THE TAMIL NADU DR.M.G.R. MEDICAL UNIVERSITY

[MD 0524] **MAY 2024** **Sub. Code: 4035**

M.D. DEGREE EXAMINATION

BRANCH XIV – FORENSIC MEDICINE

PAPER III – FORENSIC PATHOLOGY & TOXICOLOGY

Q.P. Code: 204035

Time : Three Hours **Maximum : 100 Marks**

I. Essay: **(2 x 15 = 30)**

1. Classify Immunoglobulin. Write about structure and application of IgG and IgM. What can you expect in a case of drug induced anaphylaxis?

2. What are the Histo-pathological findings in electrocution, bony fractures, Paraquat poisoning and heavy metal poisoning?

II. Short notes: **(10 x 5 = 50)**

1. How will you proceed in a Medico-legal case infected with Rabies?
2. Autopsy evidence in cerebral compression.
3. ECG changes in electrolyte imbalance and autopsy findings.
4. DNA Finger printing and its medico-legal significance.
5. Describe Post-mortem enzymatic and biochemical changes with special reference in their value in determining time since death.
6. How will you proceed in a case of XDR-Tuberculosis autopsy?
7. Blood group antigen in HLA typing.
8. Role of microbe in purification.
9. Disseminated Intravascular Coagulation.
10. Biomedical Waste disposal in mortuary.

III. Reasoning Out: **(4 x 5 = 20)**

1. Why vitreous fluid is ideal for alcohol estimation?
2. Diatoms is not at all conclusion of drowning.
3. Junk DNA is proof of potency.
4. Positive reaction of Florence test is not definite proof of seminal fluid.

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THE TAMIL NADU DR.M.G.R. MEDICAL UNIVERSITY

[MD 1224] **DECEMBER 2024** **Sub. Code: 4035**
(OCTOBER 2024 EXAM SESSION)

M.D. DEGREE EXAMINATION

FORENSIC MEDICINE

PAPER III – FORENSIC PATHOLOGY & TOXICOLOGY

Q.P. Code: 204035

Time : Three Hours **Maximum : 100 Marks**

I. Essay: **(2 x 15 = 30)**

1. Discuss the substance that resembles blood stain and discuss in detail about collection of blood stain in crime scene and various biochemical tests to confirm.

2. Discuss briefly on active principles, of action, signs and symptoms, differential diagnosis, treatment and postmortem appearance of opium poisoning.

II. Short notes: **(10 x 5 = 50)**

1. Toxidromes.
2. Toxic alkaloids.
3. Designer drugs.
4. Duties of a medical practitioner while dealing with poisoning case.
5. Discuss wound healing and medicolegal importance.
6. Postmortem findings of death due to acute pancreatitis.
7. Bioterrorism.
8. Negative autopsy.
9. Shock.
10. Drug idiosyncrasy.

III. Reasoning Out: **(4 x 5 = 20)**

1. Maceration is not a putrefaction.
2. Froth is more specific in drowning.
3. Hyoid bone fracture is common in strangulation than hanging.
4. Proof of semen in the absence of sperm.

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THE TAMIL NADU Dr. M.G.R. MEDICAL UNIVERSITY

[MD 1025] **OCTOBER 2025** **Sub. Code: 4035**

M.D. DEGREE EXAMINATION

FORENSIC MEDICINE

PAPER III – FORENSIC PATHOLOGY & TOXICOLOGY

Q.P. Code: 204035

Time : Three Hours **Maximum : 100 Marks**

I. Essay: **(2 x 15 = 30)**

1. Discuss about DNA fingerprinting and samples for DNA fingerprinting.
2. Classify Asphyxiants. Elaborate about Carbon monoxide poisoning.

II. Short notes: **(10 x 5 = 50)**

1. Microchemical examination of blood.
2. Paternity disputes.
3. Various aspects of forensic science.
4. Polygraph.
5. Fate of poisons in the body.
6. Pharmacological antidotes of poison.
7. Aluminium phosphide.
8. Hydrargyrism.
9. Cantharides.
10. Body Packer syndrome.

III. Reasoning Out: **(4 x 5 = 20)**

1. Hazards of blood transfusion.
2. Blood group – white cell antigens.
3. Use of sildenafil and sudden deaths.
4. Zyklon B – circumstance of poison.

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THE TAMIL NADU Dr. M.G.R. MEDICAL UNIVERSITY

[MD 0526] **MAY 2026** **Sub. Code: 4035**

M.D. DEGREE EXAMINATION

FORENSIC MEDICINE

PAPER III – FORENSIC PATHOLOGY & TOXICOLOGY

Q.P. Code: 204035

Time : Three Hours **Maximum : 100 Marks**

I. Essay: **(2 x 15 = 30)**

1. Functions of a forensic pathologist in infanticide. Discuss autopsy in auspicious death of a new-born infant.

2. Define Artefact and describe about artefact between death and autopsy.

II. Short notes: **(10 x 5 = 50)**

1. Polymerase chain reaction.
2. Chloral hydrate.
3. Chemical examination of blood stains.
4. Shock.
5. Narcoanalysis.
6. Gastric lavage.
7. Vitriolage.
8. Methyl alcohol poisoning.
9. War gases.
10. Aconite poisoning.

III. Reasoning Out: **(4 x 5 = 20)**

1. Substances resembling blood stains.
2. Choking as cause of death.
3. Panniculus adiposes.
4. Associated factors in hypothermia.

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