

Roll No. _____

End Semester Examination (January-February 2024)

B. Pharm. – 1st Semester

Subject Code: BP106RMT

Subject Name: Remedial Mathematics

Time: 1.5 Hour

Total Marks: 35

		Marks	CO	PO
Q.1	Attempt any one Question	10(1*10)		
a.	Let $A = \begin{bmatrix} 1 & -1 & 2 \\ -1 & 0 & 3 \\ 2 & 3 & 0 \end{bmatrix}$, $B = \begin{bmatrix} 1 & 0 & 0 \\ 0 & 1 & 0 \\ 0 & 0 & 1 \end{bmatrix}$. Find $2A$, $2A + B$, BA .	10	2	6
b.	Let $A = \begin{bmatrix} 1 & -1 & 2 \\ -1 & 0 & 3 \\ 2 & 3 & 0 \end{bmatrix}$, $B = \begin{bmatrix} 1 & 0 & 0 \\ 0 & 1 & 0 \\ 0 & 0 & 1 \end{bmatrix}$. Then calculate $\det(AB)$.	10	2	6

Q.2	Attempt any five Questions	25(5*5)		
a.	Prove that the lines $3x - 2y - 1 = 0$ and $9x - 6y + 5 = 0$ are parallel.	5	3	12
b.	Find cofactor matrix: $\begin{bmatrix} -1 & -3 \\ 7 & 9 \end{bmatrix}$	5	2	6
c.	Solve : $\int (4x^2 - 7x + 9) dx$ $\int_2^4 (2x + 3) dx$	2 3	2	6
d.	Find the equation of that line that passes through $(5, -3)$ and $(-4, 3)$.	5	3	12
e.	Express $\frac{x+7}{(x-2)(x+1)}$ in partial fractions.	5	2	6
f.	Differentiate $6x^4 - 7x^3 + 3x^2 - x + 8$ with respect to x . Differentiate $\frac{x^2}{e^x}$	2 3	2	6
g.	Solve the linear equation: $2x + 3y = 7$; $3x + 5y = 9$	5	2	6

Roll No. _____

End Semester Examination (January-February 2024)
B. Pharm. – 1st Semester

Subject Code: BP106RBT
Subject Name: Remedial Biology

Time: 1.5 Hour

Total Marks: 35

		Marks	CO	PO
Q.1	Attempt any One Question.	10 (1*10)		
a.	Write a detailed note on tissue and its types.	10	2	1
b.	Write a detailed note on Leaf morphology and draw its well labelled diagram?	10	2	2

Q.2	Attempt any five Question.	25 (5*5)		
a.	Explain cardiac system in detail.	5	2	2
b.	Explain composition and function of blood.	5	2	1
c.	Write a short note on Five kingdom classification.	5	1	1
d.	Write a note on phases and rate of plant growth hormones.	5	2	2
e.	Write a short note on nervous system.	5	2	2
f.	Write a short note on Cardiac cycle?	5	2	2
g.	Give Structure and function of lymph.	5	2	2

Roll No. _____

End Semester Examination (January-February 2024)
B. Pharm. – 1st Semester

Course Code: BP105T

Subject Name: Communication Skills- Theory

Time: 1.5 Hour

Total Marks: 35

		Marks	CO	PO
Q.1	Attempt any one Question	10(1*10)		
a.	Examine the critical role of active listening in academic settings, such as lectures and group study sessions. Discuss how active listening contributes to academic success, information retention, and critical thinking.		2	10
b.	Reflect on the importance of cultural competence in overcoming challenges related to accents in communication. Discuss specific steps individuals can take to enhance cross-cultural communication and active listening.		4	10

Q.2	Attempt any five Questions	25(5*5)		
a.	Explain the role of tone and pitch in conveying meaning in verbal communication.		2	10
b.	In what ways do effective communication abilities contribute to shaping your character?		5	8
c.	Why is communication skill important in the field of pharmacy?		1	1
d.	How does the lack of clarity in message delivery contribute to communication barriers?		2	10
e.	Explore the link between active listening and critical thinking in academic listening contexts.		4	10
f.	Provide an example of how speakers can use nonverbal cues to encourage active listening from the audience.		4	10
g.	Analyse the impact of accent-related challenges on effective cross-cultural communication		5	8

Roll No. _____

End Semester Examination (January-February 2024)

B. Pharm. – 1st Semester

Subject Code: BP104T

Subject Name: Pharmaceutical Inorganic Chemistry

Time: 3.00 Hour

Total Marks: 75

		Marks	CO	PO
Q.1	Attempt all Questions	20(10*2)		
a.	Limit tests are performed in _____	2	1	6
b.	Boric Acid is having _____ molecular weight 1. 61.83 2. 40.1 3. 45 4. 50	2	5	6
c.	Define buffers. Give examples of two official buffers	2	2	6
d.	When _____ gas is passed through potassium permanganate solution, the violet color disappears 1. Hydrogen Sulphide 2. Chloride 3. Carbon dioxide 4. Oxygen	2	1	2
e.	Which type of radiation have high penetrating power 1. Alpha radiation 2. Beta radiation 3. Gamma radiation 4. UV radiation	2	4	2
f.	Which is both an acidifying as well as expectorant 1. Ammonium Chloride 2. Potassium Iodide 3. Dil. HCl 4. Sodium Potassium Tartarate	2	3	2
g.	Magnesium Sulphate is used as 1. Astringent 2. Dental Products 3. Cathartics 4. Expectorants	2	3	2
h.	Define Limit Test	2	1	2
i.	Define Poison	2	3	2
j.	Define Antidote	2	3	2

Q.2	Attempt any Two Questions	20(2*10)		
a.	What are buffers? Explain the mechanism of buffer action with an example. Briefly discuss the role of buffers in pharmacy.	10	2	2
b.	Briefly explain the principle, apparatus and procedure for the limit test of arsenic.	10	1	6
c.	Enlist in detail any drug with their molecular formula, synonym (if any) method of preparation and use belongs to antacid.	10	5	6

Q.3	Attempt any Seven Questions	35(7*5)		
a.	What are Emetics and explain blue vitriol.	5	3	6
b.	What are GIT agents? Classify them with examples. Write a note on acidifiers.	5	3	2
c.	What do you mean by the term monograph? What are the contents of the monograph in Detail	5	1	2
d.	Give the principle and procedure involved in the sulphate limit test.	5	1	6
e.	Discuss the role of fluorides in dental caries	5	3	2
f.	What are expectorants? Give example and mechanism of action	5	3	6
g.	Define acids and bases according to various concept	5	2	2
h.	What are antimicrobials? Write a note on anyone compound	5	3	2
i.	Explain Half-life.	5	4	2

Roll No. _____

End Semester Examination (January-February 2024)
B. Pharm. – 1st Semester

Subject Code: BP 103T

Subject Name: Pharmaceutics-I

Time: 3.00 Hour

Total Marks: 75

		Marks	CO	PO
Q.1	Attempt all Questions	20(10*2)		
a.	Drug dosage may require adjustment from the usual adult dose for abnormally lean or obese patients because, <ol style="list-style-type: none"> 1. Normal doses are considered suitable for 70 kg (150 pounds) individuals. 2. The ratio between the amount of drug administered and the size of the body influences the drug concentration at the site of action. 3. Both a & b are right statements 4. Both a & b are wrong statements. 		2	2,3
b.	Drugs have to be given cautiously to females in..... <ol style="list-style-type: none"> 1. Pregnancy 2. Lactation 3. Menstruation 4. All of the above 		2	3,4
c.	_____ is a hydroalcoholic preparation. <ol style="list-style-type: none"> 1. Elixir 2. Syrup 3. Suspension 4. Emulsion 		3,4	2,3
d.	Which of the following monophasic liquid formulation is classified as a solution to be used in oral cavity? <ol style="list-style-type: none"> 1. Gargle 2. Douches 3. Eardrop 4. Nasal Drop 		4	3,4
e.	Which of the following statements regarding emulsions is false? <ol style="list-style-type: none"> 1. Emulsions cannot be separated into their constituent liquids 2. Emulsions show Brownian motion 3. Emulsions show Tyndall effect 4. Emulsions exhibit properties like Electrophoresis and Coagulation 		4	2,3
f.	Which of the following statement about emulsions is true? <ol style="list-style-type: none"> 1. Oily drugs cannot be prepared in the form of emulsions 2. Digestion does not involve the process of emulsification 3. Disinfectants like Dettol and Lysol give emulsions of water-in-oil type on mixing with water 4. The cleansing action of soap is based upon the formation of water-in-oil emulsion 		4	1,2
g.	Name ingredients used in liquid dosage form		3,4	2,3
h.	Write scope of pharmacy.		1	3,1
i.	Define labelling.		1	1,3
j.	Define powder		2	1,2

Q.2	Attempt any Two Questions	20(2*10)	
a.	Define liquid dosage forms, give in detail about excipients used in formulation of liquid dosage forms.	4	3,4
b.	Give detail about Excipients used in semi solid dosage forms	4	1,2
c.	Give in brief about methods of preparations of suppositories.	4	2,3

Q.3	Attempt any Seven Questions	35(7*5)	
a.	Give in brief about dusting powders.	3,4	2,3
b.	difference between Flocculated and Deflocculated suspension	4	3,1
c.	Give in brief about methods of preparation of emulsion.	4	3,4
d.	Give detail note on Solubility enhancement techniques.	4	2,3
e.	Define gargles. Mention the ingredients used in gargles.	4	3,4
f.	Write note on errors in prescription.	2	2,3
g.	Write note on phase inversion.	4	3,4
h.	Write note on Stabilizers used in liquid dosage forms.	4	2,3
i.	Write in brief about scope of pharmacy.	1	1,2

Roll No. _____

End Semester Examination (January-February 2024)
B. Pharm. – 1st Semester

Subject Code: BP102T

Subject Name: Pharmaceutical Analysis-I

Time: 3.00 Hour

Total Marks: 75

		Marks	CO	PO
Q.1	Attempt all Questions	20(10x2)		
a.	Define Normality	2	1	2
b.	Identification of a compound in a sample is quantitative analysis [True/ False]	2	1	2
c.	What is the range of pH value?	2	2	2
d.	Give an example of protophilic solvent.	2	2	2
e.	In argentometric titrations, titrant is _____ (a) Silver chloride (b) Silver nitrate (c) Sodium chloride (d) Sodium nitrate	2	3	2
f.	In complexometric titrations, what role do metal ion indicators serve?	2	3	2
g.	Define Coprecipitation and Post-precipitation.	2	3	2
h.	Write the principle of Gravimetric Titration.	2	3	2
i.	Write the Equivalent weight of Potassium Permanganate in Acidic, Strongly Basic, Weakly Basic, Neutral Medium.	2	4	2
j.	Give an example of Redox Reaction	2	4	2

Q.2	Attempt any Two Questions	20(2x10)		
a.	Discuss the procedures for the preparation and standardization of molar and normal solutions for various substances such as oxalic acid, sodium hydroxide, and potassium permanganate.	10	1	2
b.	Explore the sources of errors in pharmaceutical analysis, categorize types of errors, and outline methods to minimize errors. Discuss the concepts of accuracy, precision, and significant figures.	10	1	2
c.	What is Precipitation titration? Compare Mohr's method with Volhard method.	10	3	2

Q.3	Attempt any Seven Questions	35(7x5)		
a.	Explain the principal of limit test of arsenic.	5	1	2
b.	Explain %w/w, %w/v and %v/v by giving definition and formula.	5	1	2
c.	Differentiate between Primary and Secondary standard.	5	2	2
d.	Differentiate between Iodimetry and Iodometry.	5	4	2
e.	Write a note on Significant figures and its rules.	5	1	2
f.	Explain Titration, titrant, titrand, titration error, equivalence point and end point.	5	2	2
g.	Explain digestion of the precipitate in gravimetric analysis.	5	3	2
h.	Explain Ilkovic equation and meaning of each term in it.	5	5	2
i.	Write a note on mechanism of adsorption indicators.	5	3	2

Roll No. _____

End Semester Examination (January-February 2024)
B. Pharm. – 1st Semester

Subject Code: BP101T

Subject Name: Human Anatomy and Physiology I

Time: 3.00 Hour

Total Marks: 75

		Marks	CO	PO
Q.1	Attempt all Questions.	20(10*2)		
a.	What is the difference between cell and atom?		1	1
b.	Give function of rod and cone cell.		2	2
c.	What do you mean by passive transport?		2	2
d.	Give definition of phagocytosis.		1	2
e.	Enumerate the function of nervous tissue.		1	2
f.	Write the name of different layer of skin.		3	2
g.	Write name of the bones of Cranium.		2	1
h.	Write the type of cell present in lymph.		1	2
i.	Give definition of blood pressure.		2	2
j.	What is the meaning of ECG.		2	2

Q.2	Attempt any Two Question	20(2*10)		
a.	Discuss anatomy of skeletal muscle and explain in detail mechanism of muscle contraction.		2	2
b.	Define tissue. Enlist different types of tissues. Explain epithelial tissue.		1	1
c.	Discuss the physiology of hearing with diagram.		1	2

Q.3	Attempt any Seven Questions.	35(7*5)		
a.	Write a note on ABO system.		1	1
b.	Explain structure and function of skin.		1	2
c.	Define and the classify joints.		2	1
d.	Enlist the functions of skeleton system.		2	1
e.	Explain detail structure and functions of nervous tissue.		1	1
f.	Explain detail structure of cell membrane.		2	1
g.	Write a note on homeostasis and feedback system.		2	1
h.	Write a note on lymph node.		1	2
i.	Write a note on conduction system of heart.		2	1

Roll No. _____

End Semester Theory Examination (June-July 2024)
B. Pharm 2nd 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 multidisciplinary nature of environmental studies.		CO1	PO-2
b.	Explain the concept of ecosystem and its structure.		CO3	PO-2
c.	Explain how pollution can be controlled at different levels.		CO1	PO-2
Q.2	Attempt any Six Questions:	30(6*5)		
a.	Brief the indirect functions of forest.		CO1	PO-2
b.	Explain the consequences of deforestation.		CO1	PO-6
c.	Brief the role of an individual in the conservation of energy resources.		CO2	PO-6
d.	Describe the process of ecological succession.		CO3	PO-2
e.	Write any five characteristics of grassland ecosystem.		CO3	PO-2
f.	Discuss the significance of 3R's in solid waste management.		CO1	PO-2
g.	Brief the effects of water pollution.		CO4	PO-2
h.	Discuss your contribution in society for environmental awareness.		CO4	PO-11

Roll No. _____

End Semester Theory Examination (June-July 2024)

B. Pharm 2nd Semester

Subject Code: BP205T

Subject Name: computer application in pharmacy

Time: 3.00 Hour

Total Marks: 50

Q.No		Marks	CO	PO
Q.1	Attempt any Two Question	20(2*10)		
a.	I. Write the range of Binary, Octal, decimal and hexadecimal. II. Convert binary number into hexadecimal- (101100110101) ₂ → (?) ₁₆ III. Convert (9AF) ₁₆ → (?) ₂ IV. Write full form of HTML, www and XML. V. Solve the Binary subtraction-(111001) ₂ -(110) ₂ .		CO-1,2	PO-8
b.	I. Describe Data Flow Diagram in your own words II. What is Planning and managing the project with a suitable figure?		CO-2	PO-10
c.	I. What is the impact of bioinformatics in vaccine discovery? II. What is electronic prescribing system? Explain the advantages of it.		CO-5	PO-6
Q.2	Attempt any Six Questions	30(6*5)		
a.	Differentiate between computer hardware and computer software.		CO-1	PO-3
b.	Create a HTML webpage to show personal information.		CO-2	PO-9
c.	Define table? Write down the steps to create a database in MS Access.		CO-3	PO-2
d.	What is the impact of bioinformatics in vaccine discovery?		CO-4	PO-1
e.	What is Text Information Management System? Explain the use of it in pharmacy.		CO-4	PO-7
f.	Explain application of computers in drug development.		CO-3	PO-5
g.	Discuss the meaning of automated dispensing of drugs?		CO-5	PO-2
h.	Explain the use of barcode in medicine identification.		CO-3	PO-8

ROLL NO. _____

END SEMESTER THEORY EXAMINATION (JUNE-2024)
B. PHARM (2ND SEMESTER)

Subject Code: BP204T

Subject Name: PATHOPHYSIOLOGY (THEORY)

Time: 3.00 Hour

Total Marks: 75

Q.No		Marks	CO	PO
Q.1	Attempt all Questions	20(10*2)		
a.	Which serological test can be used for diagnosis of typhoid fever? 1. Widal test 2. PCR 3. ELISA 4. None of the above		4	2
b.	Parkinson disease is marked by a lack of which chemical in the brain? 1. Serotonin 2. GABA 3. Dopamine 4. Norepinephrine		4	2
c.	Increase dopaminergic transmission into mesolimbic system shows positive system in..... 1. Depression 2. Alzheimer 3. Parkinson's 4. Schizophrenia.		4	2
d.	Hallucinations means..... 1. Hearing or seeing things that don't exist. 2. These are false beliefs that are not based in reality. 3. The person may jump from one subject to another for no logical reason. 4. Disorganized thinking is inferred from disorganized speech.		1	3
e.	In which type of diabetes do people often produce insulin but the cells of the body fail to adequately respond to insulin? 1. type 1 diabetes 2. type 2 diabetes 3. diabetes insipidus 4. gestational diabetes		4	3
f.	The normal BP is _____systolic & _____diastolic. 1. 120 mmHg, 80 mmHg 2. 140 mmHg, 100 mmHg 3. 100 mmHg, 80 mmHg 4. 100 mmHg, 60 mmHg		3	2
g.	Which of the following is physical agent of cell injury? 1. Hot Surface 2. Dil. HCl 3. Viruses 4. Hypoxia		2	3

h.	Adaptation means reversible change in ____. 1. Size of cell 2. Functions of cell 3. Phenotype of cell 4. All of the above		2	2
i.	Atherosclerotic narrowing of _____ leads angina. 1. Coronary Artery 2. Coronary Vein 3. Aorta 4. All of Above		3	2
j.	Cell swelling is a result of 1. Decreased activity of sodium pump 2. Increased glycogen production 3. Decreased protein synthesis 4. Decreased lactic acid secretion		2	3
Q.2	Attempt any Two Questions	20(2*10)		
a.	Write in detail about psychiatric disorders.		4	3
b.	Discuss in detail about disorders of sex hormones		5	3
c.	Write in detail on Clinical signs of inflammation, Different types of Inflammation, Mechanism of Inflammation		2	2
Q.3	Attempt any Seven Questions	35(7*5)		
a.	Discuss pathophysiology of megaloblastic anemia		4	3
b.	Give in brief about Causes of cellular injury.		2	2
c.	Give pathogenesis, cause and symptoms of schizophrenia		4	2
d.	What is metaplasia? Give example.		2	2
e.	Write note on Calcification		2	3
f.	Give etiology, symptoms, and treatment of Osteoporosis		4	2
g.	What is Cell Injury? Discuss the various factors influencing Cell Injury?		2	2
h.	Define atrophy with example?		2	2
i.	Discuss symptoms and management of myocardial infarction.		3	3

Roll No. _____

End Semester Examination (June-2024)

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.	A nucleoside consists of 1. Nitrogenous base 2. Purine or pyrimidine base + sugar 3. Purine or pyrimidine base + phosphorous 4. Purine + pyrimidine base + sugar + phosphorous		2	2
b.	The nitrogenous base present in the RNA molecule is 1. Thymine 2. Uracil 3. Xanthine 4. Hypoxanthine		1	2
c.	When ATP forms AMP 1. Inorganic pyrophosphate is produced 2. Inorganic phosphorous is produced 3. Phosphagen is produced 4. No energy is produced		5	2
d.	An example of ligases is 1. Succinate thiokinase 2. Alanine racemase 3. Fumarase 4. Aldolase		3	2
e.	The kinetic effect of purely competitive inhibitor of an enzyme 1. Increases Km without affecting Vmax 2. Decreases Km without affecting Vmax 3. Increases Vmax without affecting Km 4. Decreases Vmax without affecting Km		2	2
f.	In reversible non-competitive enzyme activity inhibition 1. Vmax is increased 2. Km is increased 3. Km is decreased 4. Concentration of active enzyme is reduced		4	2
g.	Isoenzymes are 1. Chemically, immunologically and electrophoretically different forms of an enzyme 2. Different forms of an enzyme similar in all properties 3. Catalysing different reactions 4. Having the same quaternary structures like the enzymes		4	2
h.	Define Isoenzymes.		4	2
i.	Define Allosteric Enzymes.		5	2
j.	Define Central dogma.		5	2

Q.2	Attempt any Two Questions	20(2*10)	
a.	Write a note on EMP pathway.	2	2
b.	Explain the Citric acid pathway along with its significance and energetics.	2	2
c.	Explain Protein synthesis	4	2
Q.3	Attempt any Seven Questions	35(7*5)	
a.	Explain Albinism and Alkaptonuria.	5	2
b.	Write a short note on Hyperbilirubinemia.	1	2
c.	Explain the allosteric enzymes regulation	4	3
d.	Write a short note on synthesis and significance of dopamine, noradrenaline, adrenaline	1	2
e.	Explain about the Hyperuricemia.	2	2
f.	Explain diagnostic applications of enzymes and isoenzymes.	3	3
g.	Explain Genetic code.	4	3
h.	Explain RNA along with its classification.	3	2
i.	Give the classification of enzymes according to IUB.	5	3

Roll No. _____

End Semester Examination (June 2024)

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 contains ester functional group? 1. CH ₃ COOH 2. CH ₃ CHO 3. CH ₃ -NH ₂ 4. CH ₃ COOCH ₃		1	2
b.	Cyclic compounds which consist of only carbon atoms are called ---- compounds. 1. aliphatic 2. aromatic 3. heterocyclic 4. alicyclic		1	2
c.	IUPAC name of (CH ₃) ₃ C-OH is ---- 1. t-butyl alcohol 2. 3-propanol 3. 2-methyl 2-propanol 4. None of these		2	2
d.	IUPAC name of CH ₃ CH(NH ₂)CH ₃ --- 1. 1-propanamine 2. 2-propanamine 3. iso-propyl amine 4. None of these		2	2
e.	The order of stability of carbanion is : 1. Secondary > tertiary > primary 2. Tertiary > primary > secondary 3. Tertiary > secondary > primary 4. Primary > secondary > tertiary		3	2
f.	Which of the following is not a Nucleophile? 1. NH ₃ 2. HSO ₄ ⁻ 3. AlCl ₃ 4. OH ⁻		3	2
g.	1, 3-Butadiene react with HBr to at low temp. gives --- 1. 3-bromo 1-butene 2. 4-bromo 1-butene 3. 1-bromo 2-butene 4. None of these		4	2
h.	In Clemmensen Reduction carbonyl compound is treated with _____. 1. Zinc amalgam + HCl 2. Sodium amalgam + HCl 3. Zinc amalgam + nitric acid 4. Sodium amalgam + HNO ₃		4	2

i.	Write the chemical structure & uses of succinic and oxalic acid.		5	2
j.	Define Diels Alder reaction.		5	6
Q.2	Attempt any Two Questions.	20(2x10)		
a.	Explain the mechanism of Benzoin and Cannizaro reaction.		1	2
b.	Write a note on Structural Isomerism in organic with suitable example. Discuss the common IUPAC system of nomenclature of Alcohol & Carboxylic Acid.		2	2
c.	Write in detail about method of preparation and chemical properties of Diazonium salts.		3	2
Q.3	Attempt any Seven Questions.	35(7x5)		
a.	Give the structure and uses of acetic acid, lactic acid, formaldehyde, glycerol, ethyl alcohol and dichloromethane		2	2
b.	Give the IUPAC names 1. $\begin{array}{c} \text{O} \\ \\ \text{CH}_3 - \text{C} - \text{CH}_2 - \text{COOH} \end{array}$ 2. $\begin{array}{c} \text{Cl} \quad \text{OCH}_3 \\ \quad \\ \text{CH}_2 - \text{CH} - \text{CH}_2 - \text{CHO} \end{array}$ 3. $\begin{array}{c} \text{NH}_2 \quad \quad \text{OH} \\ \quad \quad \\ \text{CH}_3 - \text{CH} - \text{CH}_2 - \text{CH} - \text{CH}_3 \end{array}$ 4. $\begin{array}{c} \text{O} \\ \\ \text{H}_3\text{C} - \text{C} - \text{O} - \text{CH}_3 \end{array}$ 5. 		3	6
c.	Explain why aliphatic amines are more basic than ammonia?		1	2
d.	Arrange the following compounds in order of increasing acidity and justify your answer. Chloroacetic acid, formic acid, acetic acid, dichloroacetic acid.		1	2
e.	Enlist different types of dienes with examples.		5	6
f.	Explain, why Aldehydes and ketones are susceptible for nucleophilic addition reactions?		1	2
g.	Draw the structure of the following compounds: a) 2-Bromo-2-chloro-1,1,1-trifluoro ethane. b) Beta hydroxy butyric acid.		1	6
h.	Discuss kinetic and thermodynamic control in addition reaction of conjugated dienes.		3	2
i.	Write the classification of organic compounds.		3	2

Roll No. _____

End Semester Examination (June-July 2024)
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 Tidal Volume.		1	2
b.	Enlist the endocrine gland present in the human body.		1	2
c.	What is an Action Potential?		1	2
d.	What is semen?		1	2
e.	Enlist step involved in urine formation.		1	2
f.	Enlist the hormones of adrenal gland.		1	2
g.	What is the function of uterus?		2	1
h.	What is the meaning of artificial respiration?		1	2
i.	Define BBB and its location.		1	2
j.	Give definition of BMR.		2	2
Q.2	Attempt any Two Questions.	20(2*10)		
a.	Discuss anatomy and physiology of female reproductive system.		1	2
b.	Give anatomy and physiology of pituitary gland.		1	1
c.	Write a detail note on anatomy and physiology of Respiration system.		1	2
Q.3	Attempt any Seven Questions.	35(7*5)		
a.	Write a note on hypothalamus.		1	1
b.	Explain structure and function Sperm.		1	2
c.	Write a short note on BMR.		2	1
d.	Write a short note on digestion of carbohydrates.		2	1
e.	Write a note on external and internal respiration.		1	1
f.	Explain the synthesis storage and release of thyroid hormones.		2	1
g.	Write a note on disorder of endocrine gland .		2	1
h.	Write a note on menstrual cycle.		1	2
i.	Write a note on urinary system.		1	1
