

DEPARTMENT OF PHARMACEUTICAL SCIENCES & TECHNOLOGY**BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI****(Internal Assessment I)**

CLASS: B. PHARM		SEMESTER: I/ADD	
BRANCH: PHARMACY		SESSION: MO/2025	
SUBJECT: BP104T PHARMACEUTICAL INORGANIC CHEMISTRY			
TIME: 2.00 Hour		FULL MARK: 30	

PART I

A. Objective type questions (Answer all questions)	(5 x 02 = 10 marks)
1. Define limit test.	
2. Find out the pH of 0.01M HA (Note that HA is a strong acid).	
3. Define pharmaceutical impurities.	
4. Mention various types of impurities.	
5. Proof that $\text{pH} + \text{pOH} = 14$, at 25°C	

PART II

B. Long Answers (Answer any one out of two)	(01x10=10 marks)
6. Explain various sources of pharmaceutical impurities.	
7. Write a note on the followings: (a) Limit test of chloride and modified limit test of chloride (b) Limit test of sulphate and modified limit test of sulphate	

PART III

C. Short Answers (Question no. 8 is compulsory; answer any one between Question no. 9 and 10)	(02x05=10 marks)
8. Discuss 'acid and base' based on: Arrhenius, Bronsted-Lowry, and Lewis theory.	
9. Write a brief history of the Indian Pharmacopoeia and mention the content of a monograph in the Indian Pharmacopoeia.	
10. Find out the pH of an 8 M HA (HA is a weak acid), whose K_a is 2×10^{-8} .	

:::22/09/2025 :::E