

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

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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

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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

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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

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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, 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..... 1. Pregnancy 2. Lactation 3. Menstruation 4. All of the above		2	3,4
c.	_____ is a hydroalcoholic preparation. 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? 1. Gargle 2. Douches 3. Eardrop 4. Nasal Drop		4	3,4
e.	Which of the following statements regarding emulsions is false? 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? 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

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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

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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
