



AUTUMN END SEMESTER EXAMINATION-2024 1st Semester B.Pharm

HUMAN ANATOMY & PHYSIOLOGY-I BP 101

(For 2024 Admitted Batch)

Time: 3 Hours

Full Marks: 75

Answer Question No.1 (Part-A) is compulsory, any SEVEN from Part-B and any TWO from Part-C.

The figures in the margin indicate full marks.

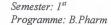
All parts of a question should be answered at one place only.

PART-A

1. Objective Answer Type Questions (Answer All)

- $[2 \times 10]$
- (a) What are the functions of fibroblast cells in connective tissue?
- (b) Write the functions of cytoskeleton in human cells.
- (c) Give the difference between sprain and strain.
- (d) Write two functions of lymph node.
- (e) Name the neuroglialcells, which are present in central nervous system (CNS).
- (f) Define anemia. Write the causative factor of Pernicious anemia.
- (g) Write the name of the cells, which are present in olfactory epithelium.
- (h) Name the sutures present in cranial bone.
- (i) What are the parts of sternum?
- (j) What is the difference between exocytosis and endocytosis?

		PARI-B	
2.	Focused-Short Answer Type Questions-(Answer Any Seven)		$[5 \times 7]$
	(a)	Define cell junction. Explain about different types of cell junction.	
	(b)	Write the structure of cartilage. Explain the structure of hyaline cartilage.	
	(c)	Write the structure and function of blood.	
	(d)	Classify neurons according to their structural and functional properties.	
	(e)	Write the different disorders that are associated with eye. Explain about the different types of glaucoma.	
	(f)	Write the structure of internal ear with labelled diagram.	
	(g)	Explain how the conduction system helps in the propagation of action potential in the heart?	
	(h)	Write the function of vertebral column. Name the bone that are present in vertebra.	
	(i)	Write the physiology of muscle contraction.	
		PART-C	
		Long Answer Type Questions (Answer Any Two)	
3.	How homeostasis maintains physiological equilibrium by regulating feedback mechanism. Explain with examples.		[10]
4.	With a neat, labelled diagram, describe the basic structures of a synovial joint and lists the different types of synovial joints.		
5.	Describe the structure of heart with labelled diagram. Explain how heart regulates the systemic and Pulmonary Circulations.		





AUTUMN END SEMESTER EXAMINATION-2024

1st Semester B.Pharm

PHARMACEUTICAL ANALYSIS-I BP 102

(For 2024 Admitted Batch)

Time: 3 Hours

Full Marks: 75

Answer Question No.1 (Part-A) is compulsory, any SEVEN from Part-B and any TWO from Part-C. The figures in the margin indicate full marks. All parts of a question should be answered at one place only.

PART-A

1. Objective Answer Type Questions (Answer All)

 $[2 \times 10]$

- (a) Define normality.
- (b) Write molecular formula and weight of sodium thiosulphate.
- (c) What is the role of mercuric chloride paper in the Arsenic limit test?
- (d) Write a suitable assay method for methyl DOPA as you studied.
- (e) Explain adjacent indicator with example.
- (f) What is sequestering agent?
- (g) How sulfonamide can be assayed as you studied.
- (h) Explain on potassium iodate.
- (i) Define Ohm law.
- (j) Write any salt of strong acid and strong base.

PART-B

	$[5 \times 7]$
(a) Describe the Ilkovic equation.	
(b) Explain and draw Calomel electrode.	

How to prepare and standardize 0.1M NaOH solution?

- (d) What are scope of Pharmaceutical analysis?
- (e) Explain limit test for chlorides.

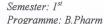
(c)

- (f) Write a note on Non-aqueous solvents.
- (g) How to estimate sodium chloride by Mohr's method.
- (h) Give a note on Diazotitration titration
- (i) Write briefly on redox indicators.

PART-C

Long Answer Type Questions (Answer Any Two)

3.	Explain all theories of Acids and bases with suitable examples.	[10]
4.	Write a note on Volhard's method and modified Volhard's method.	[10]
5.	Write a note SHE (Standard Hydrogen Electrode) and Silver-Silver chloride electrodes.	[10]





AUTUMN END SEMESTER EXAMINATION-2024

1st Semester B.Pharm

PHARMACEUTICS-I BP 103

(For 2024 Admitted Batch)

Time: 3 Hours Full Marks: 75

Answer Question No.1 (Part-A) is compulsory, any SEVEN from Part-B and any TWO from Part-C. The figures in the margin indicate full marks. All parts of a question should be answered at one place only.

PART-A

- 1. Objective Answer Type Questions (Answer All) $[2 \times 10]$
 - (a) What is proof spirit?
 - (b) Write the Drilling's Formula for children dose calculation.
 - (c) Differentiate emulsion and suspension.
 - (d) What is eutectic mixture? Give example.
 - (e) Define ointments and pastes.
 - (f) What is IP? When first edition of IP was published?
 - (g) Differentiate flocculated and deflocculated suspension.
 - (h) What is inscription? How it differ from superscription?
 - (i) What is isotonic solution? Write its importance.
 - (j) What is Displacement value?

PART-B

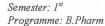
- 2. Focused-Short Answer Type Questions-(Answer Any Seven) $[5 \times 7]$
 - (a) Write a note on IP with special preference to 9th edition.
 - (b) Write a short note on stability problem of suspension.

- (c) Write the test for the identification of type of Emulsion.
- (d) Write briefly various excipients used in semi solid dosage form.
- (e) Classify the powders. Write a short note on Effervescent powders.
- (f) Briefly describe various additives used in liquid dosage forms.
- (g) Write a short note on Throat paints. How it differ from gargles?
- (h) Define and Classify the incompatibility. Write chemical incompatibility with examples.
- (i) Write a short note on evaluation of semisolids.

PART-C

Long Answer Type Questions (Answer Any Two)

- 3. Define Prescription and write its importance. Write in detail various parts of prescription. Write the various prescription errors.
- 4. Write various methods of preparation of suppository and give a note on evaluations of suppository. [10]
- 5. Write the various methods of preparation of emulsion and describe stability problems of Emulsion. [10]





AUTUMN END SEMESTER EXAMINATION-2024 1st Semester B.Pharm

PHARMACEUTICAL INORGANIC CHEMISTRY BP 104

(For 2024 Admitted Batch)

Time: 3 Hours

Full Marks: 75

Answer Question No.1 (Part-A) is compulsory, any SEVEN from Part-B and any TWO from Part-C. The figures in the margin indicate full marks. All parts of a question should be answered at one place only.

PART-A

1. Objective Answer Type Questions (Answer All)

- $[2 \times 10]$
- (a) Write any two effects of impurities in pharmaceutical substances.
- (b) What are acidifiers? Give examples.
- (c) Mention the units of radioactivity.
- (d) Define anti-microbial agents with suitable examples.
- (e) What is blue vitriol? Write its formula and uses.
- (f) Name the techniques used for the measurement of radioactivity.
- (g) Mention the methods used for adjusting isotonicity.
- (h) Define limit test.
- (i) Define buffer capacity and composition of buffer solution.
- (j) Name the antidotes of cyanide poisoning.

PART-B

۷.	Focused-Short Answer Type Questions-(Answer Any Seven)		
	(a)	Define astringents. Describe the properties, preparation and uses of Potash alum.	
	(b)	Write the limit test for Iron.	
	(c)	Write a note on role of fluoride in the treatment of dental caries.	
	(d)	What are antimicrobial agents and write a note on Iodine and its preparations.	
	(e)	Write the method of preparation and assay of Ammonium chloride.	
	(f)	Define haematinics. Write down the monograph of Ferrous sulphate.	
	(g)	Write about the preparation, assay and use of Calcium gluconate.	
	(h)	What is meant by radioactivity? How do you measure the radioactivity of a Compound?	
	(i)	Write a note on α , β , γ radiation. Mention the importance of Sodium iodide.	
		PART-C	
		Long Answer Type Questions (Answer Any Two)	
3.	Write the various sources of impurities in pharmaceutical substances with suitable examples.		[10]
4.	Discuss about major intra and extracellular electrolytes used in replacement therapy. What is the composition of ORS as per WHO?		[10]
5.		ine antacid? Classify and write down the ideal properties n antacid. Write the monograph of Aluminum hydroxide	[10]
