

PG CBCS
M.Sc. Semester-IV Examination, 2022
MEDICAL LABORATORY TECHNOLOGY (MLT)
PAPER: MLT 401
(FORENSIC SCIENCE)

Full Marks: 40**Time: 2 Hours**

The figures in the right - hand margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

MLT 401

Marks: 40

GROUP - A

1. Answer any two questions:**2×8=16**

- a) What is STR and its importance in forensic science? Discuss the importance of mt-DNA analysis in forensic science. (3+5)
- b) Describe the 7D of acute alcohol intoxication sign, symptoms and characteristics. (8)
- c) Discuss the role of responsibility of medical laboratory technologist in a forensic science laboratory. Make a list of common and major instruments that required in a forensic toxicology laboratory. (4+4)
- d) What is biotransformation of poison? Discuss the different phases of poison metabolism in human body. (2+6)

GROUP - B

2. Answer any four questions:**4×4=16**

- a) What are the inquest and its type? (2+2)
- b) Write the comparison between clinical toxicology and forensic toxicology? (4)
- c) How will you deal with conscious and unconscious patients in a forensic laboratory? (4)
- d) Write a note on type of radioactive material and their management. (2+2)
- e) What is Trinder's test? Write the application of this test. (2+2)
- f) Write a short note on RFLP. (4)
- g) What is Prodrug? State its advantages and disadvantages. (2+2)
- h) Explain the phrase – "All drugs are potential poison"

GROUP - C

3. Answer any four questions:**2X4 = 8**

- a) If a Y-STR is named by DYS455, what does it mean? (2)
- b) What is opium and state its symptoms? (2)
- c) What is antidote? Give an example of it. (2)
- d) State the Henry's law. (2)
- e) If you are working in radiology lab/mention any two problems which may occur in your body? (2)
- f) What is Therapeutic Index? How do you calculate it? (2)
- g) Name the samples that can be collected from a crime scene for the DNA analysis. (2)
- h) What is Tandem Repeat Polymorphism? (2)

