

Reg. No.

MANIPAL ACADEMY OF HIGHER EDUCATION

FIRST SEMESTER M.Sc. FORENSIC SCIENCE DEGREE EXAMINATION – JANUARY 2025

SUBJECT: MFS 601 – BASICS OF FORENSIC SCIENCE

Monday, January 13, 2025

Time: 14:00 – 16:30 Hrs.

Maximum Marks: 50

✍ **Answer ALL the questions.**

✍ **Long Answer Questions:**

1. Explain the differentiating features in male and female skull and pelvis.

(10 marks)

2. Explain the methods to collect and analyse toolmarks.

(10 marks)

3. **Write short notes on:**

3A. Types of glass fractures.

3B. Any two DNA markers used in forensic science.

3C. Lie detection test

3D. Analysis of soil sample

3E. Information management at crime scene.

3F. Physics division of FSL.

(5 marks × 6 = 30 marks)



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FIRST SEMESTER M.Sc. FORENSIC SCIENCE DEGREE EXAMINATION – JANUARY 2025

SUBJECT: MFS 603 – APPLIED FORENSIC SCIENCE AND CRIMINAL INVESTIGATION

Tuesday, January 14, 2025

Time: 14:00 – 16:30 Hrs.

Maximum Marks: 50

☞ **Answer ALL the questions.**

☞ **Long Answer Questions:**

1. Explain the classification of fingerprints developed for filing purposes.

(10 marks)

2. Explain the bail process in India.

(10 marks)

3. **Write short notes on:**

3A. Role of media in crime prevention

3B. Accreditation of laboratories

3C. Examination of alterations in a document

3D. Types of fingerprints found at the scene of crime

3E. Presumptive blood tests

3F. Protocols to collect writing exemplars.

(5 marks × 6 = 30 marks)



MANIPAL ACADEMY OF HIGHER EDUCATION

FIRST SEMESTER M.Sc. FORENSIC SCIENCE DEGREE EXAMINATION – JANUARY 2025

SUBJECT: MFS 605 – BIOCHEMISTRY

Wednesday, January 15, 2025

Time: 14:00 – 16:30 Hrs.

Maximum Marks: 50

✍ Long Answer questions:

1. Explain transcription. Write **TWO** post transcriptional modifications
(8+2 = 10 marks)
2. Explain:
 - 2A. **THREE** Factors affecting the velocity of the enzyme catalysed reactions
 - 2B. Competitive enzyme inhibition giving **TWO** examples where the principle of the same is used in clinical medicine
(6+4 = 10 marks)
3. **Short answer questions:**
 - 3A. With the help of a diagram explain Watson-Crick model of DNA. Add a note on Chargaff's rule
(4+1 = 5 marks)
 - 3B. Briefly write on :
 - i) Kwashiorkor
 - ii) BMR
(2+3 = 5 marks)
 - 3C. Name the coenzyme/active form, **ONE** function and deficiency manifestation/s of following vitamins
 - i) Vitamin D
 - ii) Thiamine
 - iii) Niacin
(2+1½+1½ = 5 marks)
 - 3D. Classify lipids giving **ONE** example for each class
(5 marks)
 - 3E. Write briefly on:
 - i) **TWO** examples for detoxification mechanisms
 - ii) Absorption of iron
(2+3 = 5 marks)
 - 3F.
 - i) Write **TWO** examples of mucopolysaccharides mentioning the functions
 - ii) Secondary structure of proteins
(2+3 = 5 marks)



MANIPAL ACADEMY OF HIGHER EDUCATION**FIRST SEMESTER M.Sc. FORENSIC SCIENCE DEGREE EXAMINATION – JANUARY 2025****SUBJECT: MFS 607 – FORENSIC PHOTOGRAPHY**

Thursday, January 16, 2025

Time: 14:00 – 16:30 Hrs.

Maximum Marks: 50

✍ **Answer the following.**

✍ **Draw diagrams wherever necessary**

✍ **Long Answer Questions:**

1A. Discuss the importance of “Exposure Triangle” in crime scene photography.

1B. Write short notes on “Types of Lenses” used in photographing crime scenes

(6+4 = 10 marks)

2A. Explain the concept of technical photography in crime scene investigation with suitable examples.

2B. Comment on the term “Macro & Micro” photography.

(8+2 = 10 marks)

3. **Write short notes on:**

3A. IR photography in forensic work.

3B. Panavision & Scene vision.

3C. Surveillance photography.

3D. White balance & Internal light meters.

3E. Filters in black and white photography.

3F. Photographic superimposition digital techniques.

(5 marks × 6 = 30 marks)



MANIPAL ACADEMY OF HIGHER EDUCATION**FIRST SEMESTER M.Sc. FORENSIC SCIENCE DEGREE EXAMINATION – JANUARY 2025****SUBJECT: MFS 609 – POLICE ADMINISTRATION AND VICTIMOLOGY**

Friday, January 17, 2025

Time: 14:00 – 16:30 Hrs.

Maximum Marks: 50

✍ **Answer ALL questions.**

✍ **Draw diagrams wherever necessary**

✍ **Long Answer Questions:**

1. Discuss the salient features of “*Karnataka Police Act 1963*”.

(10 marks)

2. What is “*Gender Sensitization*”? Evaluate the importance of gender sensitization and people friendly police initiatives.

(10 marks)

3. **Write short notes on:**

3A. Crime control records in police station

3B. Traffic police organizations.

3C. General organization of Police in a state.

3D. Role of police in crimes against women.

3E. Victim precipitation theory.

3F. Accountability of criminal justice system to crime victims.

(5 marks × 6 = 30 marks)

