PO9
<b>Section C Answer any Seven out of Nine [7 x 5 = 35 Marks]</b>					
Q. No.	QUESTIONS	Marks	COs	KL	PO
5	Write short notes on brain	5	CO2	K2	PO1
6	Write notes on different parts of alimentary canal.	5	CO2 CO5	K2	PO2
7	Briefly describe how the digestive acid actually produced in stomach.	5	CO2	K2	PO2
8	Draw a labelled diagram of lungs	5	CO2	K1 K2	PO2
9	Describe the pathophysiology of internal and external respiration.	5	CO1	K1 K2	PO1
10	Write short notes on adrenal gland	5	CO1 CO2	K1	PO1
11	Write notes on menstrual cycle	5	CO2	K2	PO1
12	write detail notes on spermatogenesis	5	CO1 CO2	K2	PO9
13	Describe the endocrine function of testes	5	CO1	K1	PO1

CO- Course Outcomes, KL- Knowledge Level, PO - Program Outcome

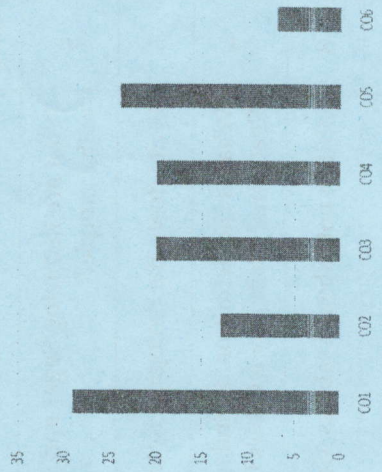
CO1	Acquire knowledge about chemistry and biological importance of biological macromolecules and biochemical energetic.
CO2	Understand the metabolism of carbohydrate in physiological and pathological conditions and biological oxidation of nutrient molecules.
CO3	Understand the metabolism of lipids in physiological and pathological conditions.
CO4	Understand the metabolism of proteins in physiological and pathological conditions
CO5	Understand the genetic organization of mammalian genome and functions of DNA in the synthesis of RNAs and proteins.
CO6	Understand the catalytic role of enzymes, importance of enzyme inhibitors in design of new drugs, therapeutic and diagnostic applications of enzymes.

**GRAPHICAL REPRESENTATION**

Bloom's level wise mark distribution.



Course Outcome wise Mark Distribution



**ARKAJAIN University**  
Jharkhand

Branch: B.Pharmacy  
Subject Name: Biochemistry

Program: Pharmacy II  
Semester: II  
Year: 2023/Even

**END TERM EXAMINATION**  
School of Health & Allied Science

- Time: 3 Hour  
Max. Marks : 75
- Start writing from 2nd page onwards; don't Write on the 1st Page Backside
  - Answer all Questions of Section A (Compulsory)
  - Answer Any Two out of Three of Section B
  - Answer Any Seven out of Nine of Section C
  - Possession of Mobile Phones or any kind of Written Material, Arguments with the Invigilator or Discussing with Co-Student will come under Unfair Means and will Result in the Cancellation of the Papers.

Knowledge Level (KL)  
K1 : Remembering  
K2 : Understanding  
K3 : Applying  
K4 : Analysing  
K5 : Evaluating  
K6 : Creating

**Section A (Each question Carry 01 Marks from Q1-i to Q1-xx) - 20 Marks**

Q. N1	QUESTIONS	Marks	COs	KL	PO
i	Which of the following does not present in DNA? a) Adenine b) Guanine c) Uracil d) Cytosine	1	CO5	K1	PO1
ii	Who discovered nucleic acid? a) Watson and Crick b) Friedrich Miescher c) Griffith d) Walter Gilbert	1	CO5, CO1	K2	PO1
iii	Deoxyribose sugar is found in DNA a) True b) False c) Present in RNA d) None of the above	1	CO5	K3	PO3
iv	Which of the following enzyme catalyzes the first step of glycolysis? a) Hexokinase/Glucokinase b) Pyruvate kinase c) Phosphofructokinase d) None of these	1	CO6	K1	PO2
v	Which of the following cell secrete insulin hormone? a) α-cell b) β-cell c) α and β cell both d) None of the above	1	CO3	K2	PO4
vi	Ketone bodies are produced in..... a) Kidney b) Liver c) Brain d) Intestine	1	CO3	K4	PO5
vii	Breakdown of fatty acid occurs in..... a) Lysosome b) Mitochondria c) Ribosome d) Vacuoles	1	CO3	K1	PO2

viii	Bile acid is synthesized in..... a) Kidney b) Liver c) Intestine d) Stomach	1	CO3	K2	PO3
ix	Which is not a pyrimidine base a) Adenine b) Cytosine c) Uracil d) Thymine	1	CO1, CO5	K3	PO4
x	Glycolysis is also known as, a) Krebs's cycle b) HMP shunt c) EMP pathway d) None	1	CO1	K4	PO4
xi	HMP shunt is also known as, a) EMP pathway b) Hill's reaction c) Phosphogluconate pathway d) Hexose monophosphate pathway	1	CO2	K2	PO1
xii	The powerhouse of the cell is a) Nucleus b) Cell membrane c) Mitochondria d) Lysosomes	1	CO1	K3	PO1
xiii	Sucrose consists of a) Glucose+glucose b) Glucose+fructose c) Glucose+galactose d) Glucose+maltose	1	CO1	K4	PO2
xiv	At glycolysis, glucose converts to a) Pyruvate b) Phosphoenolpyruvate c) Citric Acid d) None of the above	1	CO2	K3	PO3
xv	Hexokinase is..... a) Transferases b) Oxidoreductases c) Hydrolases d) Lyases	1	CO6	K1	PO1
xvi	Vitamin-D is..... a) Fat soluble b) Water soluble c) Not soluble in both d) Both soluble	1	CO1	K2	PO2
xvii	Bilirubin is..... a) Black pigment b) Yellow pigment c) Blue pigment d) Red pigment	1	CO3	K3	PO3
xviii	Substrate level phosphorylation occurs in..... a) TCA cycle b) Glucogenesis c) HMP shunt d) Glucogenolysis	1	CO1, CO2	K2	PO1
xix	High energy compounds release a) More than 7cal/mol b) Less than 7cal/mol c) Equal to 7cal/mol d) None of above	1	CO1	K2	PO3
xx	Amino acid contain..... a) Amino group b) Carboxyl group c) Amino & carboxyl group d) None of these	1	CO1	K3	PO4

Section B Answer any Two out of Three [2 x 10 = 20 Marks]					
Q. No.	QUESTIONS	Marks	COs	KL	PO
2	Give a detailed account of the glycolysis pathway. Write about the energetics (aerobic, anaerobic) glycolysis pathway.	10	CO2	K1, K6	PO2
3	Give a brief note of Translation OR Protein synthesis with a diagram.	10	CO5, CO4	K5	PO3
4	Give a brief note on $\alpha$ -helix, $\beta$ -sheet of protein with structure. Write about the biological role of protein.	10	CO4	K4	PO5

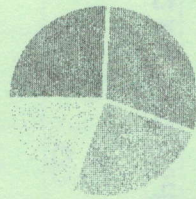
Section C Answer any Seven out of Nine [7 x 5 = 35 Marks]					
Q. No.	QUESTIONS	Marks	COs	KL	PO
5	What are Reducing Sugar and Non-Reducing Sugar with example?	5	CO1	K2	PO1
6	Write down the Biological Role of DNA and RNA.	5	CO5	K3	PO3
7	What is the definition of Endergonic and Exergonic Reactions? Write down Gibb's Free Energy equation.	5	CO1	K3	PO5
8	Write a note about Diabetes Mellitus.	5	CO1, CO3	K4	PO6
9	Write a note about the Michaelis-Menten plot with an equation and graph.	5	CO6	K5	PO3
10	Explain in detail about hyperuricemia and gout.	5	CO5, CO1	K1	PO6
11	Write about the $\beta$ -oxidation of saturated fatty acid.	5	CO3	K2	PO3
12	Write a note about Hypercholesterolemia and Obesity.	5	CO3	K4	PO6
13	Write a note about Phenylketonuria and Albinism.	5	CO1	K3	PO2



CO1	Describe the etiology and basics of pathophysiology.
CO2	Acquire knowledge of signs and symptoms of the diseases.
CO3	Identify the complications of the diseases.
CO4	Know about most commonly encountered pathophysiological state(s) and/or disease mechanism(s), as well as any clinical testing requirements

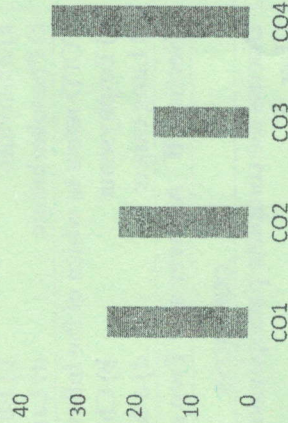
**GRAFICAL REPRESENTATION**

**Bloom's Level wise Marks Distribution**



■ K1 ■ K2 ■ K3 ■ K4 ■ K5 ■ K6

**Course Outcome Wise Marks Distribution**



Branch	B.Pharmacy	
Subject Name	Pathophysiology	
Program	Pharmacy	
Semester	II	
Year	2023/ Even	
Time: 3 Hour	Start writing from 2nd page onwards; don't Write on the 1st Page Backside	
Max. Marks : 75	<ul style="list-style-type: none"> <li>Answer all Questions of Section A (Compulsory)</li> <li>Answer Any Two out of Three of Section B</li> <li>Answer Any Seven out of Nine of Section C</li> <li>Possession of Mobile Phones or any kind of Written Material, Arguments with the Invigilator or Discussing with Co-Student will come under <u>Unfair Means</u> and will <u>Result</u> in the <u>Cancellation of the Papers</u>.</li> </ul>	
Knowledge Level (KL)	K1 : Remembering K2 : Understanding	K3 : Applying K4 : Analysing K5 : Evaluating K6 : Creating

**Section A (Each question Carry 02 Marks from Q1-i to Q1-xx) – 20 Marks**

Q. N1	QUESTIONS	Marks	COs	KL	PO
i	Renin Secreted from _____ a) Kidney b) Lungs c) Liver d) Bone Marrow	1	CO 1	K2	PO 2
ii	Which of these allergens are most likely to bring on an asthma attack? a) Ragweed b) Cockroach dander c) Dust mites d) All of the above	1	CO 4	K1, K2	PO 9
iii	STIs are most common in which age group? a) Teen and young adults up to age 24 b) People ages 30-45 c) People 60 and older d) All of the above	1	CO 3	K1, K2	PO 10
iv	Formation of red blood cells Occurs in _____ a) Bone marrow b) Sickle cell c) Heart d) Artery	1	CO 3	K1, K2	PO 9
v	Risk factors for development of atherosclerosis is a) Increase serum level of LDL b) Decrease serum level of LDL c) Increase serum level of HDL d) None of the above	1	CO 4	K2, K3	PO 11

vi	All the following are risk factors of primary hypertension except a) Low dietary intake of potassium b) Increasing age c) Hyperinsulinemia d) Low dietary salt intake	1	CO 3	K1, K2	PO 11
vii	Pathogenesis Parkinson's Disease a) B- Amyloid deposition b) A- Synuclein Formation c) Both a & b d) Mitochondrial damage	1	CO 4	K3, K4	PO 4
viii	First line drug of choice for Grand mal epilepsy_____ a) Phenytoin b) Ethosuximide c) Phenobarbitone d) Lamotrigine	1	CO 4	K1	PO 4
ix	What is the common cause of developing Peptic ulcer? a) Smoking b) Helicobacter pylori infection c) Obesity d) Alcohol	1	CO 1	K2	PO 9
x	Swelling in the wall of an artery is a) Aneurysm b) Varicose veins c) Varicose thrombus d) Atherosclerosis	1	CO 3	K1	PO 9
xi	Pathogenesis Alzheimer's Disease a) B- Amyloid deposition b) A- Synuclein Formation c) Both a & b d) Mitochondrial damage	1	CO 1	K3, K4	PO 9
xii	Angiotensin converting Enzyme Secreted from a) Kidney b) Lungs c) Liver d) Bone Marrow	1	CO 4	K1	PO 10
xiii	Vasodilator drugs in treatment for myocardial infarction a) Morphine b) Low-dose aspirin c) Propranolol (Beta blockers) d) Nitro-glycerine	1	CO 4	K1	PO 2
xiv	The following is/are mediators of inflammation: a) Histamine b) PAF c) Both a & b d) None of the above	1	CO 1	K1	PO 9
xv	Causative microorganism of Typhoid a) Salmonella typhi b) Mycobacterium tuberculosis c) Mycobacterium lepra d) Treponema pallidum	1	CO 4	K4, K5	PO 9
xvi	Which of the following is a PGs agonist drug? a) Cimetidine b) Omeprazole	1	CO 4	K1	PO 11

xvii	c) Sucralfate All the following are classes for treatment of hypertension except a) $\beta$ -Blockers b) Diuretics c) ACE (angiotensin converting enzyme) inhibitors d) Aspirin	1	CO 4	K4	PO 9
xviii	Type of angina which takes aspirin as prophylactic_____ a) Stable angina b) Unstable angina c) Variant angina d) Exertional angina	1	CO 2	K1, K2	PO 10
xix	First line drug of choice for petit mal epilepsy_____ a) Phenytoin b) Ethosuximide c) Phenobarbitone d) Lamotrigine	1	CO 4	K1	PO 11
xx	COPD refers to which of the following a) Emphysema b) Chronic bronchitis c) Lung cancer d) a & b	1	CO 4	K2	PO 2
<b>Section B Answer any Two out of Three [2 x 10 = 20 Marks]</b>					
Q. No.	QUESTIONS	Marks	COs	KL	PO
2	Discuss the complete pathophysiology of Peptic Ulcer.	10	CO4	K2, K3	PO11
3	What is Parkinson's Disease. Discuss about Pathophysiology of Parkinson's Disease.	10	CO1, CO2, CO4	KL, K2	PO9
4	Explain the pathophysiology of COPD.	10	CO2	K3, K4	PO2
<b>Section C Answer any Seven out of Nine [7 x 5 = 35 Marks]</b>					
Q. No.	QUESTIONS	Marks	COs	KL	PO
5	Discuss the pathophysiology of Tuberculosis.	5	CO4	K4	PO8
6	Write Short note on Iron Deficiency Anaemia	5	CO3	K2	PO10
7	Discuss About Urinary Tract Infection.	5	CO3	K2	PO9
8	Discuss Etiology and Pathogenesis of Alzheimer's Disease.	5	CO1	K2, K3	PO9
9	What is sickle cell anaemia and how it is treated?	5	CO4	K1	PO11
10	Define Peptic Ulcer. And its types. Mention the symptoms of Peptic Ulcer.	5	CO2, CO3	K1	PO11
11	Discuss pathophysiology of Hypertension.	5	CO2	K3, K4	PO9
12	Define Angina Pectoris and Explain Different types of Angina Pectoris.	5	CO1	K3, K4	PO9
13	Write about symptoms and treatment of Leprosy.	5	CO1	K1, K2	PO2