

**BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI
(END SEMESTER EXAMINATION)**

**CLASS: BMLT
BRANCH: BMLT**

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

SUBJECT: BMT405 HISTOPATHOLOGY AND HISTOTECHNIQUES

TIME: 3 Hours

FULL MARKS: 50

INSTRUCTIONS:

1. The question paper contains 5 questions each of 10 marks and total 50 marks.
 2. Attempt all questions.
 3. The missing data, if any, may be assumed suitably.
 4. Before attempting the question paper, be sure that you have got the correct question paper.
 5. Tables/Data hand book/Graph paper etc. to be supplied to the candidates in the examination hall.
-

Q.1(a)	Explain the reversible cell injury. Write the major differences between necrosis and apoptosis.	[5]	CO CO3	BL L2
Q.1(b)	What do you mean by intracellular accumulation? Write the differences between hypertrophy and hyperplasia.	[5]	CO2	L2
Q.2(a)	Explain the histopathological techniques and their various steps.	[5]	CO2	L1
Q.2(b)	Write the responsibilities of histopathologist when they received the isolated tissues for examination.	[5]	CO2	L2
Q.3(a)	What are the different types of microtome and microtome knives? Write the principal of rocking microtome.	[5]	CO2	L2
Q.3(b)	Write about the lubricants of honing, stropping and care of knife.	[5]	CO2	L1
Q.4(a)	Why decalcification? What are the factors that affect the rate of decalcifications?	[5]	CO3	L2
Q.4(b)	Explain Ion exchange and Electrolytic decalcification method with their advantages and disadvantages.	[5]	CO2	L2
Q.5(a)	Write the applications of biopsy. What are the characteristics of lesions?	[5]	CO2	L1
Q.5(b)	What are the different types of biopsy method? Explain aspiration and Incisional biopsy with its advantages and disadvantages.	[5]	CO3	L2

:::28/04/2025:::M