

Enrol. No. S R H U

Regn. No. D D

END SEMESTER EXAMINATION, JUNE 2025

B. PHARM. – 2ND SEMESTER

Subject Code: BP201T

Subject Name: Human Anatomy and Physiology II

Time: 3.00 Hour

Total Marks: 75

Q.No		Marks	CO	PO
Q.1	Attempt all Questions.	20(10*2)		
a.	Define the term Oogenesis.		1	1
b.	Enlist the function of CSF.		1	2
c.	What is the difference between sperm and ovum?		2	2
d.	Define Peptic Ulcer.		1	2
e.	What is Neurone?		1	2
f.	Give definition of endocrine hormone and exocrine hormone.		1	2
g.	What is Nephron?		2	1
h.	What is ATP?		1	2
i.	Enlist the name of disorder of reproductive system.		1	2
j.	Define the term Neurotransmitter.		1	2

Q.2	Attempt any Two Questions.	20(2*10)		
a.	Discuss anatomy and physiology of male reproductive system.		1	2
b.	Give anatomy and physiology of respiratory system.		1	1
c.	Write a detail note on disorder of digestive system.		1	2

Q.3	Attempt any Seven Questions.	35(7*5)		
a.	Write a note on CSF and give its composition.		1	1
b.	Explain structure and function of pancreas.		1	2
c.	Write a detail note on spinal cord.		1	1
d.	Write a note on functions of thyroid hormones.		2	1
e.	Explain detail structure and function of lungs.		1	1
f.	Write a note on step involved in urine formation.		2	1
g.	Write a note on genetic pattern of inheritance.		2	1
h.	Write a note on Spermatogenesis.		1	2
i.	Explain the physiological function of mineralocorticoids and glucocorticoids.		2	1

END SEMESTER EXAMINATION, JUNE 2025
B. Pharm. – 2nd Semester

Subject Code: BP202T

Subject Name: Pharmaceutical Organic Chemistry-I

Time: 3.00 Hour

Total Marks: 75

Q.No		Marks	CO	PO
Q.1	Attempt all Questions	20(10x2)		
a.	Which of the following example containing ketone functional group? a) CH_3COCH_3 b) CH_3CHO c) $\text{CH}_3\text{-NH}_2$ d) $\text{CH}_3\text{-OH}$		1	2
b.	The compounds which contain one or more benzene rings or their physical and chemical properties resemble like benzene are called _____ compounds. a) Aliphatic b) Aromatic c) Heterocyclic d) Alicyclic		1	2
c.	IUPAC name of $\text{CH}_3\text{-CH}(\text{CH}_3)\text{-CH}_3$ is a) 2-ethyl propane b) 3-methyl propane c) 2-methyl propane d) None of these		2	2
d.	Select correct structure of 2-methyl propanal a) CH_3CHO b) $\text{CH}_3\text{CH}_2\text{CHO}$ c) $\text{CH}_3\text{CH}(\text{CH}_3)\text{CHO}$ d) None of these		2	2
e.	Heterolytic bond fission of covalent bond will produce a) Carbanion b) Carbocation c) Free radicals d) Both a & B		3	2
f.	The least stable Carbanion is a) $\text{C}_6\text{H}_5\text{CH}_2$ b) $(\text{CH}_3)_3\text{C}$ c) $(\text{CH}_3)_2\text{CH}$ d) CH_3		3	2
g.	Propadiene is a) Cumulated diene b) Isolated diene c) Conjugated diene d) None of these		4	2
h.	The correct order of increasing acidic strength is _____. (a) Phenol < Ethanol < Chloroacetic acid < Acetic acid (b) Ethanol < Phenol < Chloroacetic acid < Acetic acid (c) Ethanol < Phenol < Acetic acid < Chloroacetic acid (d) Chloroacetic acid < Acetic acid < Phenol < Ethanol		4	2

i.	The products of the reaction of a carboxylic acid and an alcohol would be (a) Ketone and water (b) Amide and water (c) Acid chloride and water (d) Ester and water		5	2
j.	Define Cannizaro reaction.		5	6

Q.2	Attempt any Two Questions	20(2x10)		
a.	Write a short note on SN1 and SN2 reactions. Discuss various factors affecting SN1 and SN2 reactions.		1	2
b.	Describe the five general methods of preparations and Chemical reactions of alkenes.		2	2
c.	Explain nucleophilic addition reaction with suitable example of any two named reactions. Also write their mechanism.		3	2

Q.3	Attempt any Seven Questions	35(7x5)		
a.	Explain inductive effect of carboxylic acids and write in detail qualitative tests of carboxylic acids		2	2
b.	Write the structure and uses of Iodoform and trichloroethylene.		3	6
c.	Write the qualitative tests of carbonyl compounds.		1	2
d.	Write the structure and uses of Dimethyl phthalate and methyl salicylate.		1	2
e.	Explain Electromeric effect and its types. Give examples.		5	6
f.	Explain how inductive effect effects the stability of carbocations and carbanions.		1	2
g.	Write a short note on qualitative tests for amide.		1	6
h.	Explain how can we prepare esters from carboxylic acid and acid chlorides.		3	2
i.	Write a note on rearrangement of carbocations.		3	2

END SEMESTER EXAMINATION (JUNE 2025)**B. Pharm. – 2nd Semester**

Subject Code: BP203T

Subject Name: Biochemistry

Time: 3.00 Hour

Total Marks: 75

Q. No		Marks	CO	PO
Q.1	Attempt all Questions	20(10*2)		
a.	The precursor for vitamin D a) Cholesterol b) Arachidonic acid c) Triacylglycerol d) Phospholipoids		2	2
b.	Which class of amino acids contain only non-essential amino acids? a) Aromatic b) Acidic c) Branched chain d) Basic		1	2
c.	The digestive enzymes belong to a) Isomerase b) Transferase c) Hydrolase d) Ligases		5	2
d.	Which of the following holds DNA Strands together? a) Phosphodiester bond b) Hydrogen bond c) Glycosidic bond d) Phosphate ester		3	2
e.	In oxidative phosphorylation, the oxidation of one molecule of FADH ₂ produces a) 3 ATP molecules b) 2 ATP molecules c) 1 ATP molecule d) No ATP at all		2	2
f.	Gluconeogenesis occurs in which of the following a) Heart b) Erythrocytes c) Liver d) Lungs		4	2
g.	The principal source of glucose after an overnight fast is a) Gluconeogenesis b) Glycolysis c) Glycogenolysis d) HMP pathway		4	2
h.	Ketosis occurs in all the following conditions, except a) Diabetes Mellitus b) Marasmus c) Prolonged starvation d) High fat diet		4	2
i.	Define Enthalpy.		5	2
j.	Define Cofactors.		5	2

Q.2	Attempt any Two Question	20(2*10)		
a.	Write a short note on Glycolysis Cycle along with its Significance and Energetics.		2	2
b.	Write a short note on β -oxidation of fatty acids along with its significance and energetics.		2	2
c.	Explain Biosynthesis of purine nucleotide.		4	2

Q.3	Attempt any Seven Questions	35(7*5)		
a.	Define Enzymes along with their classification and examples.		5	2
b.	Write a short note on carbohydrates along with its classification and examples.		1	2
c.	Write a short note on catabolism of Phenylalanine and its metabolic disorders.		4	3
d.	Write a short note on Electron transport chain.		1	2
e.	Define Oxidative phosphorylation and its mechanism.		2	2
f.	Write a note on biological conversion of cholesterol and its conversion.		3	3
g.	What do you understand by catabolism of heme.		4	3
h.	Write a note on DNA replication.		3	2
i.	Explain hormonal regulation of blood glucose level		5	3

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END SEMESTER EXAMINATION, JUNE 2025

B. Pharm (2nd Semester)

Subject Code: BP204T

Subject Name: Pathophysiology

Time: 3.00 Hour

Total Marks: 75

Q.No		Marks	CO	PO
Q.1	Attempt all questions	20(10*2)		
a.	The normal BP is _____ systolic & _____ diastolic. a) 120 mmHg, 80 mmHg b) 140 mmHg, 100 mmHg c) 100 mmHg, 80 mmHg d) 100 mmHg, 60 mmHg		3	2
b.	Which of the following is physical agent of cell injury? a) Hot Surface b) Dil. HCl c) Viruses d) Hypoxia		2	2
c.	Adaptation means reversible change is _____ a) Size of cell b) Functions of cell c) Phenotype of cell d) All of the above		2	2
d.	Atherosclerotic narrowing of leads angina. a) Coronary Artery b) Coronary Vein c) Aorta d) All of Above		3	3
e.	Cell swelling is a result of a) Decreased activity of sodium pump b) Increased glycogen production c) Decreased protein synthesis d) Decreased lactic acid secretion		2	2
f.	Which THREE of the following are involved in pituitary gland disorders? a) anterior pituitary gland b) posterior pituitary gland c) hypothalamus d) medulla oblongata		4	3
g.	A person demonstrating jaundice, joint pain, dark coloured urine and pyrexia may have _____. a) paracetamol overdose b) hepatitis c) phenylketonuria d) alcohol-related liver disease		4	3

h.	Fatigue is often a sign of depression; raised levels of what following mediator contribute to this? a) prostaglandins b) interleukin c) histamine d) cytokines		4	2
i.	In schizophrenia, what part of the brain is found to be thinner due to loss of grey and white matter? a) basal ganglia b) cerebral cortex c) prefrontal cortex d) basal ganglia		3	2
j.	Which statement about cancer chemotherapy is correct? a) Chemotherapy drugs do not affect normal cells. b) Chemotherapy drugs can be administered as one single dose. c) Chemotherapy drugs may affect the cell cycle. d) Chemotherapy drugs are local treatments.		4	3

Q.2	Attempt any Two Questions	20(2*10)		
a.	Write in detail about psychiatric disorders.		4	2
b.	Discuss List of chemical mediators and their role in inflammation		2	2
c.	Classification, etiology, and pathogenesis of cancer.		4	3

Q.3	Attempt any Seven Questions	35(7*5)		
a.	Discuss pathophysiology and treatment of Asthma.		4	2
b.	Discuss cause, symptoms, and management of Peptic Ulcer.		4	2
c.	Give pathogenesis cause and symptoms of Alzheimer's disease		4	3
d.	Discuss symptoms and management of Diabetes.		4	3
e.	Write note on chronic renal failure.		5	3
f.	Discuss in detail about megaloblastic anaemia.		3	2
g.	What is Cell Injury? Discuss the various factors influencing Cell Injury?		2	2
h.	Define atrophy with example?		2	2
i.	What is metaplasia? Give example.		2	3

Roll No. _____

End Semester Theory Examination (June 2025)

B. Pharm - II Semester

Subject Code: BP205T

Subject Name: Computer Applications in Pharmacy

Time: 3.00 Hour

Total Marks: 50

		Marks	CO	PO
Q.1	Attempt any Two Question	20(2*10)		
a.	What are web technologies? Explain the role of HTML, CSS, and databases and their types.	10	CO3	PO3
b.	Explain about Binary number, Hexadecimal number, Octal number, Decimal number. Solve Hexadecimal to Binary A5C B4D	10	CO1	PO1
c.	What do you know about HTML, XML, CSS and Web Servers? Explain the heading tags, tr and th tag, image tag, br tag, ol and ul tags with example	10	CO2	PO2
Q.2	Attempt any Six Questions	30(6*5)		
a.	Solve Two's Complement using direct and indirect method 100111	5	CO1	PO1
b.	What is the planning and managing of the project?	5	CO1	PO1
c.	Write short notes on MS ACCESS and MySQL.	5	CO2	PO2
d.	Explain Database and its types.	5	CO2	PO2
e.	What is Pharmacokinetics? Explain in detail.	5	CO3	PO3
f.	State the key objectives of using bioinformatics in pharmacy.	5	CO4	PO4
g.	What is barcode medicine identification?	5	CO3	PO4
h.	What is a Chromatographic Data System (CDS)?	5	CO5	PO4

Roll No. _____

End Semester Theory Examination (June 2025)
B. Pharm (II semester)

Subject Code: BP206T

Subject Name: Environmental Sciences

Time: 3.00 Hour

Total Marks: 50

		Marks	CO	PO
Q.1	Attempt any Two Questions	20(2*10)		
a.	Describe the importance and need of public awareness for environment.	10	CO1	PO-2
b.	Explain the direct and indirect functions of forest in detail.	10	CO2	PO-2
c.	Classify pollutants. Also write any five consequences of polluted water.	10	CO1	PO-2
Q.2	Attempt any Six Questions	30(6*5)		
a.	Brief the causes of water crisis.	6	CO1	PO-2
b.	Explain the causes of soil degradation.	6	CO1	PO-6
c.	Brief the role of an individual in the conservation of energy resources.	6	CO2	PO-6
d.	Write the functions of an ecosystem.	6	CO3	PO-2
e.	Write any five characteristics of aquatic ecosystem.	6	CO3	PO-2
f.	Differentiate between primary and secondary energy resources.	6	CO1	PO-2
g.	Brief the effects of automobile pollution on environment.	6	CO4	PO-2
h.	Discuss the significance of sustainable development.	6	CO4	PO-11