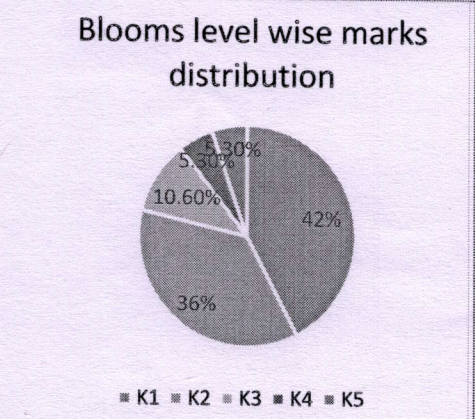
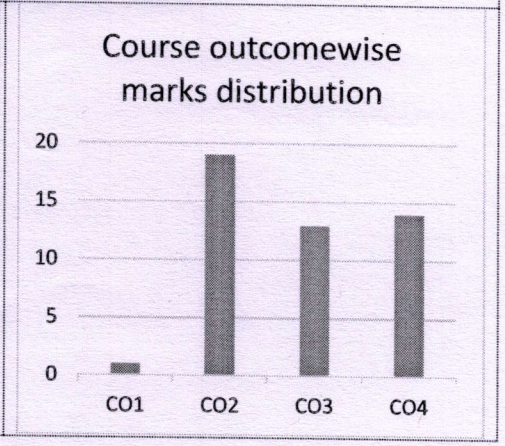
CO- Course Outcomes, **KL**- Knowledge Level, **PO** – Program Outcome

Course Outcomes	CO1	Remember the history of profession of pharmacy.
	CO2	Understand the basics of different dosage forms, pharmaceutical incompatibilities and pharmaceutical calculations.
	CO3	Apply the professional way of handling the prescription.
	CO4	Apply the knowledge of various conventional dosage forms.
	CO5	Understand various pharmaceutical incompatibilities and formulation techniques of suppositories.
	CO6	Apply basic methodology to prepare various conventional semisolid dosage forms.

GRAPHICAL REPRESENTATION





JGi	ARKA JAIN University Jharkhand	NAAC GRADE A ACCREDITED UNIVERSITY	1st INTERNAL EXAMINATION School of Pharmacy

Branch	B. Pharmacy	Program	Pharmacy
Subject Name	Pharmaceutics - I (Theory)	Semester	1st
		Year	October 2025

Time: 1 Hour Max. Marks : 30

- **Answer all Questions of Section A (Compulsory)**
- **Answer Any *0ne* out of *Two* of Section B**
- **Answer Any *Two* out of *Three* of Section C**
- **Possession of Mobile Phones** or any kind of **Written Material, Arguments with the Invigilator or Discussing with Co-Student** will comes under **Unfair Means** and will **Result** in the **Cancellation of the Papers**.

Knowledge Level (KL)	K1 : Remembering	K3 : Applying	K5 : Evaluating
	K2 : Understanding	K4 : Analysing	K6 : Creating

Section A (Each question Carry 01 Marks from Q1-i to Q1-x) – 10 Marks

Q. N 1	QUESTIONS	Marks	COs	KL	PO
i	The fifth edition of IP was published in? a) 1996 b) 2000 c) 2007 d) 2010 आईपी का पाँचवाँ संस्करण कब प्रकाशित हुआ था? a) 1996 b) 2000 c) 2007 d) 2010	1	CO1	K1, K2	PO1
ii	Drugs converted to suitable form are known as? a) Excipient b) Source of drug c) Dosage form d) API उपयुक्त रूप में परिवर्तित औषधियों को क्या कहते हैं? a) एक्सीपिएंट b) औषधि का स्रोत c) खुराक का रूप d) एपीआई	1	CO2	K1, K2	PO2
iii	Every dosage form is a combination of drug and different kind of non-drug components called? a) Excipients b) Non-additives c) New chemical entity d) All of these प्रत्येक खुराक रूप दवा और विभिन्न प्रकार के गैर-दवा घटकों का एक संयोजन है, जिसे क्या कहा जाता है? a) एक्सीपिएंट्स b) गैर-योजक c) नई रासायनिक इकाई d) ये सभी	1	CO2	K1	PO1
iv	The abbreviation of Latin word Rx is? a) You take b) To make c) To sold d) To use लैटिन शब्द Rx का संक्षिप्त रूप है... a) आप लेते हैं b) बनाना c) बेचना d) उपयोग करना	1	CO3	K1, K2	PO2
v	When two or more drugs are used in combination to increase the pharmacological action, the phenomenon is known as? a) Synergism b) Tolerance c) Potentiation d) Idiosyncrasy जब औषधीय क्रिया को बढ़ाने के लिए दो या दो से अधिक दवाओं का संयोजन में उपयोग किया जाता है, तो इस घटना को क्या कहते हैं?	1	CO3	K1, K2	PO2

	a) सहक्रियावाद b) सहनशीलता c) क्षमताकरण d) स्वभावगत				
vi	Effervescent powders release which gas when dissolved in water? a) Oxygen b) Carbon dioxide c) Nitrogen d) Sulphur dioxide जल में घुलने पर बुदबुदाते पाउडर कौन सी गैस छोड़ते हैं? a) ऑक्सीजन b) कार्बन डाइऑक्साइड c) नाइट्रोजन d) सल्फर डाइऑक्साइड	1	CO4	K1, K2	PO1 , PO2
vii	Which one of the following is an Anisotropic in nature? a) Amorphous b) Crystalline c) Both d) All of the Above निम्नलिखित में से कौन सा प्रकृति में विषमदैशिक है a) अनाकार b) क्रिस्टलीय c) दोनों d) उपरोक्त सभी	1	CO4	K1, K2	PO1 , PO2
viii	First-pass metabolism occurs primarily in? a) Stomach b) Small intestine and liver c) Kidney d) Lungs प्रथम-मार्ग चयापचय मुख्यतः कहाँ होता है? a) आमाशय b) छोटी आंत और यकृत c) वृक्क d) फेफड़े	1	CO2	K1, K2	PO1 , PO2
ix	Which one of the following is not a aqueous monophasic liquid dosage form a) Linctus b) Liniments c) Tincture d) Elixir निम्नलिखित में से कौन सा जलीय मोनोफ़ेज़िक द्रव खुराक रूप नहीं है? a) लिंक्टस b) लिनिमेंट्स c) टिंचर d) एलिक्सिर	1	CO4	K1, K2	PO1 ,PO 2
x	Simple syrup is a saturated solution of… a) Sucrose b) Fructose c) Dextrose d) None of these सरल सिरप किसका संतृप्त विलयन है? a) सुक्रोज b) फ्रुक्टोज c) डेक्सट्रोज d) इनमें से कोई नहीं	1	CO4	K1, K2	PO1 , PO2

Section B Answer any One out of Two [1 x 10 = 10 Marks]

Q. No.	QUESTIONS	Marks	COs	KL	PO
2	Define dosage forms. Write the properties and classification of pharmaceutical dosage forms. खुराक रूपों को परिभाषित करें। औषधीय खुराक रूपों के गुण और वर्गीकरण लिखें।	10	CO2	K1, K2	PO1, PO2
3	Describe Prescription and parts of the prescription. नुस्खे और नुस्खे के भागों का वर्णन करें।	10	CO3	K1, K2	PO1, PO2

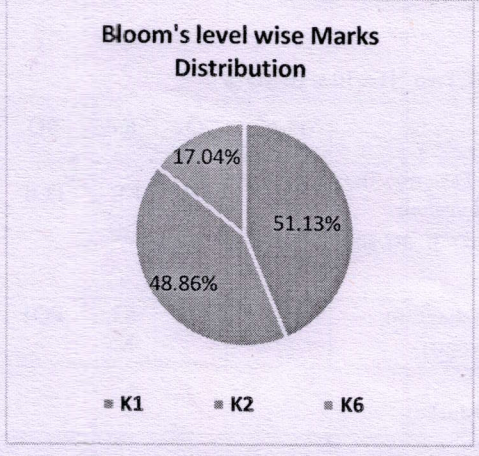
Section C Answer any Two out of Three [2 x 5 = 10 Marks]

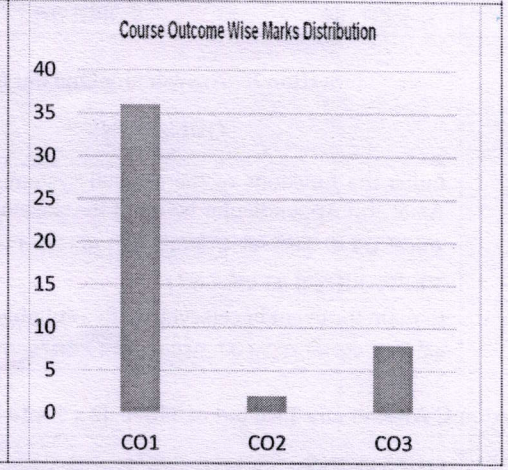
Q. No.	QUESTIONS	Marks	COs	KL	PO
4	What quantities of 95% v/v and 45% v/v alcohols to be mixed to make 800 ml of 65% alcohol? 65% अल्कोहल की 800 मिली मात्रा बनाने के लिए 95% v/v और 45% v/v अल्कोहल की कितनी मात्रा मिलानी होगी?	5	CO2	K3, K4, K5	PO1 0
5	Differentiate between amorphous and crystalline forms with examples. उदाहरणों सहित अनाकार और क्रिस्टलीय रूपों में अंतर स्पष्ट कीजिए।	5	CO4	K1, K2	PO1
6	Explain the different techniques involved in the improvement of solubilisation of drugs. औषधियों के घुलनशीलता में सुधार लाने में प्रयुक्त विभिन्न तकनीकों की व्याख्या कीजिए।	5	CO4	K1, K3	PO1 , PO2

CO- Course Outcomes, **KL**- Knowledge Level, **PO** – Program Outcome

Course Outcomes	CO1	Understand the gross morphology, structure and functions of various organs of the human body.
	CO2	Understand the various homeostatic mechanisms and their imbalances.
	CO3	Understand the various tissues and organs of different systems of human body.
	CO4	Analyze the various experiments related to special senses and nervous system.
	CO5	Evaluate coordinated working pattern of different organs of each system.

GRAPHICAL REPRESENTATION





ARKA JAIN University Jharkhand — NAAC GRADE A ACCREDITED UNIVERSITY

1st INTERNAL EXAMINATION
School of Pharmacy

Branch	**B. Pharmacy**	**Program**	**Pharmacy**
Subject Name	**Human Anatomy and Physiology-1 (Theory)**	**Semester**	**1st**
		Year	**October 2025**

Time: 1 Hour Max. Marks : 30

- **Answer all Questions of Section A (Compulsory)**
- **Answer Any *One* out of *Two* of Section B**
- **Answer Any *Two* out of *Three* of Section C**
- **Possession of Mobile Phones** or any kind of **Written Material, Arguments with the Invigilator or Discussing with Co-Student** will comes under **Unfair Means** and will **Result** in the **Cancellation of the Papers**.

Knowledge Level (KL)			
	K1 : Remembering	**K3 :** Applying	**K5 :** Evaluating
	K2 : Understanding	**K4 :** Analysing	**K6 :** Creating

Section A (Each question Carry 01 Marks from Q1-i to Q1-x) – 10 Marks

Q. N 1	QUESTIONS	Marks	COs	KL	PO
i	In order, the stages of mitosis are: _____ a. Telophase, anaphase,metaphase,prophase b. Prophase, metaphase,anaphase,telophase c. Metaphase,prophase,telophase,anaphase d. Anaphase,prophase,metaphase,telophase क्रम में, माइटोसिस के चरण हैं:_____ a. टेलोफ़ेज़, एनाफ़ेज़, मेटाफ़ेज़, प्रोफ़ेज़ b. प्रोफ़ेज़, मेटाफ़ेज़, एनाफ़ेज़, टेलोफ़ेज़ c. मेटाफ़ेज़, प्रोफ़ेज़, टेलोफ़ेज़, एनाफ़ेज़ d. एनाफ़ेज़, प्रोफ़ेज़, मेटाफ़ेज़, टेलोफ़ेज़	1	CO1	K1, K2	PO1
ii	The organelles that generate cellular energy need for division are: a. Mitochondria b. Ribosomes c. Lysosomes d. Golgi apparatus विभाजन केलिए सेलुलर ऊर्जा की आवश्यकता उत्पन्न करने वाले अंगक हैं: a.माइटोकॉन्ड्रिया b. लाइसोसोम c.राइबोसोम d.गॉल्जीकाय	1	CO1	K1, K2	PO1, PO2
iii	Which part of the brain acts as the body thermostat and controls body temperature? a. Hypothalamus b. Thalamus c. Cerebellum d. Pons	1	CO2	K1, K2	PO1, PO2

	मस्तिष्क का कौन सा भाग शरीर के थर्मोस्टेट के रूप में कार्य करता है और शरीर के तापमान को नियंत्रित करता है? a. हाइपोथेलेमस b. थैलेमस c. सेरिबैलम d. पोंस				
iv	Sweating helps to cool the body by which mechanism? a. Conduction b.Convention c. Radiation d. Evaporation पसीना किस तंत्र द्वारा शरीर को ठंडा करने में मदद करता है? a.प्रवाहकत्व b. सम्मेलन c.विकिरण d. वाष्पीकरण	1	CO2	K1, K2	PO1, PO2
v	Which one is from the below examples is the only movable bone in the human skull. a.Mandible b. Maxilla c.Vomer d. Palatine नीचे दिए गए उदाहरणों में से कौन सी मानव खोपड़ी की एकमात्र गतिशील हड्डी है? a. मैंडिबल b. मैक्सिला c. वोमर d. पैलेटाइन	1	CO1	K1	PO1
vi	Which of the following ribs do not attach to the sternum at all. a. True ribs b. False ribs c. Floating ribs d. None of the above निम्नलिखित में से कौन सी पसलियाँ उरोस्थि से बिल्कुल भी नहीं जुड़ी होती हैं? a. सच्ची पसलियाँ b. झूठी पसलियाँ c. तैरती पसलियाँ c. उपरोक्त में से कोई नहीं	1	CO1	K1	PO1
vii	Which of the following is not a function of the skin? a.Temperature regulation b. Calcium production c. Protection d. Vitamin D synthesis निम्नलिखित में से कौन सा त्वचा का कार्य नहीं है? a. तापमान नियंत्रण b. कैल्शियम उत्पादन c. सुरक्षा d. विटामिन D संश्लेषण	1	CO3	K1, K2	PO1
viii	Which of the following bones are not paired? a.Vomer b. Palatine c. Maxilla d. Lacrimal निम्नलिखित में से कौन सी अस्थियाँ युग्मित नहीं होती हैं? a. वोमर b. पैलेटाइन c. मैक्सिला d. लैक्रिमल	1	CO1	K1, K2	PO1
ix	Which of the following tissues is avascular? a. Adipose b. Skeletal muscle c. Cardiac muscle d. Compact bone निम्नलिखित में से कौन सा ऊतक अवस्कुलर है? a. वसायुक्त b. कंकाल पेशी c. हृदय पेशी d. सघन अस्थि	1	CO3	K1, K2	PO1
x	A plane that separates the body into unequal right and left sides is a a. Parasagittal plane b. Coronal plane c. Frontal plane d. Transverse plane वह तल जो शरीर को असमान दाएँ और बाएँ पक्षों में विभाजित करता है, वह है: a.पैरासगिटल तल b. कोरोनल तल c. फ्रंटल तल d. सवर्स तल	1	CO1	K1, K2	PO1

Section B Answer any One out of Two [1 x 10 = 10 Marks]

Q. No.	QUESTIONS	Marks	COs	KL	PO
2	Enlist the functions of the skeletal system. Describe the Axial and Appendicular bones of the skeletal system. कंकाल तंत्र के कार्यों को सूचीबद्ध करें। कंकाल तंत्र की अक्षीय और उपांगीय अस्थियों का वर्णन करें।	10	CO1	KI, K2,	PO1
3	Explain the event of cell cycle with a suitable diagram. कोशिका चक्र की घटना को उपयुक्त चित्र द्वारा समझाइए।	10	CO1	K1, K6	PO1

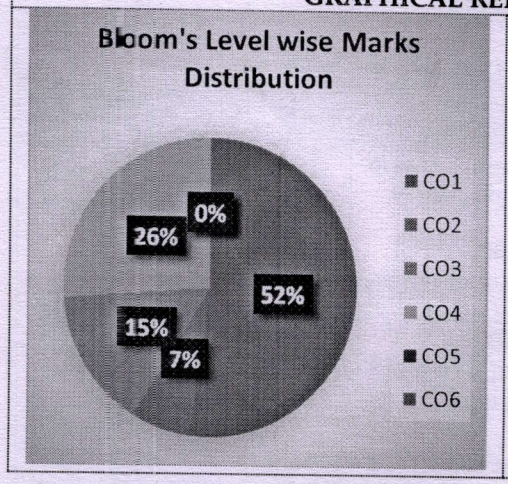
Section C Answer any Two out of Three [2 x 5 = 10 Marks]

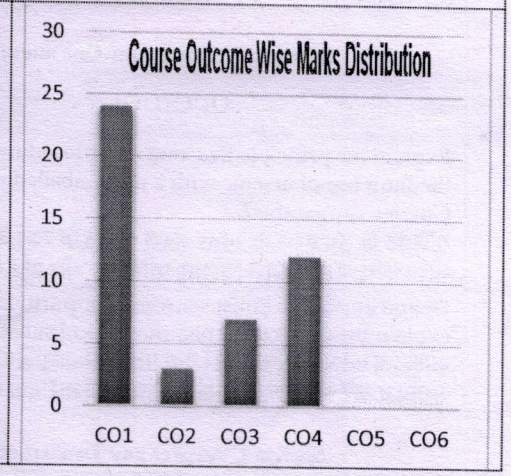
Q. No.	QUESTIONS	Marks	COs	KL	PO
4	Explain transport mechanism across plasma membrane. प्लाज्मा झिल्ली में परिवहन तंत्र की व्याख्या करें।	5	CO1	K1, K2	PO1, PO2
5	What are the body's six level of structural organization? Give any one example of how the structure of a part of the body is related to its function. शरीर के संरचनात्मक संगठन के छह स्तर क्या हैं? अपना स्वयं का एक उदाहरण दीजिए कि शरीर के किसी भाग की संरचना उसके कार्य से किस प्रकार संबंधित है।	5	CO1	K1, K2	PO1
6	Explain in detail the structure and function of nervous tissue. तंत्रिका ऊतक की संरचना एवं कार्य को विस्तार से समझाइये।	5	CO3	K1, K6	PO1

CO- Course Outcomes, KL- Knowledge Level, PO – Program Outcome

Course Outcomes	CO1	Remember the principles of limit tests.
	CO2	Understand different classes of inorganic pharmaceuticals and their analysis
	CO3	Remember the identification and test for purity of different inorganic pharmaceuticals.
	CO4	Understand the sources of impurities and methods to determine the impurities in inorganic drugs and pharmaceuticals
	CO5	Understand the medicinal and radiopharmaceutical importance of inorganic compounds
	CO6	Remember to a variety of inorganic drug classes.

GRAPHICAL REPRESENTATION





JGi	ARKA JAIN University Jharkhand	NAAC GRADE A ACCREDITED UNIVERSITY	1st INTERNAL EXAMINATION School of Pharmacy
Branch	B. Pharmacy	Program	Pharmacy
Subject Name	Pharmaceutical Inorganic Chemistry (Theory)	Semester	I
		Year	October 2025
Time: 1 Hour Max. Marks : 30	• Answer all Questions of Section A (Compulsory) • Answer Any *One* out of *Two* of Section B • Answer Any *Two* out of *Three* of Section C • Possession of Mobile Phones or any kind of Written Material, Arguments with the Invigilator or Discussing with Co-Student will comes under Unfair Means and will Result in the Cancellation of the Papers.		
Knowledge Level (KL)	K1 : Remembering	K3 : Applying	K5 : Evaluating
	K2 : Understanding	K4 : Analysing	K6 : Creating

Section A (Each question Carry 01 Marks from Q1-i to Q1-x) – 10 Marks

Q. N 1	QUESTIONS	Marks	COs	KL	PO
i	In which one of the given reactions a salt is reacting with a base? (A)$NaOH+HCl \rightarrow NaCl+H_2O$ (B)$Cu(OH)_2+H_2SO_4 \rightarrow CuSO_4+2H_2O$ (C)$KOH+HCl \rightarrow KCl+H_2O$ (D)$6NH_4OH+Al(SO_4)_3 \rightarrow 2Al(OH)_3+3(NH_4)_2SO_4$ दिए गए प्रतिक्रियाओं में से किस प्रतिक्रिया में एक लवण एक आधार के साथ अभिक्रिया कर रहा है? (A)$NaOH+HCl \rightarrow NaCl+H_2O$ (B)$Cu(OH)_2+H_2SO_4 \rightarrow CuSO_4+2H_2O$ (C)$KOH+HCl \rightarrow KCl+H_2O$ (D)$6NH_4OH+Al(SO_4)_3 \rightarrow 2Al(OH)_3+3(NH_4)_2SO_4$	1	CO3	K1, K2	PO1
ii	Which one of the Following is incorrect? (A)Acids turns blue litmus paper red (B)Aqueous solutions of acids conduct electricity (C)Acids react with certain metals to form hydrogen gas (D)None of these उपर्युक्त में से कौन सा गलत है? (A)अम्ल नीले लिटमस पेपर को लाल कर देते हैं (B) अम्ल के तरल विलयन विद्युत संचालित करते हैं (C)अम्ल कुछ धातुओं के साथ प्रतिक्रिया करके हाइड्रोजन गैस बनाते हैं (D)इनमें से कोई नहीं	1	CO3	K1, K2	PO2
iii	In Bronsted-Lowry concept acid is (A) proton donor (B) electron donor (C) proton accepter (D) electron accepter ब्रोंस्टेड-लोरी अवधारणा में एसिड है	1	CO3	K1	PO1

	(क) प्रोटॉन दाता (ख) इलेक्ट्रॉन दाता (ग) प्रोटॉन स्वीकारक (घ) इलेक्ट्रॉन स्वीकारक				
iv	Impurities in pharmaceutical preparation may be due to following sources: (A) Raw material (B) Manufacturing process (C) Chemical instability (D) All of the above दवा की तैयारी में अशुद्धियां निम्नलिखित स्रोतों के कारण हो सकती हैं: (A) कच्चा माल (B)विनिर्माण प्रक्रिया (C) रासायनिक अस्थिरता (D) उपरोक्त सभी	1	CO4	K1, K2	PO2
v	In the limit test for chloride, the standard Solution is a (A) 0.0824% w/v sodium chloride solution (B) 5.85 % w/v sodium chloride solution (C) 1 % hydrochloric acid solution (D) 1 M hydrochloric acid solution क्लोराइड के लिए सीमा परीक्षण में, मानक समाधान है (A)0.0824% w/v सोडियम क्लोराइड समाधान (B)5.85 % w/v सोडियम क्लोराइड समाधान (C)1 % हाइड्रोक्लोरिक एसिड समाधान (D)1 M हाइड्रोक्लोरिक एसिड समाधान	1	CO1	K1, K2	PO2
vi	Limit test for Heavy Metals is carried out To identify and control impurities (A) Mercury (B) Cadmium (C) Bismuth (D) All of the above भारी धातुओं के लिए सीमा परीक्षण अशुद्धियों की पहचान और नियंत्रण के लिए किया जाता है (A) पारा (B) कैडमियम (C) बिस्मथ (D) उपरोक्त सभी	1	CO1, CO4	K1, K2	PO1, PO2
vii	Limit test for Pb has been based b/w..... And..... upon reaction to form Complex (A) Pb and dithionite (B) Guizet test (C) Arsine (D) Mercuric chloride Pb के लिए सीमा परीक्षण b/w..... आधारित किया गया है। और....प्रतिक्रिया पर कॉम्प्लेक्स बनता है (A) पीबी और डाइथियोनाइट (B) गुइज़ेट परीक्षण (C) आर्सीन (D) मर्क्यूरिक क्लोराइड	1	CO1	K1, K2	PO1, PO2
viii	The function of granulated Zn in the limit test For Arsenic is (A) Low and prolonged evolution of Nascent H2 gas (B) High and prolonged evolution of Nascent H2 gas (C) Low and prolonged evolution of Nascent N2 gas (D) Low and prolonged evolution of Nascent N2 gas आर्सेनिक के लिए सीमा परीक्षण में द्रानेदार Zn का कार्य है (A) नवजात एच2 गैस का कम और लंबे समय तक विकास (B) नवजात एच2 गैस का उच्च और दीर्घकालिक विकास (C) नवजात एन2 गैस का कम और लंबे समय तक विकास (D) नवजात एन2 गैस का कम और लंबे समय तक विकास	1	CO1	K1, K2	PO1, PO2
ix	What is added in preparation of barium Sulphate reagent to prevent super Saturation (A) Ethanol (B) BaCl2 (C) K2S04 (D) A & B सुपर संतृप्ति को रोकने के लिए बेरियम सल्फेट अभिकर्मक की तैयारी में क्या जोड़ा जाता है? (A) इथेनॉल (B) BaCl2 (C) के2एस04 (D) ए और बी	1	CO1	K1, K2	PO2
x	The standard solution of limit test for arsenic contains (A) Arsenious acid (B) Arsenic acid (C) Arsine (D) Arsenic oxide आर्सेनिक के मानक घोल में शामिल है (A) आर्सेनियस अम्ल (B) आर्सेनिक एसिड (C) आर्सिन (D) आर्सेनिक ऑक्साइड	1	CO1	K1, K2	PO1

Section B Answer any One out of Two [1 x 10 = 10 Marks]

Q. No.	QUESTIONS	Marks	COs	KL	PO
2	Explain the principle,Reaction and procedure involved in the limit test of arsenic with a neat Labelled diagram of Gutziet's apparatus? गुज़ियेट के उपकरण के स्वच्छ लेबल आरेख के साथ आर्सेनिक की सीमा परीक्षण में शामिल सिद्धांत, प्रतिक्रिया और प्रक्रिया को समझाएं.	10	CO1	K2, K4	PO1, PO3
3	Define impurity. Enlist sources of impurities in and explain their effects on pharmaceutical substances. अशुद्धता को परिभाषित करें। दवा पदार्थों में अशुद्धियों के स्रोतों को सूचीबद्ध करें और उनके प्रभावों की व्याख्या करें दवा पदार्थ.	10	CO4	K1, K2	PO1, PO2

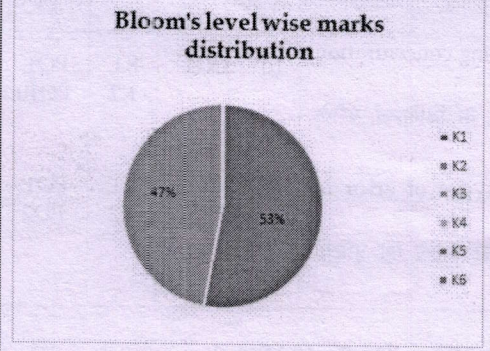
Section C Answer any Two out of Three [2 x 5 = 10 Marks]

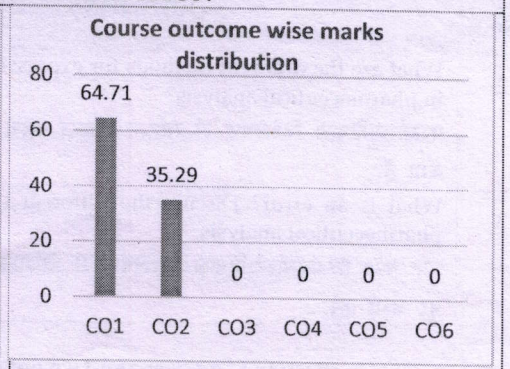
Q. No.	QUESTIONS	Marks	COs	KL	PO
4	Write in detail the principle, reactions and procedure for the limit test of iron. लोहे की सीमा परीक्षण के सिद्धांत, प्रतिक्रिया एवं प्रक्रिया को विस्तार से लिखें.	5	CO1	K1, K2	PO1, PO2
5	Explain Acid & Base as per Lewis's theory. लुईस के सिद्धांत के अनुसार अम्ल और क्षार की व्याख्या करें।	5	CO3	K1, K3	PO1
6	Discuss the limit test of chloride for potassium permanganate. पोटेशियम परमैंगनेट के लिए क्लोराइड की सीमा परीक्षण पर चर्चा करें.	5	CO1	K1, K2	PO1, PO2

CO- Course Outcomes, KL- Knowledge Level, PO – Program Outcome

Course Outcomes	CO1	Understand the ideas with the fundamental of analytical chemistry
	CO2	Remember the sources of mistakes and errors in analysis and their minimizing techniques
	CO3	Apply the fundamentals of volumetric analytical skills
	CO4	Understand the fundamentals and mechanism of precipitation, and complexometric titration
	CO5	Understand the fundamentals and types of redox titration
	CO6	Understand the basic knowledge in the principles of electrochemical analytical techniques

GRAPHICAL REPRESENTATION





ARKA JAIN University Jharkhand — NAAC GRADE A		1st INTERNAL EXAMINATION School of Pharmacy	
Branch	B. Pharmacy	Program	Pharmacy
Subject Name	Pharmaceutical Analysis I (Theory)	Semester	I
		Year	October 2025
Time: 1 Hour Max. Marks : 30	• Answer all Questions of Section A (Compulsory) • Answer Any *One* out of *Two* of Section B • Answer Any *Two* out of *Three* of Section C • Possession of Mobile Phones or any kind of Written Material, Arguments with the Invigilator or Discussing with Co-Student will comes under Unfair Means and will Result in the Cancellation of the Papers.		
Knowledge Level (KL)	K1 : Remembering	K3 : Applying	K5 : Evaluating
	K2 : Understanding	K4 : Analysing	K6 : Creating

Section A (Each question Carry 01 Marks from Q1-i to Q1-x) – 10 Marks

Q. N 1	QUESTIONS	Marks	COs	KL	PO
I	The point at which the reaction is complete in titration is known as? A) Midpoint C) End point B) Half point D) Neutral point. टाइट्रेशन में जिस बिंदु पर अभिक्रिया पूरी हो जाती है उसे क्या कहा जाता है? A) मध्य बिंदु C) अंतिम बिंदु B) आधा बिंदु D) उदासीनीकरण बिंदु	1	CO1	K1, K2	PO1
ii	Which of the following is a primary standard? A) NaOH C) K_2Cr_2O7 B) HCl D) NH_4OH निम्नलिखित में से कौन-सा एक प्राथमिक मानक है? A) NaOH C) K_2Cr_2O7 B) HCl D) NH_4OH	1	CO1	K1, K2	PO2
iii	Which of the following indicators is used in acid–base titration? A) Starch C) Eosin B) Phenolphthalein D) Diphenylamine निम्नलिखित में से कौन-सा सूचक अम्ल-क्षार टाइट्रेशन में उपयोग किया जाता है? A) स्टार्च C) इओसिन	1	CO1	K1, K2	PO1

	B)) फिनॉल्फ्थेलिन D) डाइफिनाइलअमीन				
iv	What is one mole? A)6.022*10^6 C)6.022*10^23 B)6.022*10^8 D)6.022*10^7 एक मोल कितना होता है? A)6.022*10^6 C)6.022*10^23 B)6.022*10^8 D)6.022*10^7	1	CO1	K1, K2,	PO2
v	What is the difference between the observed value and true value is called? A) Accuracy C) Precision B) Error D) Specificity प्रेक्षित मान और वास्तविक मान के बीच का अंतर क्या कहलाता है? A) शुद्धता C) त्रुटि B) परिशुद्धता D) विशिष्टता	1	CO2	K1, K2	PO2
vi	Equivalent weight = -------- a) Molecular weight × Valency b) Molecular weight ÷ Valency c) Valency ÷ Molecular weight d) None तल्यांक ? A) आणविक भार × संयोजकता C) संयोजकता ÷ आणविक भार B) आणविक भार ÷ संयोजकता D) इनमें से कोई नहीं	1	CO1	K1, K2	PO1, PO2
vii	How is titration end point be determined by change in colour? A) Measuring C) Burette B) Molecular Weight D) Equivalence Weight टाइट्रेशन का अंतिम बिंदु (End Point) रंग परिवर्तन से किसके द्वारा निर्धारित किया जा सकता है? A) मापन C) ब्युरेट B) आणविक भार D) तुल्यक भार	1	CO1	K1, K2	PO1, PO2
viii	What is the solution of known concentration called as? A) Buffer solution C) Neutral solution B) Standard solution D) Saturated solution ज्ञात सांद्रता वाला विलयन किसकी परिभाषा है? A) बफ़र विलयन C) उदासीन विलयन B) मानक विलयन D) संतृप्त विलयन	1	CO1	K1, K2	PO1, PO2
ix	What Error arise when an individual analyst is responsible for them? A) Method error C) instrumental error B) Personal error D) Random error	1	CO2	K1, K2	PO2
	वह त्रुटि जो विश्लेषक की व्यक्तिगत लापरवाही या गलती के कारण उत्पन्न होती है, उसे क्या कहते हैं? A) विधिगत त्रुटि C) यांत्रिक/उपकरणीय त्रुटि B) व्यक्तिगत त्रुटि D) आकस्मिक त्रुटि				
x	Phenolphthalein has a Ph range of_____ A).6.8-8. C).8.3-11.0 B). 1.2-2.8 D).4.2-6.3 फ़िनॉल्फ़्थलीन का pH रेंज कितना होता है? A) 6.8 – 8. C) 1.2 – 2.8 B) 8.3 – 11.0 D) 4.2 – 6.3	1	CO1, CO2	K1, K2	PO1, PO2

Section B Answer any One out of Two [1 x 10 = 10 Marks]

Q. No.	QUESTIONS	Marks	COs	KL	PO
2	What are the different methods for expressing concentration in pharmaceutical analysis? फार्मास्युटिकल विश्लेषण में सांद्रता व्यक्त करने के विभिन्न तरीके क्या हैं?	10	CO1	K1, K2	PO1, PO10
3	What is an error? Discuss the different types of error in pharmaceutical analysis. त्रुटि क्या है? फार्मास्युटिकल विश्लेषण में विभिन्न प्रकार की त्रुटियों पर चर्चा करें.	10	CO2	K1, K2	PO1, PO2

Section C Answer any Two out of Three [2 x 5 = 10 Marks]

Q. No.	QUESTIONS	Marks	COs	KL	PO
4	What do u understand by Primary and Secondary standard solutions? Give some examples. फार्मास्युटिकल विश्लेषण में सांद्रता व्यक्त करने के विभिन्न तरीके क्या हैं?कुछ उदाहरण दीजिए?	5	CO1	K1, K2	PO1, PO2
5	What are the different scopes of pharmaceutical analysis? फार्मास्युटिकल विश्लेषण के विभिन्न क्षेत्र क्या हैं?	5	CO1	K1	PO1
6	Discus the different sources of error in pharmaceutical analysis. फार्मास्युटिकल विश्लेषण में त्रुटि के विभिन्न स्रोतों पर चर्चा करें.	5	CO2	K1, K2	PO1, PO2

	ARKA JAIN University Jharkhand — NAAC GRADE A ACCREDITED UNIVERSITY		1ST INTERNAL EXAMINATION
Program Name	**BACHELOR OF PHARMACY**	Program Code	**B.PHARM**
Course Name	**COMMUNICATION SKILLS**	Semester	**I**
Course Code	**PHM21005**	Year	**2025/ODD**
Time: 1 Hours	**Answer Any ONE of Section A** **Answer Any FOUR of Section B**	Maximum Marks	**30**

Knowledge Level (KL)	**K1 :** Remembering	**K3 :** Applying	**K5 :** Evaluating
	K2 : Understanding	**K4 :** Analysing	**K6 :** Creating

Section A

Answer any one out of two **[1 x 10 = 10 Marks]**

Q. No.	Questions	Marks	COs	KL	PO
1(i)	What is the significance of communication for health care professionals?	10	CO1	K2	PO1
1(ii)	Describe the basic elements of communication.	10	CO 5	K2	PO2

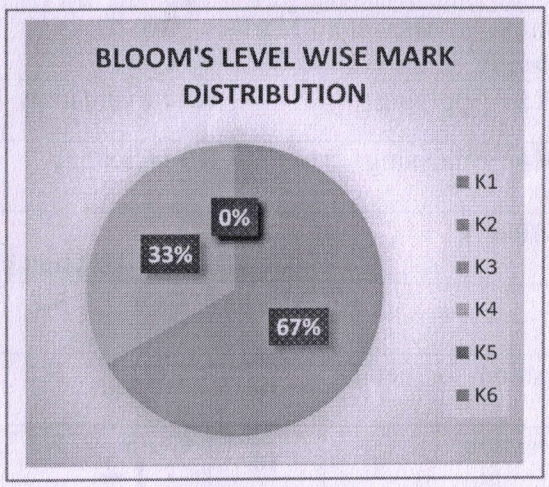
Section B

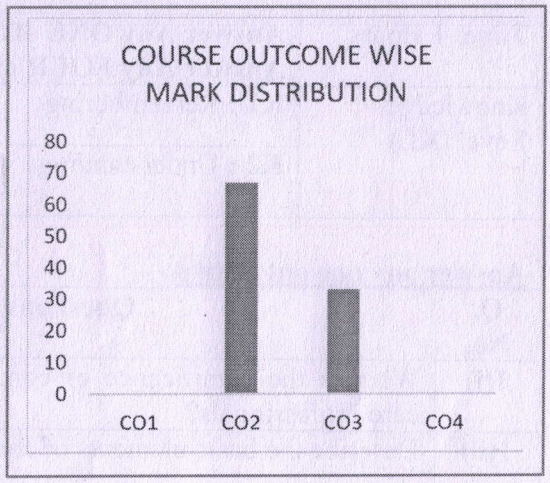
Answer any FOUR out of SIX **[4 x 5 = 20 Marks]**

Q. No.	Questions	Marks	COs	KL	PO
1	Write about the kinds of communication.	05	CO 2	K2	PO3
2	Describe the process of communication.	05	CO 1	K4	PO2
3	How does body language play its role in communication?	05	CO 2	K5	PO1
4	What is the difference between formal and informal communication?	05	CO 5	K2	PO1
5	What are the major barriers to effective communication?	05	CO 1	K2	PO2
6	How is English important for health care professionals?	05	CO 2	K1	PO3

CO- Course Outcomes, KL- Knowledge Level, PO – Program Outcome

Course Outcomes	CO1	To understand the behavioural needs for a Pharmacist to function effectively in the areas of pharmaceutical operation
	CO2	Communicate effectively (Verbal and Non Verbal)
	CO3	Effectively manage the team as a team player
	CO4	To develop interview skills
	CO5	To develop Leadership qualities and essentials

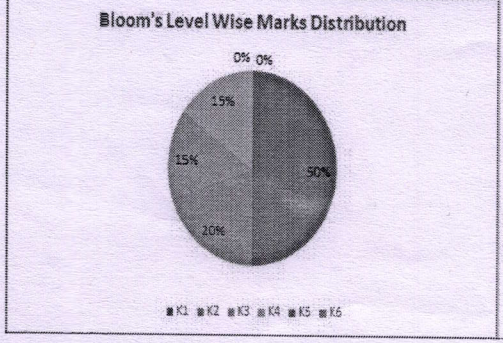


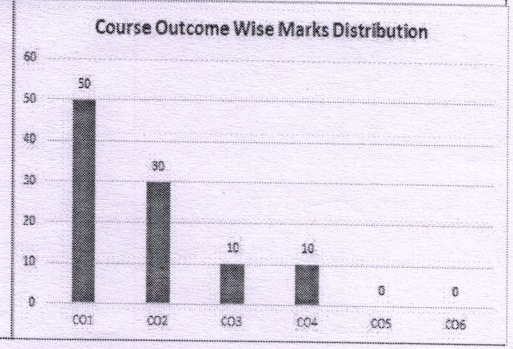


CO- Course Outcomes, **KL**- Knowledge Level, **PO** – Program Outcome

Course Outcomes	CO1	Understand classification system of the living world.
	CO2	Know the morphology and anatomy of plants and animals
	CO3	Understand the organ system in plant and their physiology
	CO4	Know the organ system in animals and their physiology
	CO5	Know about the nutrition and growth regulators of plant
	CO6	Understand cell biology (Basic Nature of Plant cell and Animal cell)

GRAPHICAL REPRESENTATION





ARKA JAIN University Jharkhand

NAAC GRADE A ACCREDITED UNIVERSITY

1st INTERNAL EXAMINATION
School of Pharmacy

Branch	**B. Pharmacy**	**Program**	**Pharmacy**
Subject Name	**Remedial Biology**	**Semester**	**I**
		Year	**October 2025**

Time: 1 Hour
Max. Marks : 30

- **Answer Any *One* out of *Two* of Section A**
- **Answer Any *Two* out of *Three* of Section B**
- **Possession of Mobile Phones** or any kind of **Written Material, Arguments with the Invigilator or Discussing with Co-Student** will comes under **Unfair Means** and will **Result** in the **Cancellation of the Papers**.

Knowledge Level (KL)	**K1 :** Remembering	**K3 :** Applying	**K5 :** Evaluating
	K2 : Understanding	**K4 :** Analysing	**K6 :** Creating

Section A Answer any One out of Two [1 x 10 = 10 Marks]

Q. No.	QUESTIONS	Marks	COs	KL	PO
1	Write in details about the five kingdom classifications of organisms. जीवों के पाँच जगत वर्गीकरण के बारे में विस्तार से लिखिए।	10	CO1	K1, K3	PO1, PO7
2	Draw a schematic diagram and write a morphological study of the root. मूल का रूपरेखा चित्र बनाइए और उसकी आकृतिकीय संरचना का अध्ययन लिखिए।	10	CO2	K1, K6	PO1, PO7

Section B Answer any Four out of Six [4 x 5 = 20 Marks]

Q. No.	QUESTIONS	Marks	COs	KL	PO
3	What is blood? Write a short note highlighting its components and functions. रक्त पर संक्षिप्त टिप्पणी लिखिए।	5	CO4	K1, K2	PO1
4	Write short note on Characters of a living organisms. सजीवों की विशेषताओं पर संक्षिप्त टिप्पणी लिखिए।	5	CO1	K1, K2	PO1, PO7
5	Enlist the salient features of Virus. वायरस की मुख्य विशेषताएं सूचीबद्ध कीजिए।	5	CO1	K1, K2	PO1, PO7
6	Draw a neat, labelled diagram of a leaf and explain its structure and functions. पत्ते का एक साफ-सुथरा, लेबलयुक्त चित्र बनाएं और उसकी संरचना एवं कार्यों की व्याख्या करें।	5	CO2	K1, K6	PO1, PO7
7	Describe the various parts of Flowers with a neat labelled diagram. फूल के विभिन्न भागों का वर्णन कीजिए तथा एक साफ-सुथरा, लेबलयुक्त चित्र बनाइए।	5	CO3	K1, K3	PO1, PO7
8	Write short note on Binomial Nomenclature. द्विनाम पद्धति पर संक्षिप्त टिप्पणी लिखिए।	5	CO1	K1, K2	PO1, PO10

	ARKA JAIN University Jharkhand — NAAC GRADE A ACCREDITED UNIVERSITY		1ST INTERNAL EXAMINATION
Program Name	**BACHELOR OF PHARMACY**	Program Code	**B.PHARM**
Course Name	**Remedial Mathematics**	Semester	**I**
Course Code	**PHM21006**	Year	**2025/ODD**
Time: 1 Hours	**Answer Any ONE of Section A** **Answer Any FOUR of Section B**	Maximum Marks	**30**

Knowledge Level (KL)			
	K1 : Remembering	**K3 :** Applying	**K5 :** Evaluating
	K2 : Understanding	**K4 :** Analysing	**K6 :** Creating

Section A

Answer any one out of two **[1 x 10 = 10 Marks]**

Q. No.	Questions	Marks	COs	KL	PO
1(i)	If $A = \begin{bmatrix} 4 & 0 & 2 \\ 2 & 3 & 3 \\ 1 & 2 & 4 \end{bmatrix}$ find inverse of A or A^{-1}	10	CO2	K3,K4	PO1
1(ii)	Evaluate the limit $\lim_{x\to\infty} \frac{5x3-2x2+4}{3x3+x-7}$	10	CO1	K4,K5	PO2

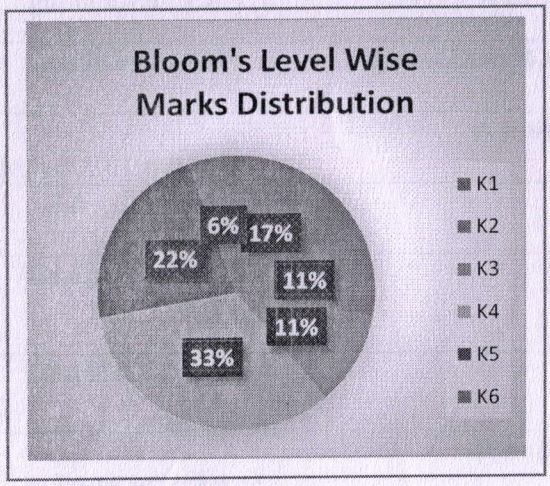
Section B

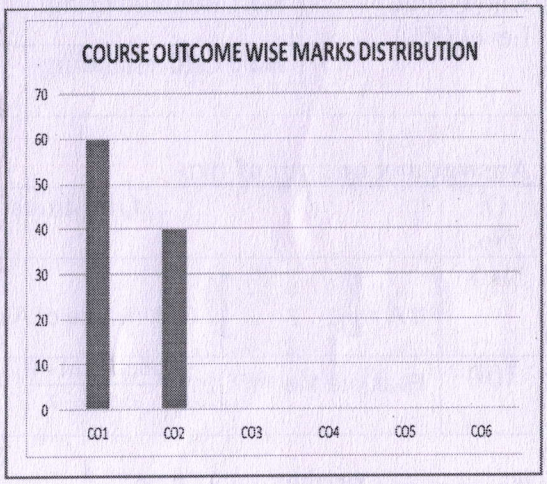
Answer any FOUR out of SIX **[4 x 5 = 20 Marks]**

Q. No.	Questions	Marks	COs	KL	PO
1	Trace the function $y = 2^x$.	05	CO1	K1,K2	PO1
2	Prove that $\sqrt{5}+3$ is an irrational number.	05	CO1	K6	PO10
3	If $A = \begin{bmatrix} 4 & 5 & 6 \\ 2 & 3 & 1 \\ 5 & 7 & 3 \end{bmatrix}$ then find the value of $2A \times I$.	05	CO2	K4,K5	PO2
4	Prove that: $2\log(\frac{15}{18}) - \log(\frac{25}{162}) + \log(\frac{4}{9}) = \log 2$.	05	CO1	K1,K6	PO10
5	If $A = \begin{bmatrix} 2 & 4 \\ 3 & 5 \end{bmatrix}$ and $B = \begin{bmatrix} 1 & -3 \\ 2 & 2 \end{bmatrix}$ show that $AB \neq BA$.	05	CO2	K1,K2	PO10
6	Evaluate the value of $f(x) = \frac{x2-9}{x-3}$ at x =3 and explain right hand limit and left hand limit for it when $x \to 3$.	05	CO1	K4,K5	PO2

CO Course Outcomes, KL- Knowledge Level, PO – Program Outcome

Course Outcomes	CO1	Evaluate and demonstrate the partial fraction, logarithms, functions and limits and continuity.
	CO2	Explain matrices and determination.
	CO3	Explain simple equations using graphs.
	CO4	Evaluate relationship and functions; fundamentals of trigonometry and geometry.
	CO5	Analyze sequences and binomial series.
	CO6	Evaluate calculus and integral calculus.





Note : This above figure is only Example and must prepare this type of figure in these two column

SCHOOL OF PHARMACY	ARKA JAIN University Jharkhand	NAAC GRADE A	1ST INTERNAL EXAMINATION
Program Name	**BACHELOR OF PHARMACY**	Program Code	**B. PHARM**
Course Name	**Pharmaceutics -I (Practical)**	Semester	**1st Semester (Group-A)**
Course Code	**PHM21003**	Year	**October 2025**
Time: 4 Hours	**All the Questions are Compulsory**	Maximum Marks	**40**
Knowledge Level (KL)	**K1 :** Remembering	**K3 :** Applying	**K5 :** Evaluating
	K2 : Understanding	**K4 :** Analysing	**K6 :** Creating

Section A

[1 x 10 = 10 Marks]

Q. No.	Questions	Marks	COs	KL	PO
I	**Synopsis** Write a synopsis on pharmaceutical dosage forms, differentiate between an elixir and a syrup, and describe the different parts of a prescription. वाइयों के खुराक रूपों पर एक सारांश लिखें, अमृत और सिरप के बीच अंतर करें, और नुस्खे के विभिन्न भागों का वर्णन करें।	10	C02, CO3	K1, K2	PO1

Section B

[15 + 10=25 Marks]

Q. No.	Questions	Marks	COs	KL	PO
II	a. Major To prepare and dispense 10ml of piperazine citrate elixir. 10 मिलीलीटर पिपेरेजीन साइट्रेट अमृत तैयार करना और वितरित करना।	15	C02	K3, K5, K6	PO1, PO10
	b.Minor To prepare and dispense 10 ml of simple syrup I.P 66. 10 मिलीलीटर सरल सिरप आई.पी 66 तैयार करना और वितरित करना।	10	CO2	K3, K5, K6	PO1, PO10

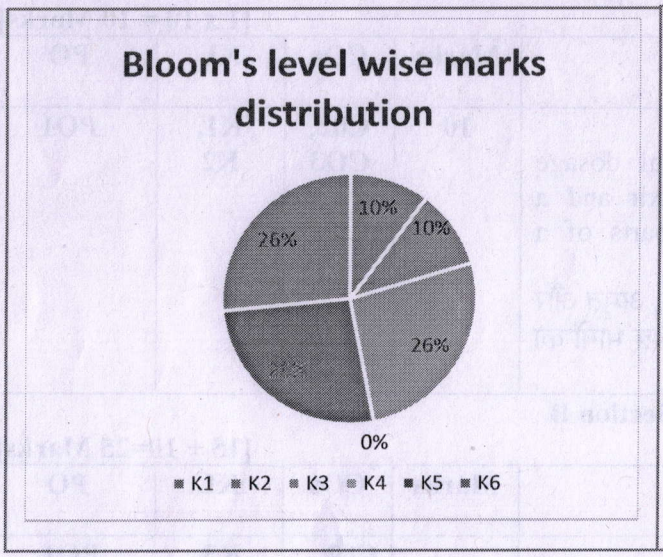
Section C

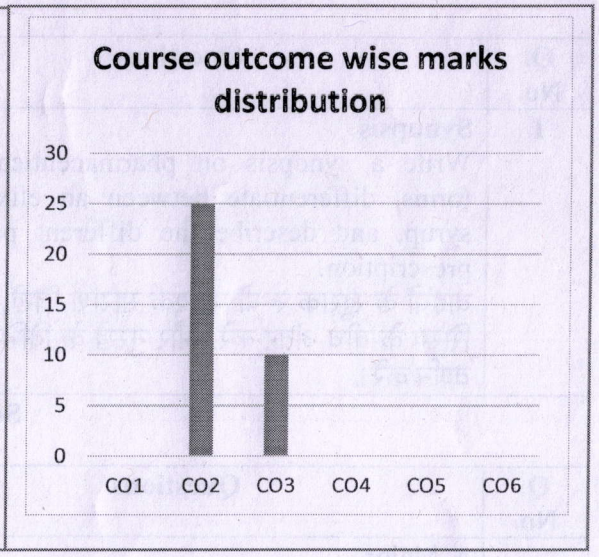
[05 Marks]

Q. No.	Questions	Marks	COs	KL	PO
III	Viva voce	05			

CO- Course Outcomes, KL- Knowledge Level, PO – Program Outcome

Course Outcomes	CO1	Remember the history of profession of pharmacy.
	CO2	Understand the basics of different dosage forms, pharmaceutical incompatibilities and pharmaceutical calculations.
	CO3	Apply the professional way of handling the prescription.
	CO4	Apply the knowledge of various conventional dosage forms.
	CO5	Understand various pharmaceutical incompatibilities and formulation techniques of suppositories.
	CO6	Apply basic methodology to prepare various conventional semisolid dosage forms.





SCHOOL OF PHARMACY	ARKA JAIN University Jharkhand NAAC GRADE A		1ST INTERNAL EXAMINATION
Program Name	**BACHELOR OF PHARMACY**	Program Code	**B. PHARM**
Course Name	**Pharmaceutics -I (Practical)**	Semester	**1st Semester (Group-B)**
Course Code	**PHM21003**	Year	**October 2025**
Time: 4 Hours	**All the Questions are Compulsory**	Maximum Marks	**40**
Knowledge Level (KL)	**K1 :** Remembering	**K3 :** Applying	**K5 :** Evaluating
	K2 : Understanding	**K4 :** Analysing	**K6 :** Creating

Section A

[1 x 10 = 10 Marks]

Q. No.	Questions	Marks	COs	KL	PO
I	**Synopsis** Write a synopsis on the classification of powder dosage forms and differentiate between powders and granules. पाउडर खुराक रूपों के वर्गीकरण पर एक सारांश लिखें और पाउडर और कणिकाओं के बीच अंतर करें।	10	CO2	K1	PO1

Section B

[15 + 10=25 Marks]

Q. No.	Questions	Marks	COs	KL	PO
II	a. Major To prepare and dispense 10ml of strong ammonium acetate. 10 मिलीलीटर मजबूत अमोनियम एसीटेट तैयार करना और वितरित करना।	15	CO2, CO4	K1,K3, K5,K6	PO1, PO10
	b. Minor To prepare and dispense 10 ml of Iodine throat paint. 10 मिलीलीटर आयोडीन गले का रंग तैयार करना और वितरित करना।	10	CO2, CO4	K1,K3, K5,K6	PO1, PO10

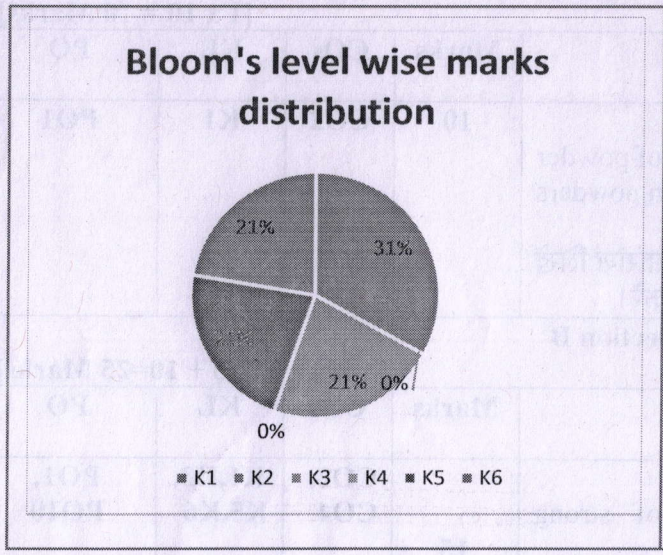
Section C

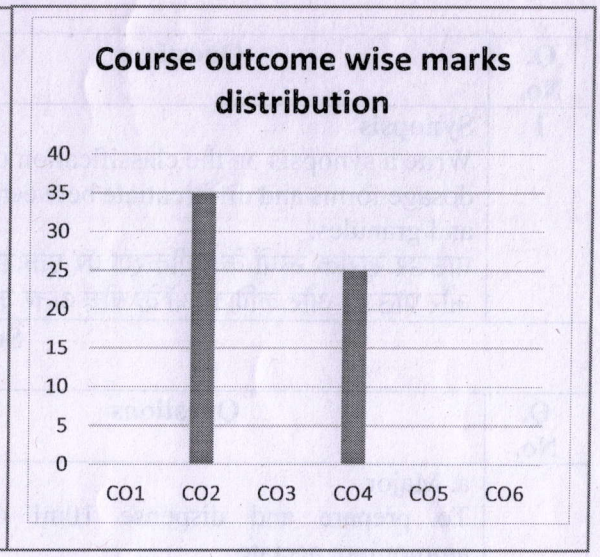
[05 Marks]

Q. No.	Questions	Marks	COs	KL	PO
III	Viva voce	05			

CO- Course Outcomes, KL- Knowledge Level, PO – Program Outcome

Course Outcomes	CO1	Remember the history of profession of pharmacy.
	CO2	Understand the basics of different dosage forms, pharmaceutical incompatibilities and pharmaceutical calculations.
	CO3	Apply the professional way of handling the prescription.
	CO4	Apply the knowledge of various conventional dosage forms.
	CO5	Understand various pharmaceutical incompatibilities and formulation techniques of suppositories.
	CO6	Apply basic methodology to prepare various conventional semisolid dosage forms.





SCHOOL OF PHARMACY	ARKA JAIN University Jharkhand	NAAC GRADE A	1ST INTERNAL EXAMINATION
Program Name	**BACHELOR OF PHARMACY**	Program Code	**B. PHARM**
Course Name	**Pharmaceutics -I (Practical)**	Semester	**1st Semester (Group-C)**
Course Code	**PHM21003**	Year	**October 2025**
Time: 4 Hours	**All the Questions are Compulsory**	Maximum Marks	**40**
Knowledge Level (KL)	**K1 :** Remembering	**K3 :** Applying	**K5 :** Evaluating
	K2 : Understanding	**K4 :** Analysing	**K6 :** Creating

Section A

[1 x 10 = 10 Marks]

Q. No.	Questions	Marks	COs	KL	PO
I	**Synopsis** Write down the difference between linctuses and liniments dosage form. लिन्क्टस और लिनिमेंट खुराक के रूप के बीच अंतर लिखें।	10	CO2, CO4	K1	

Section B

[15 + 10=25 Marks]

Q. No.	Questions	Marks	COs	KL	PO
II	a. Major To prepare and dispense 10 ml of compound syrup B.P.C 68. 10 मिलीलीटर मिश्रित सिरप बी.पी.सी 68 तैयार करना और वितरित करना।	15	CO2, CO4	K1, K3, K5	
	b.Minor To prepare and dispense 10 ml of simple syrup I.P 66. 10 मिलीलीटर सरल सिरप आई.पी 66 तैयार करना और वितरित करना।	10	CO2, CO4	K1, K3, K5	

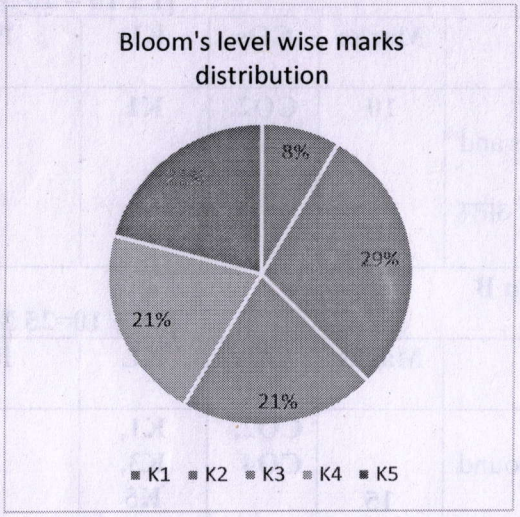
Section C

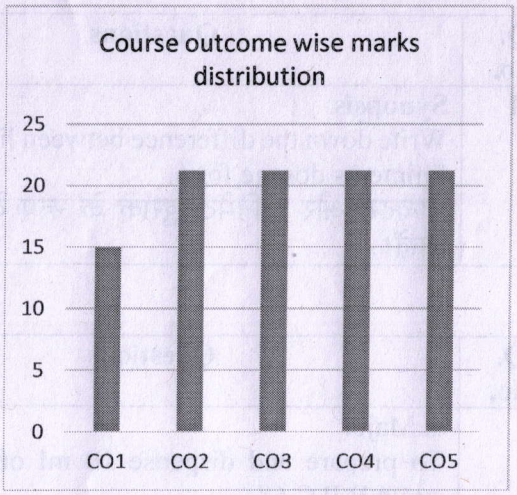
[05 Marks]

Q. No.	Questions	Marks	COs	KL	PO
III	Viva voce	05			

CO- Course Outcomes, KL- Knowledge Level, PO – Program Outcome

Course Outcomes	CO1	Remember the history of profession of pharmacy.
	CO2	Understand the basics of different dosage forms, pharmaceutical incompatibilities and pharmaceutical calculations.
	CO3	Apply the professional way of handling the prescription.
	CO4	Apply the knowledge of various conventional dosage forms.
	CO5	Understand various pharmaceutical incompatibilities and formulation techniques of suppositories.
	CO6	Apply basic methodology to prepare various conventional semisolid dosage forms.





SCHOOL OF PHARMACY	ARKA JAIN University Jharkhand	NAAC GRADE A	1ST INTERNAL EXAMINATION
Program Name	**BACHELOR OF PHARMACY**	Program Code	**B. PHARM**
Course Name	**Pharmaceutics -I (Practical)**	Semester	**1st Semester (Group-D)**
Course Code	**PHM21003**	Year	**October 2025**
Time: 4 Hours	**All the Questions are Compulsory**	Maximum Marks	**40**
Knowledge Level (KL)	**K1 :** Remembering	**K3 :** Applying	**K5 :** Evaluating
	K2 : Understanding	**K4 :** Analysing	**K6 :** Creating

Section A

[1 x 10 = 10 Marks]

Q. No.	Questions	Marks	COs	KL	PO
I	**Synopsis** Write down the introduction and properties of dosage form and classify liquid dosage form. खुराक के रूप का परिचय और गुण लिखें तथा तरल खुराक के रूप को वर्गीकृत करें।	10	CO2	K1	PO1

Section B

[15 + 10=25 Marks]

Q. No.	Questions	Marks	COs	KL	PO
II	a. Major To prepare and dispense 10 ml compound syrup B.P.C 68. 10 मिलीलीटर मिश्रित सिरप बी.पी.सी 68 तैयार करना और वितरित करना।	15	CO2, CO4	K3, K5, K6	PO1, PO10
	b. Minor To prepare and dispense 10 ml of Iodine throat paint. 10 मिलीलीटर आयोडीन गले का रंग तैयार करना और वितरित करना।	10	CO2, CO4	K3, K5, K6	PO1, PO10

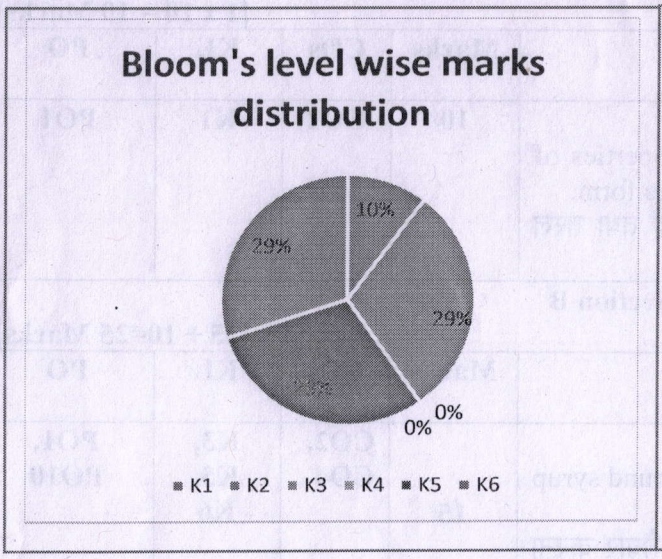
Section C

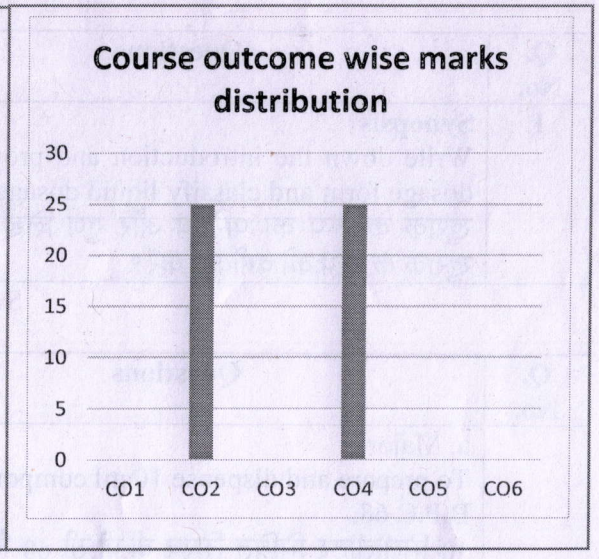
[05 Marks]

Q. No.	Questions	Marks	COs	KL	PO
III	Viva voce	05			

CO- Course Outcomes, KL- Knowledge Level, PO – Program Outcome

Course Outcomes	CO1	Remember the history of profession of pharmacy.
	CO2	Understand the basics of different dosage forms, pharmaceutical incompatibilities and pharmaceutical calculations.
	CO3	Apply the professional way of handling the prescription.
	CO4	Apply the knowledge of various conventional dosage forms.
	CO5	Understand various pharmaceutical incompatibilities and formulation techniques of suppositories.
	CO6	Apply basic methodology to prepare various conventional semisolid dosage forms.





SCHOOL OF PHARMACY	ARKA JAIN University Jharkhand NAAC GRADE A		1ST INTERNAL EXAMINATION
Program Name	**BACHELOR OF PHARMACY**	Program Code	**B.PHARM**
Course Name	**Human Anatomy and Physiology-1 (Practical)**	Semester	**1st Semester(Group-A)**
Course Code	**PHM21007**	Year	**October 2025**
Time: 4 Hours	**All the Questions are Compulsory**	Maximum Marks	**40**
Knowledge Level (KL)	**K1 :** Remembering	**K3 :** Applying	**K5 :** Evaluating
	K2 : Understanding	**K4 :** Analysing	**K6 :** Creating

Section A

[1 x 10 = 10 Marks]

Q. No.	Questions	Marks	COs	KL	PO
I	Explain in details the structure and function of epithelial tissue. उपकलाऊतककीसंरचनाऔरकार्यकोविस्तारसेसमझाइए।	10	CO1,CO2,CO5	K1, K2,	PO 1

Section B

[15 + 10=25 Marks]

Q. No.	Questions	Marks	COs	KL	PO
II	a.To Study the skeletal system from the given model. दिएगएमॉडलसेकंकालप्रणालीकाअध्ययनकरना।	15	CO3	K1, K2,K3	PO 1
	b.To identify the given tissue from the microscope and write its name and two function. सूक्ष्मदर्शीसेदिएगएऊतककीपहचानकरनातथाउसकानामएवंदोकार्यलिखना।	10	CO1,CO2	K1,K3, K4	PO 1

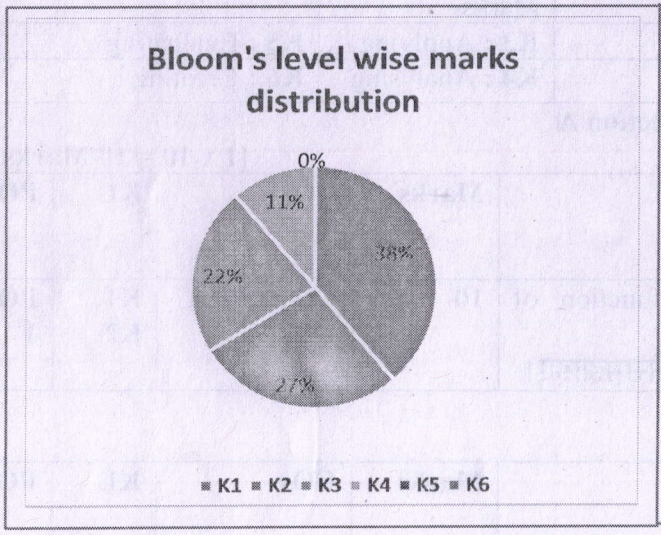
Section C

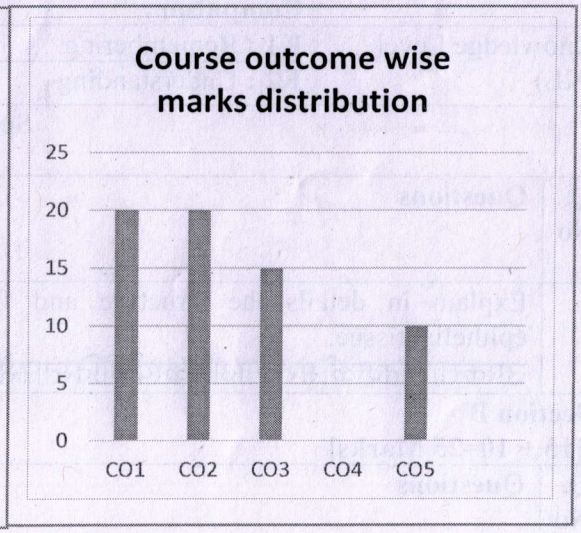
[05 Marks]

Q. No.	Questions	Marks	COs	KL	PO
III	Viva voce	05			

CO- Course Outcomes, KL- Knowledge Level, PO – Program Outcome

Course Outcomes	CO1	Understand human body histology & microscopic process
	CO2	Understanding both physiological/anatomical homeostatic mechanisms.
	CO3	Remember about human skeleton
	CO4	Apply knowledge about vital sign measurements
	CO5	Apply a vocabulary of appropriate terminology to effectively communicate information related to human anatomy and physiology.





SCHOOL OF PHARMACY	ARKA JAIN University		1ST INTERNAL EXAMINATION
Program Name	**BACHELOR OF PHARMACY**	Program Code	**B. PHARM**
Course Name	**Human Anatomy and Physiology-1 (Practical)**	Semester	**1st Semester (Group-B)**
Course Code	**PHM21007**	Year	**October 2025**
Time: 4 Hours	**All the Questions are Compulsory**	Maximum Marks	**40**
Knowledge Level (KL)	**K1 :** Remembering	**K3 :** Applying	**K5 :** Evaluating
	K2 : Understanding	**K4 :** Analysing	**K6 :** Creating

Section A
[1 x 10 = 10 Marks]

Q. No.	Questions	Marks	COs	KL	PO
I	Give a short note on translation and transcription. अनुवाद और लिप्यंतरण पर संक्षिप्त टिप्पणी दीजिए।	10	CO1,CO2	K1, K2	PO1

Section B
[15 + 10=25 Marks]

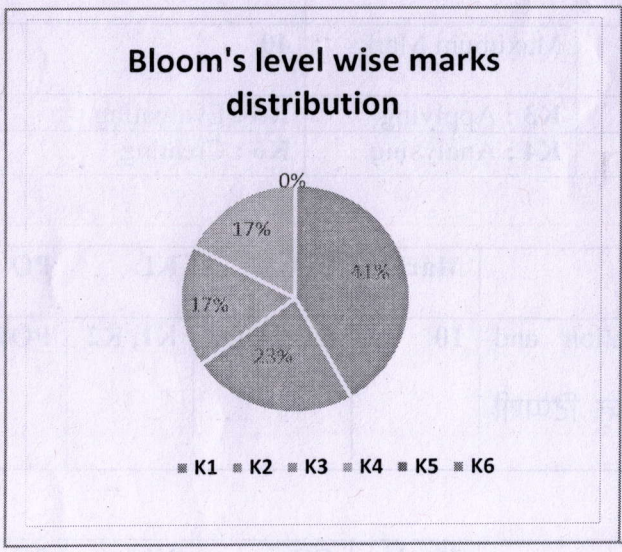
Q. No.	Questions	Marks	COs	KL	PO
II	a. To study the structure and working of a compound microscope. संयुक्त सूक्ष्मदर्शी की संरचना और कार्यप्रणाली का अध्ययन करना।	15	CO1	K1, K3, K4	PO1
	b. Describe the differences between the axial and appendicular skeleton. अक्षीय और उपांगीय कंकाल के बीच अंतर का वर्णन करें।	10	CO2,CO5	K1,K2	PO1

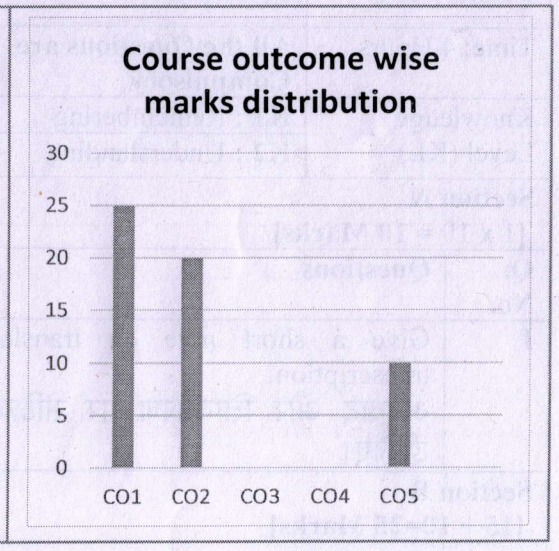
Section C
[05 Marks]

Q. No.	Questions	Marks	COs	KL	PO
III	Viva voce	05			

CO- Course Outcomes, KL- Knowledge Level, PO – Program Outcome

Course Outcomes	CO1	Understand human body histology & microscopic process
	CO2	Understanding both physiological/anatomical homeostatic mechanisms.
	CO3	Remember about human skeleton
	CO4	Apply knowledge about vital sign measurements
	CO5	Apply a vocabulary of appropriate terminology to effectively communicate information related to human anatomy and physiology.





SCHOOL OF PHARMACY	ARKA JAIN University Jharkhand NAAC GRADE A		1ST INTERNAL EXAMINATION
Program Name	**BACHELOR OF PHARMACY**	Program Code	**B. PHARM**
Course Name	**Human Anatomy and Physiology-1 (Practical)**	Semester	**1st Semester (Group-C)**
Course Code	**PHM21007**	Year	**October 2025**
Time: 4 Hours	**All the Questions are Compulsory**	Maximum Marks	**40**
Knowledge Level (KL)	**K1 :** Remembering	**K3 :** Applying	**K5 :** Evaluating
	K2 : Understanding	**K4 :** Analysing	**K6 :** Creating

Section A

[1 x 10 = 10 Marks]

Q. No.	Questions	Marks	COs	KL	PO
I	Enlist the functions of the Skeletal system. कंकाल तंत्र के कार्यों को सूचीबद्ध करें।	10	CO3, CO5	K1, K2	PO1

Section B
[15 + 10=25 Marks]

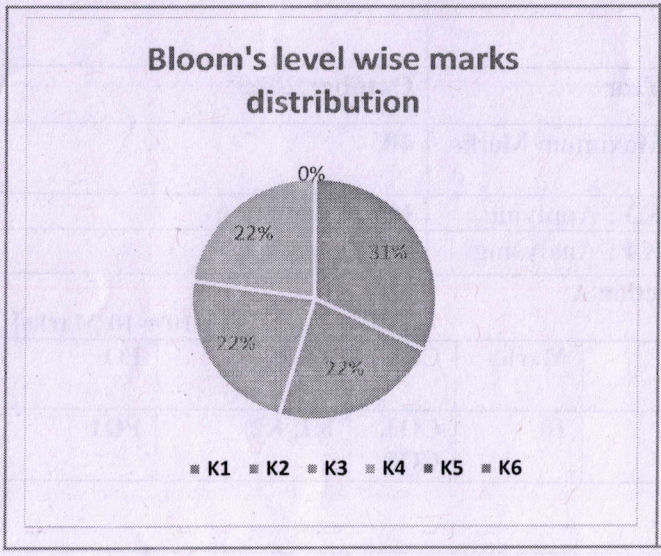
Q. No.	Questions	Marks	COs	KL	PO
II	a. To study the type of epithelial tissue from the given slide in a microscope. सूक्ष्मदर्शी में दी गई स्लाइड से उपकला ऊतक के प्रकार का अध्ययन करना।	15	CO1, CO2	K1,K2,K3,K4	PO1
	b. To identify the difference between compact and spongy bone from the skeletal mode. कंकाल मोड से कॉम्पैक्ट और स्पंजी हड्डी के बीच अंतर की पहचान करना।	10	CO3	K1,K3,K4	PO1

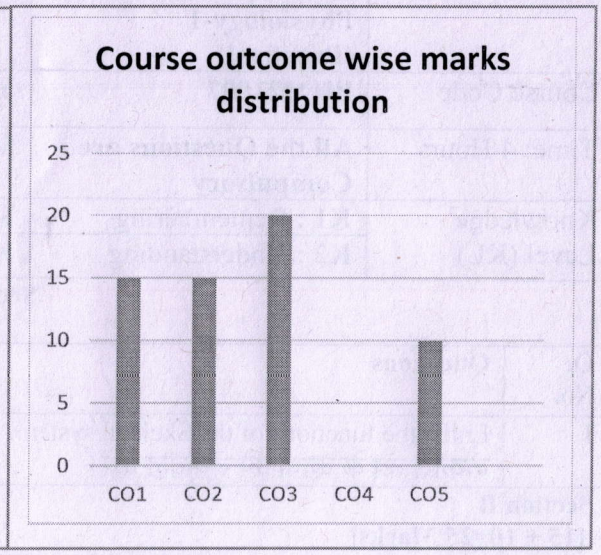
Section C
[05 Marks]

Q. No.	Questions	Marks	COs	KL	PO
III	Viva voce	05			

CO- Course Outcomes, KL- Knowledge Level, PO – Program Outcome

Course Outcomes	CO1	Understand human body histology & microscopic process
	CO2	Understanding both physiological/anatomical homeostatic mechanisms.
	CO3	Remember about human skeleton
	CO4	Apply knowledge about vital sign measurements
	CO5	Apply a vocabulary of appropriate terminology to effectively communicate information related to human anatomy and physiology.





SCHOOL OF PHARMACY	ARKA JAIN University Jharkhand | NAAC GRADE A		1ST INTERNAL EXAMINATION
Program Name	**BACHELOR OF PHARMACY**	Program Code	**B. PHARM**
Course Name	**Human Anatomy and Physiology-1 (Practical)**	Semester	**1st Semester (Group-D)**
Course Code	**PHM21007**	Year	**October 2025**
Time: 4 Hours	**All the Questions are Compulsory**	Maximum Marks	**40**
Knowledge Level (KL)	**K1 :** Remembering	**K3 :** Applying	**K5 :** Evaluating
	K2 : Understanding	**K4 :** Analysing	**K6 :** Creating

Section A

[1 x 10 = 10 Marks]

Q. No.	Questions	Marks	COs	KL	PO
I	Write a short note on muscular tissue. पेशीय ऊतक पर एक संक्षिप्त टिप्पणी लिखिए।	10	CO1, CO2	K1, K2	PO1

Section B
[15 + 10=25 Marks]

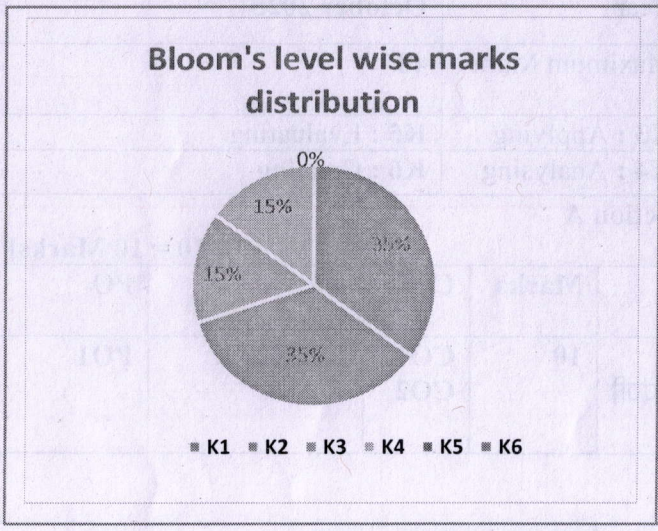
Q. No.	Questions	Marks	COs	KL	PO
II	a. To study the unknown type of tissue from the microscope. सूक्ष्मदर्शी से अज्ञात प्रकार के ऊतक का अध्ययन करना।	15	CO1, CO2	K1,K2,K3,K4,	PO1
	b. What are the key features of long, short, flat, and irregular bones? लंबी, छोटी, चपटी और अनियमित हड्डियों की मुख्य विशेषताएं क्या हैं?	10	CO3	K1,K2	PO1

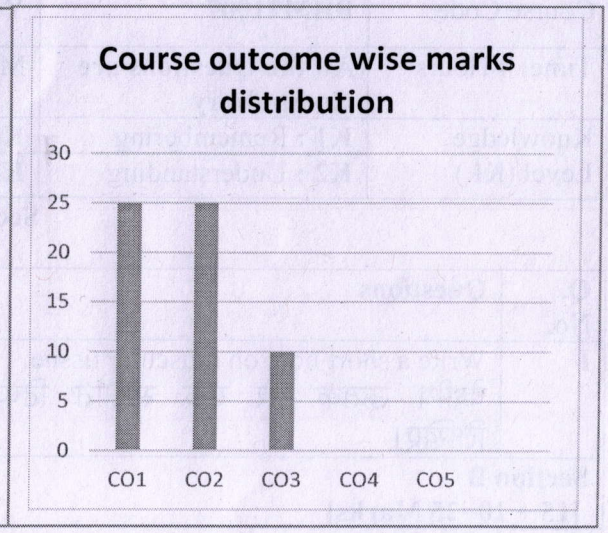
Section C
[05 Marks]

Q. No.	Questions	Marks	COs	KL	PO
III	Viva voce	05			

CO- Course Outcomes, KL- Knowledge Level, PO – Program Outcome

Course Outcomes	CO1	Understand human body histology & microscopic process
	CO2	Understanding both physiological/anatomical homeostatic mechanisms.
	CO3	Remember about human skeleton
	CO4	Apply knowledge about vital sign measurements
	CO5	Apply a vocabulary of appropriate terminology to effectively communicate information related to human anatomy and physiology.





SCHOOL OF PHARMACY	ARKA JAIN University Jharkhand NAAC GRADE A		1ST INTERNAL EXAMINATION
Program Name	**BACHELOR OF PHARMACY**	Program Code	**B.PHARM**
Course Name	**Pharmaceutical Inorganic Chemistry(Pratical)**	Semester	**1ST Semester (Group-A)**
Course Code	**PHM21010**	Year	**October 2025**
Time: 4 Hours	**All the Questions are COMPULSORY**	Maximum Marks	**40**
Knowledge Level (KL)	**K1 :** Remembering	**K3 :** Applying	**K5 :** Evaluating
	K2 : Understanding	**K4 :** Analysing	**K6 :** Creating

Section A

[1 x 10 = 10 Marks]

Q. No.	Questions	Marks	COs	KL	PO
I	**Synopsis** सारांश Write a synopsis on all concepts of acid and base? अम्ल और क्षार की सभी अवधारणाओं पर एक सारांश लिखें?	10	CO1,CO2	K1,K2	PO1

Section B

[15 + 10=25 Marks]

Q. No.	Questions	Marks	COs	KL	PO
II	a.Major प्रमुख प्रयोग Write an experiment on limit test for heavy metals. भारी धातुओं के लिए सीमा परीक्षण पर एक प्रयोग लिखें।	15	CO1	K2,K3,K4	PO1
	b.Minor **लघु प्रयोग** Write an experiment on limit test for chloride. क्लोराइड के सीमा परीक्षण पर एक प्रयोग लिखें।	10	CO1	K2,K3,K4	PO1

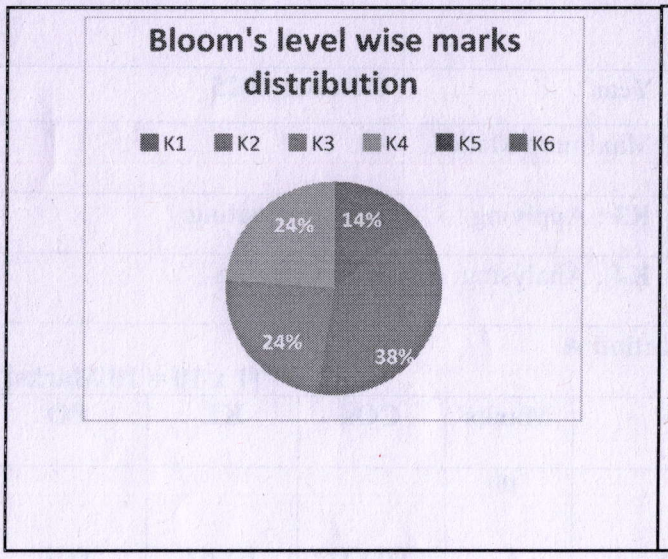
Section C

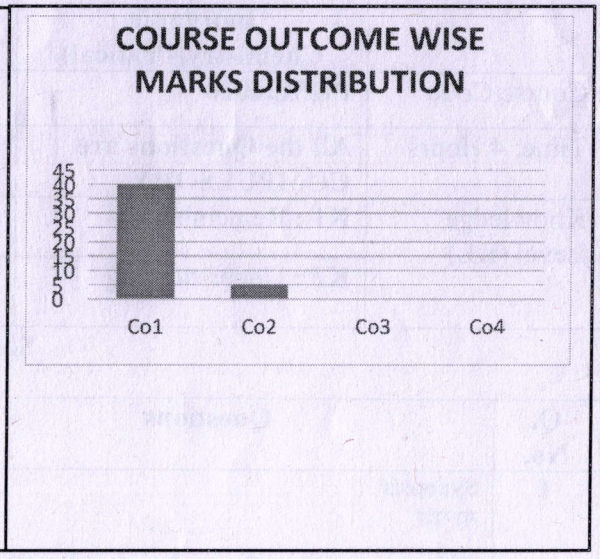
[05 Marks]

Q. No.	Questions	Marks	COs	KL	PO
III	Viva voce मौखिक परीक्षा	05			

CO- Course Outcomes, KL- Knowledge Level, PO – Program Outcome

Course Outcomes	CO1	Design and excute detection of likely impurities in sample compounds.
	CO2	Know about different function and role of major extracellular and intracellular electrolytes and buffer solutions
	CO3	Prepare different types gastrointenstinal agents and its category
	CO4	Carry out the preparation and study of important inorganic pharmceuticals





SCHOOL OF PHARMACY	ARKA JAIN University Jharkhand NAAC GRADE A		1ST INTERNAL EXAMINATION
Program Name	**BACHELOR OF PHARMACY**	Program Code	**B.PHARM**
Course Name	**Pharmaceutical Inorganic Chemistry(Pratical)**	Semester	**1ST Semester (Group-B)**
Course Code	**PHM21010**	Year	**October 2025**
Time: 4 Hours	**All the Questions are COMPULSORY**	Maximum Marks	**40**
Knowledge Level (KL)	**K1 :** Remembering	**K3 :** Applying	**K5 :** Evaluating
	K2 : Understanding	**K4 :** Analysing	**K6 :** Creating

Section A

[1 x 10 = 10 Marks]

Q. No.	Questions	Marks	COs	KL	PO
I	**Synopsis** सारांश Write a synopsis on Source of impurities. अशुद्धियों के स्रोत पर एक सारांश लिखें।	10	CO1,CO2	K1,K2	PO1

Section B

[15 + 10=25 Marks]

Q. No.	Questions	Marks	COs	KL	PO
II	a.Major प्रमुख प्रयोग Write an experiment on Limit Test for Sulphate. सल्फेट के लिए सीमा परीक्षण पर एक प्रयोग लिखें।	15	CO1	K2,K3,K4	PO1
	b.Minor **लघु प्रयोग** Write an experiment on limit test for iron. लोहे के सीमा परीक्षण पर एक प्रयोग लिखिए।	10	CO1	K2,K3,K4	PO1

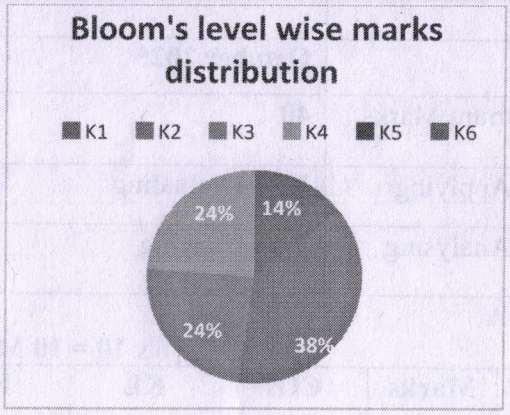
Section C

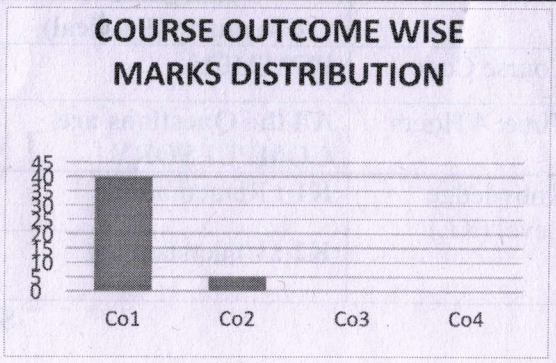
[05 Marks]

Q. No.	Questions	Marks	COs	KL	PO
III	Viva voce मौखिक परीक्षा	05			

CO- Course Outcomes, KL- Knowledge Level, PO – Program Outcome

Course Outcomes	CO1	Design and excute detection of likely impurities in sample compounds.
	CO2	Know about different function and role of major extracellular and intracellular electrolytes and buffer solutions
	CO3	Prepare different types gastrointenstinal agents and its category
	CO4	Carry out the preparation and study of important inorganic pharmceuticals





SCHOOL OF PHARMACY	ARKA JAIN University Jharkhand NAAC GRADE A		1ST INTERNAL EXAMINATION
Program Name	**BACHELOR OF PHARMACY**	Program Code	**B.PHARM**
Course Name	**Pharmaceutical Inorganic Chemistry(Pratical)**	Semester	**1ST Semester (Group-C)**
Course Code	**PHM21010**	Year	**October 2025**
Time: 4 Hours	**All the Questions are COMPULSORY**	Maximum Marks	**40**
Knowledge Level (KL)	**K1 :** Remembering	**K3 :** Applying	**K5 :** Evaluating
	K2 : Understanding	**K4 :** Analysing	**K6 :** Creating

Section A

[1 x 10 = 10 Marks]

Q. No.	Questions	Marks	COs	KL	PO
I	**Synopsis** सारांश Write a synopsis on Source of impurity. **अशुद्धता के स्रोत पर एक संक्षिप्त वर्णन लिखें।**	10	CO1,CO2	K1,K2	PO1

Section B

[15 + 10=25 Marks]

Q. No.	Questions	Marks	COs	KL	PO
II	a.Major प्रमुख प्रयोग Write an experiment on limit test for arsenic. आर्सेनिक के सीमा परीक्षण पर एक प्रयोग लिखें।	15	CO1	K2,K3,K4	PO1
	b.Minor **लघु प्रयोग** Write on experiment on limit test for sulphate. सल्फेट के लिए सीमा परीक्षण पर प्रयोग लिखें	10	CO1	K2,K3,K4	PO1

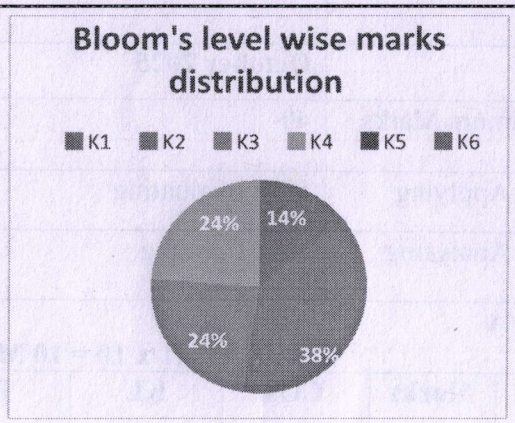
Section C

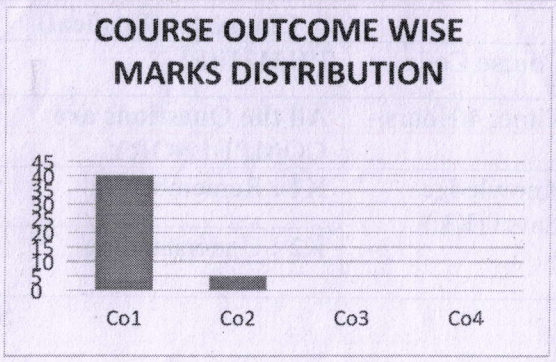
[05 Marks]

Q. No.	Questions	Marks	COs	KL	PO
III	Viva voce मौखिक परीक्षा	05			

CO- Course Outcomes, KL- Knowledge Level, PO – Program Outcome

Course Outcomes	CO1	Design and excute detection of likely impurities in sample compounds.
	CO2	Know about different function and role of major extracellular and intracellular electrolytes and buffer solutions
	CO3	Prepare different types gastrointenstinal agents and its category
	CO4	Carry out the preparation and study of important inorganic pharmceuticals





SCHOOL OF PHARMACY	ARKA JAIN University Jharkhand NAAC GRADE A		1ST INTERNAL EXAMINATION
Program Name	**BACHELOR OF PHARMACY**	Program Code	**B.PHARM**
Course Name	**Pharmaceutical Inorganic Chemistry(Pratical)**	Semester	**1ST Semester (Group-D)**
Course Code	**PHM21010**	Year	**October**
Time: 4 Hours	**All the Questions are COMPULSORY**	Maximum Marks	**40**
Knowledge Level (KL)	**K1 :** Remembering	**K3 :** Applying	**K5 :** Evaluating
	K2 : Understanding	**K4 :** Analysing	**K6 :** Creating

Section A

[1 x 10 = 10 Marks]

Q. No.	Questions	Marks	COs	KL	PO
I	**Synopsis** सारांश Write an experiment on modified limit test for chloride. क्लोराइड के लिए संशोधित सीमा परीक्षण पर एक प्रयोग लिखें।	10	CO1	K1,K2	PO1

Section B

[15 + 10=25 Marks]

Q. No.	Questions	Marks	COs	KL	PO
II	a.Major प्रमुख प्रयोग Write an experiment on limit test for arsenic. आर्सेनिक के सीमा परीक्षण पर एक प्रयोग लिखें।	15	CO1	K2,K3,K4	PO1
	b.Minor **लघु प्रयोग** Write an experiment on limit test for chloride. क्लोराइड के लिए सीमा परीक्षण पर एक प्रयोग लिखें।	10	CO1	K2,K3,K4	PO1

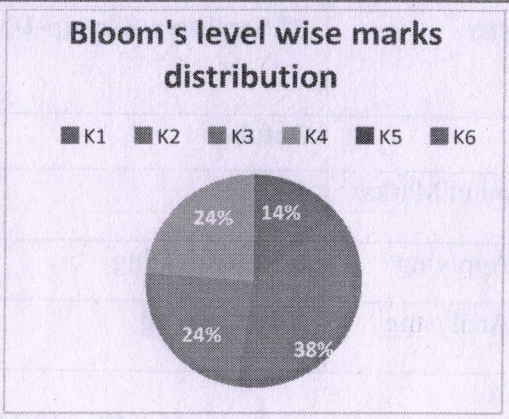
Section C

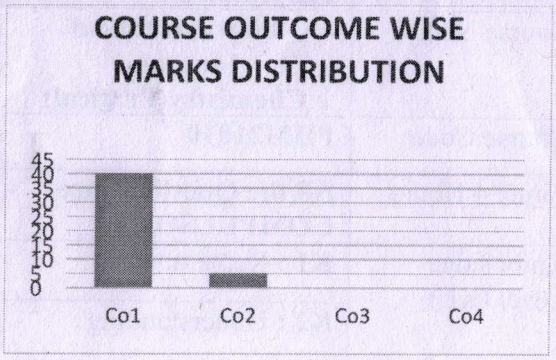
[05 Marks]

Q. No.	Questions	Marks	COs	KL	PO
III	Viva voce मौखिक परीक्षा	05	CO1,CO2	K1,K2	PO1

CO- Course Outcomes, KL- Knowledge Level, PO – Program Outcome

Course Outcomes	CO1	Design and excute detection of likely impurities in sample compounds.
	CO2	Know about different function and role of major extracellular and intracellular electrolytes and buffer solutions
	CO3	Prepare different types gastrointenstinal agents and its category
	CO4	Carry out the preparation and study of important inorganic pharmceuticals





SCHOOL OF PHARMACY	ARKA JAIN University Jharkhand NAAC GRADE A		1ST INTERNAL EXAMINATION
Program Name	**BACHELOR OF PHARMACY**	Program Code	**B. PHARM**
Course Name	**Pharmaceutical analysis-I (Practical)**	Semester	**1st Semester (Group-A)**
Course Code	**PHM21008**	Year	**October 2025**
Time: 4 Hours	**All the Questions are Compulsory**	Maximum Marks	**40**
Knowledge Level (KL)	**K1 :** Remembering	**K3 :** Applying	**K5 :** Evaluating
	K2 : Understanding	**K4 :** Analysing	**K6 :** Creating

Section A

[1 x 10 = 10 Marks]

Q. No.	Questions	Marks	COs	KL	PO
I	**Synopsis** What are the different methods of Expressing concentration in analysis? विश्लेषण में सांद्रता को व्यक्त करने के विभिन्न तरीके क्या हैं	10	CO2	K1, K2	PO1

Section B

[15 + 10=25 Marks]

Q. No.	Questions	Marks	COs	KL	PO
II	A Major Prepare and Standardize 0.1N NaOH 0.1N NaOH का निर्माण और मानकीकरण कैसे करें	15	CO1,CO2,CO3	K3,K4,K5	PO1
	B Minor Perform the limit test for Chloride क्लोराइड का सीमा परीक्षण कैसे करें	10	CO1, CO2	K3,K4, K5,K6	PO2

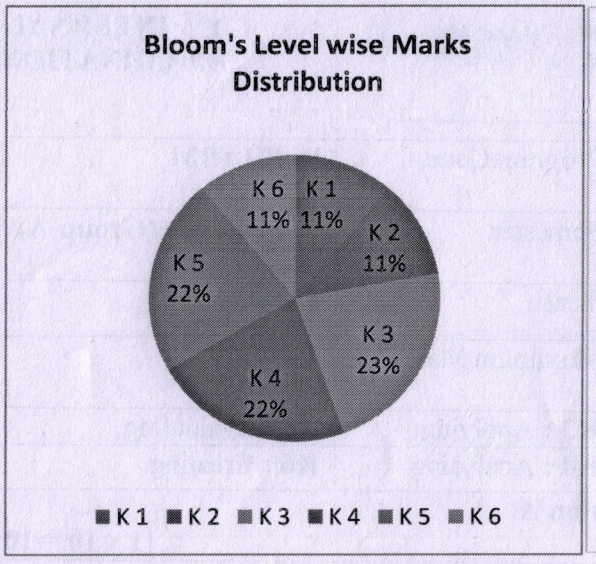
Section C

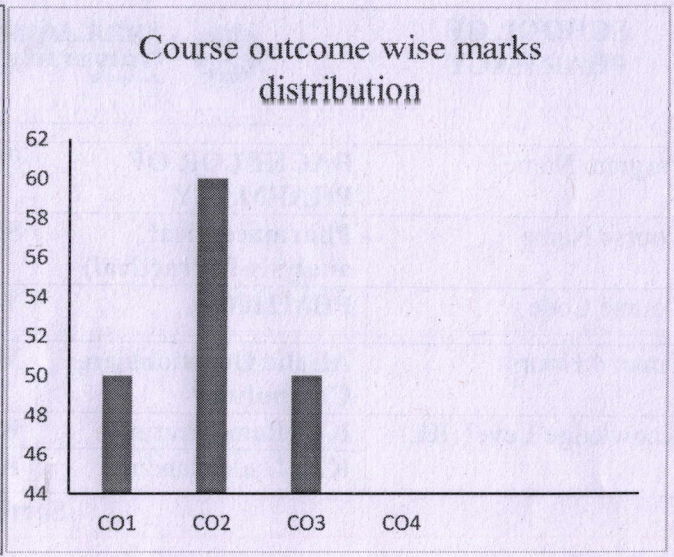
[05 Marks]

Q. No.	Questions	Marks	COs	KL	PO
III	Viva voce मौखिक परीक्षा	05			

CO- Course Outcomes, KL- Knowledge Level, PO – Program Outcome

Course Outcomes	CO1	Understand the basic apparatus and instruments and their calibration
	CO2	Apply the fundamental methodology to prepare different strength of standard solutions.
	CO3	Evaluate different types of titrations (neutralization, non-aqueous, precipitation, complexometric and redox titrations)
	CO4	Evaluate to standardize different standard solutions
	CO5	Evaluate assay of different drugs by titrimetric method


Bloom's Level wise Marks Distribution
K 6 11%
K 1 11%
K 2 11%
K 5 22%
K 3 23%
K 4 22%
K1 K2 K3 K4 K5 K6


Course outcome wise marks distribution
62
60
58
56
54
52
50
48
46
44
CO1
CO2
CO3
CO4

SCHOOL OF PHARMACY	ARKA JAIN University Jharkhand		1ST INTERNAL EXAMINATION
Program Name	**BACHELOR OF PHARMACY**	Program Code	**B. PHARM**
Course Name	**Pharmaceutical analysis-I (Practical)**	Semester	**1st Semester (Group-B)**
Course Code	**PHM21008**	Year	**October 2025**
Time: 4 Hours	**All the Questions are Compulsory**	Maximum Marks	**40**
Knowledge Level (KL)	**K1 :** Remembering	**K3 :** Applying	**K5 :** Evaluating
	K2 : Understanding	**K4 :** Analysing	**K6 :** Creating

Section A

[1 x 10 = 10 Marks]

Q. No.	Questions	Marks	COs	KL	PO
I	**Synopsis** What are the different Sources of Error त्रुटि'यों के टि)टि न स्रोत कौन-कौन से हैं	10	CO2	K1, K2	PO1

Section B

[15 + 10=25 Marks]

Q. No.	Questions	Marks	COs	KL	PO
II	A Major Prepare and standardize 0.1N H_2SO_4 0.1 N सल्फ्यूटिरक अम्ल का टिनर्मा<ण और मानिकीकरण टिकटिए	15	CO1,CO2,CO3	K3,K4, K5	PO1
	B Minor Perform the limit test for Sulphate सल्फेट के लिए सीमा परीक्षण करें	10	CO1, CO2	K3,K4, K5,K6	PO2

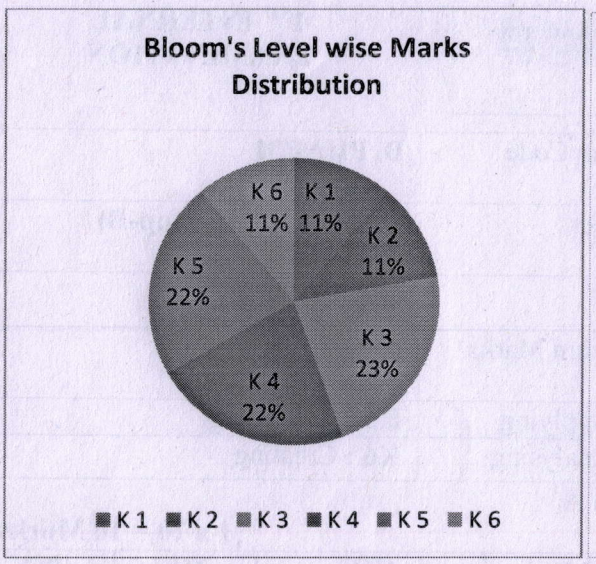
Section C

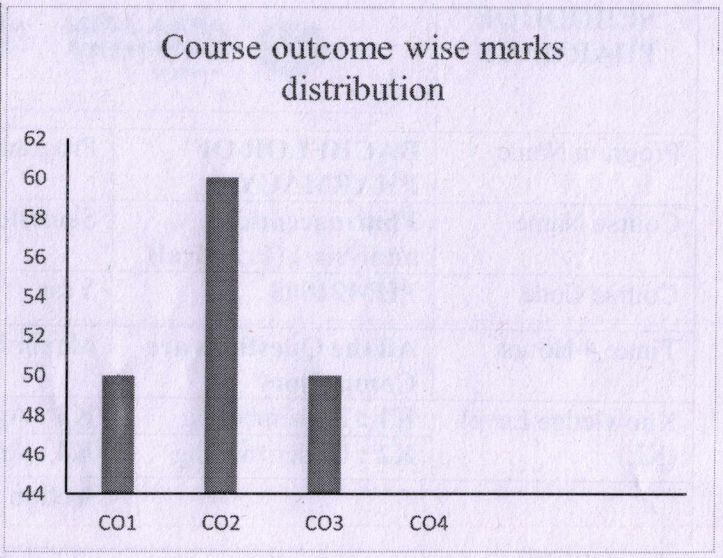
[05 Marks]

Q. No.	Questions	Marks	COs	KL	PO
III	Viva voce मौंटि'क परीक्षा	05			

CO- Course Outcomes, KL- Knowledge Level, PO – Program Outcome

Course Outcomes	CO1	Understand the basic apparatus and instruments and their calibration
	CO2	Apply the fundamental methodology to prepare different strength of standard solutions.
	CO3	Evaluate different types of titrations (neutralization, non-aqueous, precipitation, complexometric and redox titrations)
	CO4	Evaluate to standardize different standard solutions
	CO5	Evaluate assay of different drugs by titrimetric method


Bloom's Level wise Marks Distribution
K 6 11%
K 1 11%
K 2 11%
K 3 23%
K 4 22%
K 5 22%
K1 K2 K3 K4 K5 K6


Course outcome wise marks distribution
62
60
58
56
54
52
50
48
46
44
CO1
CO2
CO3
CO4

SCHOOL OF PHARMACY	ARKA JAIN University Jharkhand NAAC GRADE A		1ST INTERNAL EXAMINATION
Program Name	**BACHELOR OF PHARMACY**	Program Code	**B. PHARM**
Course Name	**Pharmaceutical analysis-I (Practical)**	Semester	**1st Semester (Group-C)**
Course Code	**PHM21008**	Year	**October 2025**
Time: 4 Hours	**All the Questions are Compulsory**	Maximum Marks	**40**
Knowledge Level (KL)	**K1 :** Remembering	**K3 :** Applying	**K5 :** Evaluating
	K2 : Understanding	**K4 :** Analysing	**K6 :** Creating

Section A

[1 x 10 = 10 Marks]

Q. No.	Questions	Marks	COs	KL	PO
I	**Synopsis** Write the synopsis on different types of Error in Pharmaceutical analysis फार्मास्यूटिकल विश्लेषण में विभिन्न प्रकार की त्रुटियों पर सारांश लिखें	10	CO1	K1,K2	PO1

Section B

[15 + 10=25 Marks]

Q. No.	Questions	Marks	COs	KL	PO
II	A Major Prepare and Standardize 0.1N NaOH 0.1N NaOH का निर्माण और मानकीकरण कैसे करें	15	CO1, CO2, CO3	K3,K4,K5	PO1
	B Minor Perform the limit test for Iron आयरन का सीमा परीक्षण कैसे करे	10	CO1, CO2	K3, K4, K5, K6	PO1

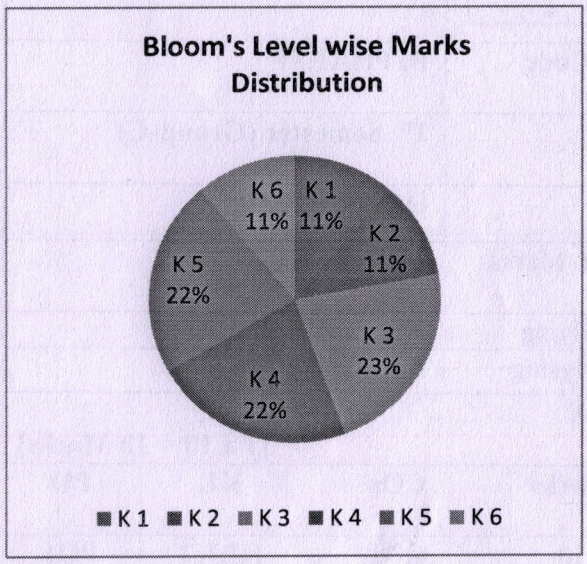
Section C

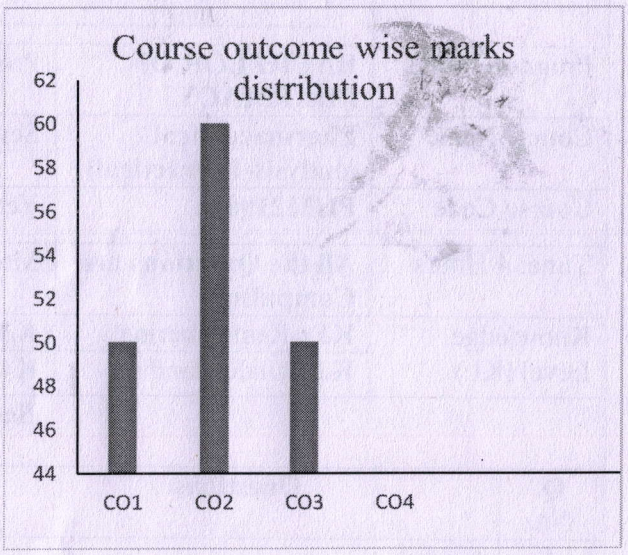
[05 Marks]

Q. No.	Questions	Marks	COs	KL	PO
III	Viva voce मौखिक परीक्षा	05			

CO- Course Outcomes, KL- Knowledge Level, PO – Program Outcome

Course Outcomes	CO1	Understand the basic apparatus and instruments and their calibration
	CO2	Apply the fundamental methodology to prepare different strength of standard solutions.
	CO3	Evaluate different types of titrations (neutralization, non-aqueous, precipitation, complexometric and redox titrations)
	CO4	Evaluate to standardize different standard solutions
	CO5	Evaluate assay of different drugs by titrimetric method


Bloom's Level wise Marks Distribution
K 6 11%
K 1 11%
K 2 11%
K 5 22%
K 3 23%
K 4 22%
K1 K2 K3 K4 K5 K6


Course outcome wise marks distribution
62
60
58
56
54
52
50
48
46
44
CO1
CO2
CO3
CO4

SCHOOL OF PHARMACY	ARKA JAIN University Jharkhand NAAC GRADE A		1ST INTERNAL EXAMINATION
Program Name	**BACHELOR OF PHARMACY**	Program Code	**B. PHARM**
Course Name	**Pharmaceutical analysis-I (Practical)**	Semester	**1st Semester (Group-D)**
Course Code	**PHM21008**	Year	**October 2025**
Time: 4 Hours	**All the Questions are Compulsory**	Maximum Marks	**40**
Knowledge Level (KL)	**K1 :** Remembering	**K3 :** Applying	**K5 :** Evaluating
	K2 : Understanding	**K4 :** Analysing	**K6 :** Creating

Section A

[1 x 10 = 10 Marks]

Q. No.	Questions	Marks	COs	KL	PO
I	**Synopsis** Write the synopsis on different types of Standard solutions with examples विश्लेषण में एकाग्रता व्यक्त करने के विभिन्न तरीके क्या हैं	10	CO1	K1,K2	PO1

Section B

[15 + 10=25 Marks]

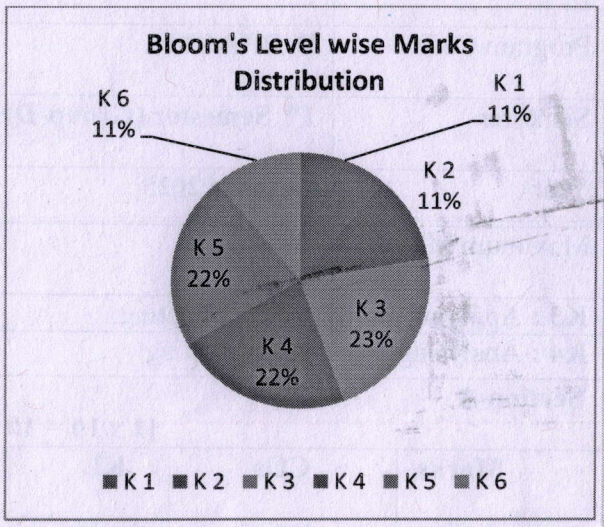
Q. No.	Questions	Marks	COs	KL	PO
II	A Major Prepare and Standardize 0.1N H_2SO_4 0.1N H2SO4 की तैयारी और मानकीकरण करें	15	CO1,CO2,CO3	K3,K4,K5	PO1
	B Minor Perform the limit test for Arsenic आर्सेनिक के लिए सीमा परीक्षण करें	10	CO1,CO2	K3,K4, K5,K6	PO1

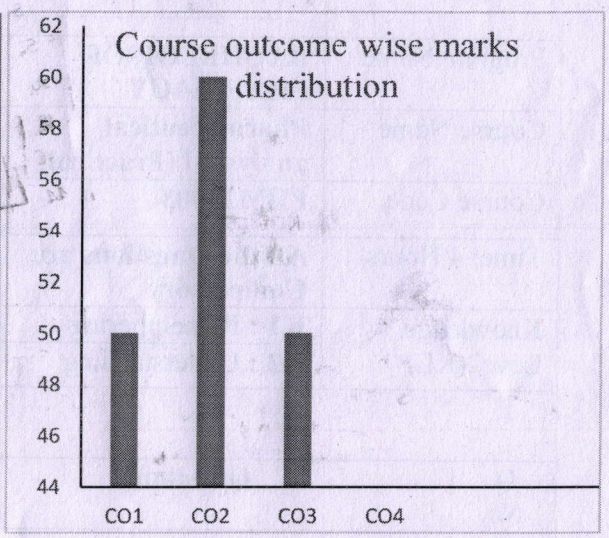
Section C

[05 Marks]

Q. No.	Questions	Marks	COs	KL	PO
III	Viva voce मौखिक परीक्षा	05			

Course Outcomes	CO1	Understand the basic apparatus and instruments and their calibration
	CO2	Apply the fundamental methodology to prepare different strength of standard solutions.
	CO3	Evaluate different types of titrations (neutralization, non-aqueous, precipitation, complexometric and redox titrations)
	CO4	Evaluate to standardize different standard solutions
	CO5	Evaluate assay of different drugs by titrimetric method


Bloom's Level wise Marks Distribution
K 1 11%
K 2 11%
K 3 23%
K 4 22%
K 5 22%
K 6 11%
K1 K2 K3 K4 K5 K6


Course outcome wise marks distribution
62
60
58
56
54
52
50
48
46
44
CO1
CO2
CO3
CO4

School of Pharmacy	ARKA JAIN University Jharkhand		1ST INTERNAL EXAMINATION
Program Name	**BACHELOR OF PHARMACY**	Program Code	**B.PHARM**
Course Name	**REMEDIAL BIOLOGY**	Semester	**I**
Course Code	**PHM21012**	Year	**October/2025**
Time:	**ALL THE QUESTIONS ARE COMPULSORY**	Maximum Marks	**20**

Knowledge Level (KL)			
	K1 : Remembering	**K3 :** Applying	**K5 :** Evaluating
	K2 : Understanding	**K4 :** Analysing	**K6 :** Creating

Section A

SYNOPSIS **[1 x 10 = 10 Marks]**

Q. No.	Questions	Marks	COs	KL	PO
1	Write a synopsis on the compound microscope, describing its different parts and their functions with the help of a neat, labelled diagram. यौगिक सूक्ष्मदर्शी पर एक संक्षिप्त विवरण लिखिए, जिसमें इसके विभिन्न भागों और उनके कार्यों का वर्णन हो, तथा एक साफ-सुथरा, लेबलयुक्त चित्र भी बनाइए।	10	CO1	K1,K2	PO1, PO3

Section B

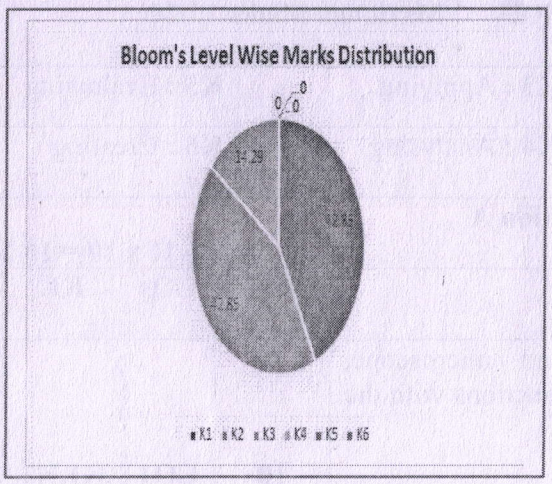
EXPERIMENT **[1 x 5 = 05 Marks]**

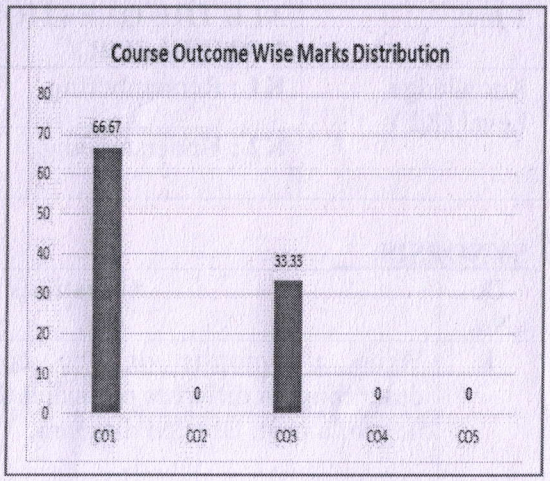
Q. No.	Questions	Marks	COs	KL	PO
2	Perform an experiment on "Determination of Blood group". "रक्त समूह निर्धारण" पर एक प्रयोग करें।	05	CO3	K1,K2, K3	PO1, PO10

3. VIVA VOCE **[5 Marks]**

CO Course Outcomes, KL Knowledge Level, PO Program Outcome

Course Outcomes	CO1	Understand about the handling of microscopes and preparation of slides
	CO2	Know about the parts of plants and their microscopic characteristics
	CO3	Estimate different haematological parameters
	CO4	Know about the skeletal systems and bones
	CO5	Know Anatomy and Physiology of plants and animals





	ARKA JAIN University Jharkhand — NAAC GRADE A ACCREDITED UNIVERSITY		1ST INTERNAL EXAMINATION
Program Name	**BACHELOR OF PHARMACY**	Program Code	**B.PHARM**
Course Name	**COMMUNICATION SKILLS**	Semester	**I**
Course Code	**PHM21005**	Year	**2025/ODD**
Time: 4 Hours	**ALL THE QUESTIONS ARE COMPULSORY**	Maximum Marks	20

Knowledge Level (KL)	**K1 :** Remembering	**K3 :** Applying	**K5 :** Evaluating
	K2 : Understanding	**K4 :** Analysing	**K6 :** Creating

Section A

SYNOPSIS **[1 x 10 = 10 Marks]**

Q. No.	Questions	Marks	COs	KL	PO
1(i)	**Rewrite the passage in around 30 words.** According to a recent study, people who eat a diet rich in fruits and vegetables have a lower risk of developing chronic diseases such as diabetes and heart disease. The study found that individuals who consumed at least five servings of fruits and vegetables per day had a 20% lower risk of developing these diseases than those who consumed fewer servings. This suggests that a diet high in fruits and vegetables may be an effective way to prevent chronic diseases. (80 words)	10	CO2	K3	PO2

Section B

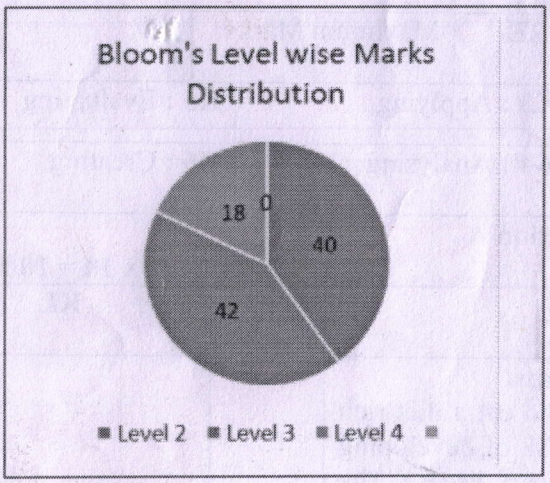
EXPERIMENT **[1 x 5 = 05 Marks]**

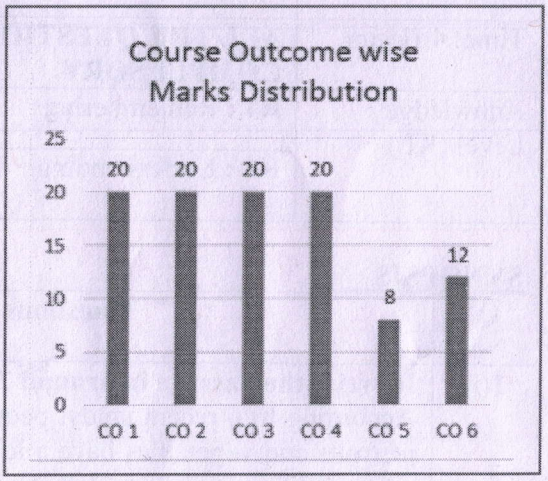
Q. No.	Questions	Marks	COs	KL	PO
1	Draw a flowchart of the process of Communication.	05	CO3	K4	PO2

VIVA VOCE **[5 Marks]**

CO- Course Outcomes, KL- Knowledge Level, PO – Program Outcome

Course Outcomes	CO1	To understand the behavioural needs for a Pharmacist to function effectively in the areas of pharmaceutical operation
	CO2	Communicate effectively (Verbal and Non Verbal)
	CO3	Effectively manage the team as a team player
	CO4	To develop interview skills
	CO5	To develop Leadership qualities and essentials





Note : This above figure is only Example and must prepare this type of figure in these two column