

B.Pharmacy I Semester (PCI) (Main) Examination Feb/March 2024

Subject & Code: Human Anatomy and Physiology- I BP101T

Time: 3 Hours

Max.Marks: 75

PART-A

Note: Answer ALL questions

Q.No.	Question	CO	BL
1	Define meiosis and mitosis.	1	1
2	Name the various parts of the human nose.	2	1
3	Enumerate the functions of blood.	2	1
4	Draw a labelled diagram of the human eye.	2	1
5	What is electrocardiogram?	6	2
6	Write about the neuromuscular junction.	5	3
7	Define homoeostasis.	4	1
8	Name the bones of the axial skeleton.	3	1
9	Define bradycardia and tachycardia.	6	1
10	Define cardiac cycle and cardiac output.	6	1

PART B

Note: Answer any TWO questions

 $(2 \times 10 = 20 \text{ Marks})$

Q.No.	Question	CO	BL
11	Illustrate the elements of conduction system of human heart.	6	4
12	Construct a flow chart to explain peripheral nervous system.	5	6
13	Illustrate the lymph organs and add a note on the functions of human lymphatic system.	1	4

PART C

Note: Answer any **SEVEN** questions

 $(7 \times 5 = 35 \text{ Marks})$

Q.No.	Question	СО	BL
14	Write a brief note on anemia.	4	3
15	Describe the various parts of human skin.	1	2
16	Write briefly about the spinal nerves.	5	3
17	Illustrate the functions of the parasympathetic nervous system.	5	4
18	Explain the mechanism of blood grouping.	4	2
19	Explain the various parts of human ear.	1	4
20	Discuss briefly about the bones of appendicular skeleton.	3	2
21	0 1100 0 01 11	1	4
22	Explain the physiology of muscle contraction.	1	1



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B.Pharmacy I Semester (PCI) (Main) Examination Feb/March 2024

Subject: Pharmaceutical Analysis-BP102T

Time: 3 Hours

Max.Marks: 75

PART- A

Note: Answer ALL questions

 $(10 \times 2 = 20 \text{ Marks})$

Q.No.	Question	CO	BL
1	Define accuracy and precision with examples.	1	1
2	Write about the significance of Pharmacopoeia in Pharmaceutical Analysis.	1	3
3	How do you prepare 0.1 M oxalic acid?	2	5
4	List out the solvents used in non-aqueous titrations.	3	1
5	Differentiate between iodometry and iodimetry.	6	4
6	Classify complexometric titrations.	4	2
7	List out types of redox titrations.	6	1
8	What are metal ion indicators?	4	1
9	Summarize the applications of conductometry.	5	2
10	Write Ilkovic equation and give its significance.	5	3

PART B

Note: Answer any TWO questions

 $(2 \times 10 = 20 \text{ Marks})$

Q.No.	Question	СО	BL
11	Discuss the principle and steps involved in gravimetric analysis.	4	2
12	Classify acid-base titrations. Explain the theory involved in titrations of strong acid against strong base with relevant examples.	3	3
13	Write the principle and applications of polarography. Explain the construction and working of dropping mercury electrode.	5	3 & 4

PART C

Note: Answer any <u>SEVEN</u> questions

 $(7 \times 5 = 35 \text{ Marks})$

Q.No.	Question	CO	BL
14	Describe briefly about various types of errors.	1	2
15	Write the preparation and standardization of 0.5 N sodium hydroxide	2	5
16	How to estimate Sodium benzoate? Discuss in detail.	3	2
17	Differentiate between Mohr's and Volhard's methods of precipitation titrations.	4	4
18	Explain briefly about pH indicators.	3	2
19	Write the principle and applications of cerimetric titrations.	6	3
20	Define primary and secondary standard substances. Describe their properties with suitable examples.	1	1 & 2
21	What are potentiometric titrations? Write their advantages over indicator method.	5	1
22	Draw and explain the construction and working of conductivity cal Pharma	5	1&:



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B.Pharmacy I Semester (PCI) (Main) Examination Feb/March 202

Subject: Pharmaceutics-I-BP103T

Time: 3 Hours

Max.Marks: 75

PART-A

Note: Answer ALL questions

 $(10 \times 2 = 20 \text{ Marks})$

Q.No.	Question	СО	BL
1	Define effervescent powders with few examples.	4	1
2	List out the different types of ointment bases.	5	1
3	Illustrate the differences between creams and pastes.	4	6
4	Define posology and dosage form.	4	1
5	Enumerate the examples of emulsifying agents.	5	1
6	What is displacement value.	4	2
7	What are eutectic mixtures give examples.	4	1
8	Write various formulae used for calculation of dose of a child	2	1
9	Find out the strength of 65.7% v/v of alcohol in proof spirit.	4	3
10	Classify the solid dosage forms.	4	2

PART B

Note: Answer any TWO questions

 $(2 \times 10 = 20 \text{ Marks})$

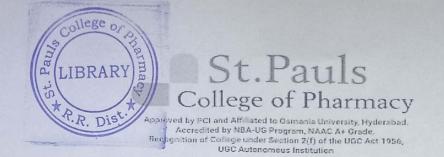
Q.No.	Question	CO	BL
11	Describe the method of preparation of suspensions and write a note on stability problems & remedies to overcome instability in suspensions.	4 & 6	4
12	Define pharmaceutical incompatibilities and explain different types of incompatibilities with suitable examples.	3	4
	Define prescription; write in detail about parts of prescription.	2	3

PART C

Note: Answer any **SEVEN** questions

 $(7 \times 5 = 35 \text{ Marks})$

Q.No.	Question	CO	BL
14	Write short notes on IP.	1	1
15	Describe the excipients used in the formulation of liquid dosage form and mention its uses.	5	4
16	Write differences between flocculated and deflocculated suspensions.	4	6
17	Discuss about evaluation of suppositories.	4	5
18	Describe the method of preparation of cold cream with any one formulation.	4	3
19	Briefly discuss the formulation of liniments with suitable example.	5	3
20	Explain various identification tests of emulsions.	4	2
21	Describe the mechanism and factors affecting dermal penetration of drugs.	1	4
22	Briefly discuss the significance of pharmacy as a career in academia vs industry.	1	5





B.Pharmacy I Semester (PCI) (Main) Examination Feb/March 2024

Subject: Pharmaceutical Inorganic Chemistry BP104T

Time: 3 Hours

Max.Marks: 75

PART- A

Note: Answer ALL questions

 $(10 \times 2 = 20 \text{ Marks})$

Q.No.	Question	CO	BL
1	Define limit test. Give examples of limit tests official in Indian Pharmacopoeia.	3	1
2	Enlist the types of impurities in pharmaceutical substances.	2	3
3	Explain the Henderson-Hasselbalch equation for acidic and basic buffers.	5	3
4	What are electrolytes? Give two examples.	5	1
5	List out the medicinal uses of Kaolin and Magnesium hydroxide.	6	2
6	Define antimicrobials. Give two examples.	4	1
7	What are Expectorants? Explain the properties of any one expectorant.	1	2
8	Define Haematinics. Write two examples.	1	1
9	Explain the terms radioactivity and half life.	6	2
10	What are the precautions should be taken while handling radiopharmaceuticals.	6	2

PART B

Note: Answer any TWO questions

 $(2 \times 10 = 20 \text{ Marks})$

Q.No.	Question	CO	BL
11	Discuss the method of preparation, properties and medicinal uses of i) Calcium carbonate ii) Zinc sulphate iii) Sodium bicarbonate (4+3+3)	6	3
12	Explain the principle and procedure involved in the assay of i) Copper sulphate ii) Chlorinated lime (5+5)	4	3
13	Write notes on i) Modified limit test for Chloride and Sulphate ii) Properties of α , β and γ radiations (5+5)	3, 6	2

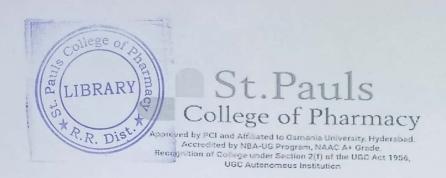
PART C

Note: Answer any SEVEN questions

 $(7 \times 5 = 35 \text{ Marks})$

Q.No.	Question	CO	BL
14	Give an account on Iodine and its preparations.	6	2
15	Write short notes on electrolyte replacement therapy.	6	2
16	Discuss the applications of radiopharmaceuticals with suitable examples.	6	3
17	Outline the sources of impurities in pharmaceuticals with suitable examples	2	3
18	Select an acidifier and explain the principle and procedure involved in its assay	4	5
19	What is Rochelle salt? Discuss its preparation, assay and uses.	6	4
20	Explain the principle involved in the limit test for Arsenic.	3	3
21	Discuss the role of buffers in pharmaceutical systems with suitable examples.	4	3
22	Explain the preparation, properties and medicinal uses of Sodium Iodide ¹³¹ I.	6	3

Code. No.B022415



B.Pharmacy I Semester (PCI) (Main) Examination Feb/March 2024

Subject: Communication Skills-BP105T

Time: 1.5 Hours

PART-A

Max.Marks: 35

Note: Answer any ONE question

 $(1 \times 10 = 10 \text{ Marks})$

Q.No.	Question	CO	RI
1	Explain two situations in your life where you have experienced miscommunication.	1	2
2	Define writing skills, elaborate on the importance and strategies used for effective writing.	5	6

PART B

Note: Answer any FIVE questions

 $(5 \times 5 = 25 \text{ Marks})$

Q.No.			BL
3	Define an Interview and explain various types of Interviews.	4	1
4	Illustrate the process of Communication.	2	3
5	Write atleast five frequently asked questions in a job interview with answers.	4	3
6	Relate the significance of oral presentation in the career of a pharmacist	5	2
7	Write the Dos and Don'ts of a Group Discussion.	4	3
8	Listening is most crucial to develop Speaking-Explain	3	2
9	Explain the barriers in written communication.	3	2
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B.Pharmacy I Semester (PCI) (Main) Examination Feb/March 2024

Subject: Remedial Mathematics -BP106RMT

Time: 1.5 Hours

Max.Marks: 35

PART- A

Note: Answer any ONE question

 $(1 \times 10 = 10 \text{ Marks})$

Q.No.	Question		CO	BL		
	Compute the adjoint and inverse of the matrix	[2	3	4]	2	3
	general inverse of the matrix	4	3	1		
2	Solve the differential equation $(y^2 - 2xy) dx + 6$	220	_ Z	4J 2)dy: - 0	5	-
	1 0 22/10/03/1	LAY)a,y = 0	3	5

PART B

Note: Answer any FIVE questions

 $(5 \times 5 = 25 \text{ Marks})$

Q.No.	Question	CO	BL
3	Split into partial fractions $\frac{2x-3}{(x-2)(x-3)}$.		1
4	Define Non – singular matrix. Is the matrix Non – singular matrix $\begin{bmatrix} 1 & 2 & 5 \\ 3 & 8 & 15 \\ -2 & 9 & -10 \end{bmatrix}$.		2
5	Find the derivative of $e^x + x^n + 5\log x$	6	2
6	Evaluate the integral $\int x^2 \cos x dx$.	5	3
7	Find $L(5\cos t + 2\sin 3t)$.	5	
8			3
	Find the Characteristic equation of the matrix $A = \begin{bmatrix} 1 & 2 & 2 \\ 0 & 2 & 1 \\ -1 & 2 & 2 \end{bmatrix}$.	2	2
9	Show that $16\log(\frac{16}{15}) + 12\log(\frac{25}{24}) + 7\log(\frac{81}{80}) + \log 2 = 1$	3	3