

**BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI
(MID SEMESTER EXAMINATION SP/2025)**

**CLASS: BMLT
BRANCH: BMLT**

**SEMESTER: IV
SESSION: SP/2025**

SUBJECT: BMT405 HISTOPATHOLOGY AND HISTOTECHNIQUES

TIME: 2 HOURS

FULL MARKS: 25

INSTRUCTIONS:

1. The question paper contains 5 questions each of 5 marks and total 25.
2. Attempt all questions.
3. The missing data, if any, may be assumed suitably.
4. Tables/ Data handbook/ Graph paper etc., if applicable, will be supplied to the candidates.

Q1	(a)	Define cell injury and their important injurious stimuli.	[2]	CO	BL
Q1	(b)	Explain cell adaptation and its different types of adaptation.	[3]	CO2	L1
				CO3	L2
Q2	(a)	Write in brief about the fibrosis and their types.	[2]	CO2	L2
Q2	(b)	What are intracellular accumulations? Explain the main pathways of abnormal intracellular accumulations.	[3]	CO3	L2
Q3	(a)	What are simple fixatives? Write the Principle and aim of fixation with suitable example.	[2]	CO2	L2
Q3	(b)	What are Micro Anatomical fixatives and compound fixative? Give example of each.	[3]	CO1	L2
Q4	(a)	Write the process of dehydration. What are the factors that influencing the rate of impregnation?	[2]	CO3	L1
Q4	(b)	Explain the role of staining agents in histopathological techniques with example? Write the properties of paraffin wax.	[3]	CO3	L2
Q5	(a)	Define microscope and microtome. Write the application of simple microscope.	[2]	CO1	L2
Q5	(b)	Write the objectives of microtome. Name the different types of microtome and microtome knives.	[3]	CO2	L1

:24/02/2025:E