

Reg. No.

MANIPAL ACADEMY OF HIGHER EDUCATION

FIRST SEMESTER M.Sc. FORENSIC SCIENCE DEGREE EXAMINATION – MARCH 2021


SUBJECT: MFS 603 – APPLIED FORENSIC SCIENCE AND CRIMINAL INVESTIGATION

Tuesday, March 23, 2021

Time: 14:00 – 16:30 Hrs.

Maximum Marks: 50

 **Answer ALL the questions.**

 **Long Answer Questions:**

1. Explain the role of media in criminal justice system with suitable case studies.
(10 marks)

2. Explain the different types of fingerprints found in scene of crime. Elaborate the method of collecting specimen fingerprints from dead and living persons.
(10 marks)

3. **Write short notes on:**

3A. Decipherment of secret writing.

3B. Need for quality management in laboratory.

3C. Ridge counting and ridge tracing in fingerprints.

3D. Laboratory examination of saliva and urine samples.

3E. NABL and IEC.

3F. National agencies for crime prevention.

(5 marks × 6 = 30 marks)



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FIRST SEMESTER M.Sc. FORENSIC SCIENCE DEGREE EXAMINATION – MARCH 2021

SUBJECT: MFS 601 – BASICS OF FORENSIC SCIENCE

Monday, March 22, 2021

Time: 14:00 – 16:30 Hrs.

Maximum Marks: 50

✍ **Answer ALL the questions.**

✍ **Long Answer Questions:**

1. Critically analyse Narco analysis as a scientific interrogation technique.

(10 marks)

2. Discuss any two DNA markers used in forensics.

(10 marks)

3. **Write short notes on:**

3A. Types of glass fractures.

3B. Forensic voice analysis.

3C. Types of tool marks.

3D. Critical note on role of forensic scientists in crime investigation.

3E. Collection of sunken footprints.

3F. Explain Phishing and cyberstalking. Add a note on its prevention.

(5 marks × 6 = 30 marks)



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FIRST SEMESTER M.Sc. FORENSIC SCIENCE DEGREE EXAMINATION – MARCH 2021

SUBJECT: MFS 609 – POLICE ADMINISTRATION AND VICTIMOLOGY

Friday, March 26, 2021

Time: 14:00 – 16:30 Hrs.

Maximum Marks: 50

✍ Answer ALL the questions.

✍ Long Answer Questions:

1A. Discuss in detail about different crime control records maintained in police stations.

1B. What do you understand by the term "*Crime Statistics Analysis*"?

(8+2 = 10 marks)

2. Explain the functions in detail about "*Special Units of State Police Force*"

(10 marks)

3. Write short notes on:

3A. Stress in police work.

3B. Need for gender sensitization in police.

3C. Mendelsohn's typology of crime victims.

3D. Victim rights in India.

3E. Traffic police

3F. Psycho-social coping theory.

(5 marks × 6 = 30 marks)



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FIRST SEMESTER M.Sc. FORENSIC SCIENCE DEGREE EXAMINATION – MARCH 2021

SUBJECT: MFS 605/FSC 605 – BIOCHEMISTRY

Wednesday, March 24, 2021

Time: 14:00 – 16:30 Hrs.

Maximum Marks: 50

Answer ALL the questions.

1. Define primary, secondary, tertiary and quaternary structure of proteins giving one example each.

(10 marks)

2. Explain Lac operon model. Discuss its regulation in presence of glucose and lactose.

(5+5 = 10 marks)

3. **Answer the following:**

3A. Write a note on the general structure of immunoglobulins.

3B. Write structure and functions of different types of RNA's

3C. Explain how competitive inhibitors are useful in clinical medicine with examples?

3D. Write significance of mucopolysaccharides with FIVE examples

3E. Explain blood glucose regulation.

3F. Explain any FOUR factors affecting velocity of enzyme catalyzed reactions with suitable illustrations.

(5 marks × 6 = 30 marks)



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MANIPAL ACADEMY OF HIGHER EDUCATION
FIRST SEMESTER M.Sc. FORENSIC SCIENCE DEGREE
EXAMINATION – MARCH 2021

SUBJECT: FSC 608 – DNA TECHNOLOGIES

Thursday, March 25, 2021

Time: 14:00 – 16:30 Hrs.

Maximum Marks: 50

 **Answer ALL the questions.**

1. **Long answer questions:**

1. Discuss DNA replication

(10 marks)

2. Discuss the techniques used to analyze protein levels and localization of proteins.

(10 marks)

3. **Write short notes on:**

3A. RACE

3B. Plasmid isolation

3C. STR sequence

3D. Gene sequencing

3E. Forensic samples in DNA analysis

3F. Proto oncogenes.

(5 marks × 6 = 30 marks)



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MANIPAL ACADEMY OF HIGHER EDUCATION

FIRST SEMESTER M.Sc. FORENSIC SCIENCE DEGREE EXAMINATION – MARCH 2021

SUBJECT: MFS 607 – FORENSIC PHOTOGRAPHY

Thursday, March 25, 2021

Time: 14:00 – 16:30 Hrs.

Maximum Marks: 50

✍ Answer ALL the questions.

✍ Draw diagrams wherever necessary

✍ Long Answer Questions:

1. Discuss the structure and functions of video cameras.

(10 marks)

2. What is digital photography? Explain the applications of digital photography in crime scene investigation.

(10 marks)

3. Write short notes on:

3A. History of Forensic Photography.

3B. Focusing modes in professional camera.

3C. Judicial photography.

3D. Mid-range photography.

3E. Periphery camera.

3F. Photomicrographs.

(5 marks × 6 = 30 marks)

