

PG CBCS
M.SC. Semester-IV Examination, 2021
MEDICAL LABORATORY TECHNOLOGY
PAPER: MLT 403D
(ADVANCE PATHOLOGY II)

Full Marks: 40

Time: 2 Hours

Answer any FOUR questions of the following:

10X4=40

1. Briefly describe the role of apoptosis in normal physiological and pathological states with appropriate examples.
2. What are cytokines? Write the general properties of cytokines. Discuss different types of interferon with their functions. 2+4+4
3. Briefly discuss the pathogenesis and diagnostic work-up of Sickle-cell anemia.
4. Briefly describe the cellular adaptation to stress.
5. What do you mean by hypertrophy and hyperplasia? Write the causes of hypertrophy. Briefly discuss the physiological hypertrophy of uterus during pregnancy. 2+3+5
6. What is neoplasm? Differentiate between benign and malignant neoplasms based on histologic appearance. How can you confirm whether a neoplasm is malignant before it metastasizes? 2+5+3
7. Define gene therapy. Describe the mechanism of gene therapy. What are the requirements for a gene therapy protocol? 2+4+4
8. What is autosomal dominance? Discuss the chromosomal abnormality in relation to human diseases. Write the final steps of mutant gene isolation. 2+5+3
