

April-2001

[KD 180]

Sub. Code : 2084

M.D. DEGREE EXAMINATION.

Branch XIV — Forensic Medicine

(Revised Regulations)

Paper II — FORENSIC PATHOLOGY, FORENSIC
IMMUNOLOGY AND FORENSIC BIOCHEMISTRY

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

1. Discuss "Shock". (25)
 2. Describe the gross and microscopic finding of Pulmonary tuberculosis along with other associated finding seen on autopsy. (25)
 3. Write a note on : (5 × 10 = 50)
 - (a) Crush syndrome.
 - (b) AIDS as an occupational hazard.
 - (c) Medicolegal application of chromatography.
 - (d) Legal framework for Blood transfusion.
 - (e) Falanga.
-

November-2001

[KE 180]

Sub. Code : 2084

M.D. DEGREE EXAMINATION.

(Revised Regulations)

Branch XIV — Forensic Medicine

Part II

Paper II — FORENSIC MEDICINE, FORENSIC
IMMUNOLOGY AND FORENSIC BIO-CHEMISTRY

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

1. What is Embolism? Classify Embolisms and discuss in detail about Thrombo-Embolism. (25)
2. Due to various reasons/causes, what are the Bio-chemical changes noticed in Blood before and after death? Write in detail. (25)
3. Write briefly on : (5 × 10 = 50)
 - (a) Different Antigen-Antibody tests in Forensic Medicine.
 - (b) Recent advances in Wound Age Estimation.
 - (c) Demonstration of Air-Embolism at Autopsy.
 - (d) Hydrostatic test and its relevance.

oup injuries

March-2002

[KG 180]

Sub. Code : 2084

M.D. DEGREE EXAMINATION.

Forensic Medicine

Part II

Paper II — FORENSIC PATHOLOGY, FORENSIC
IMMUNOLOGY AND FORENSIC BIOCHEMISTRY

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

1. Describe the various methods in determining the 'age' of various injuries. (25)
 2. Discuss briefly the various types of Embolism and discuss the techniques for demonstration of fat embolism and air embolism. (25)
 3. Write briefly on : (5 × 10 = 50)
 - (a) Botulism.
 - (b) Role of microbes in putrefaction.
 - (c) Tests for blood stains.
 - (d) Precipitin test.
 - (e) Polygraph.
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April-2003

[KI 180]

Sub. Code : 2084

M.D. DEGREE EXAMINATION.

Forensic Medicine

Part II

Paper II — FORENSIC PATHOLOGY, FORENSIC
IMMUNOLOGY AND FORENSIC BIOCHEMISTRY

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

1. Discuss the microbiological applications in the field of Forensic Medicine. (25)
 2. Discuss the pathophysiology and sequelae of Myocardial Infarction. (25)
 3. Write briefly on : (5 × 10 = 50)
 - (a) Ewings postulates
 - (b) Food poisoning
 - (c) Tests for seminal stains
 - (d) AIDS
 - (e) Anaphylaxis.
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[KJ 180]

Sub. Code : 2084

M.D. DEGREE EXAMINATION.

Forensic Medicine

Part II

Paper II — FORENSIC PATHOLOGY, FORENSIC
IMMUNOLOGY AND FORENSIC BIOCHEMISTRY

Time : Three hours

Maximum : 100 marks

Theory : Two hours and
forty minutes

Theory : 80 marks

M.C.Q. : 20 marks

M.C.Q. : Twenty minutes

M.C.Q. must be answered **SEPARATELY** on the
answer sheet provided as per the instructions on
the first page of M.C.Q. Booklet.

Answer ALL questions.

Draw suitable diagrams wherever necessary.

1. Discuss the various blood groups and their medico
legal importance. (15)

2. Discuss the importance of DNA finger printing in
medico legal situations and how will you collect and
forward the samples for DNA profiling. (15)

3. Write short notes on : (10 × 5 = 50)

1. Seminoma.
2. Aschoff bodies.
3. Primary tuberculosis.
4. Sago spleen.
5. Pathogenesis of oedema.
6. Iso enzymes.
7. Carcinogens.
8. Hypergamma globulinaemia.
9. Air embolism.
10. Phagocytosis.

[KM 180]

Sub. Code : 2084

M.D. DEGREE EXAMINATION.

Forensic Medicine

Part II

Paper II — FORENSIC PATHOLOGY, FORENSIC IMMUNOLOGY AND FORENSIC BIOCHEMISTRY

Time : Three hours Maximum : 100 marks

Theory : Two hours and Theory : 80 marks
forty minutes

M.C.Q. : Twenty minutes M.C.Q. : 20 marks

Answer ALL questions.

Draw suitable diagrams wherever necessary.

I. Essay : (2 × 15 = 30)

(1) Describe the blood supply to the heart. Enlist sudden deaths due to heart disease. Discuss the post mortem diagnosis of early and delayed deaths due to myocardial infarction.

(2) Define shock. Mention the various types, and discuss the pathogenesis of shock.

II. Write short notes on : (10 × 5 = 50)

(a) Precautions during autopsy on a case of AIDS.

(b) Fat embolism.

(c) Precipitin test.

(d) Enzyme histochemistry in study of wounds.

(e) Hazards of blood transfusion.

(f) Chemical tests for semen.

(g) Vagal inhibition.

(h) Estimation of time since death from body fluids.

(i) Berry aneurysm.

(j) White cell antigens.

[KQ 154]

Sub. Code : 2082

M.D. DEGREE EXAMINATION,

Branch XIV — Forensic Medicine

FORENSIC PATHOLOGY, FORENSIC
IMMUNOLOGY AND FORENSIC BIOCHEMISTRY

(Common to Paper II — (Old/New/Revised Regulations)
(Candidates admitted from 1988-89 onwards) and
Paper II — (For candidates admitted from
2004-2005 onwards)

Time : Three hours Maximum : 100 marks

Theory : Two hours and Theory : 80 marks
forty minutes

M.C.Q. : Twenty minutes M.C.Q. : 20 marks

Answer ALL questions.

Draw suitable diagrams wherever necessary.

I. Essay :

(1) Describe the post mortem procedure and
Medicolegal investigations in a case of death due to
bomb explosion. (20)

(2) How will you differentiate Antemortem and
Post mortem injuries? Add a note on enzyme
histo chemistry regarding. (15)

(3) Describe the application of radiology in
forensic medicine. (15)

II. Short notes : (6 × 5 = 30)

(a) Anaphylaxis due to Drug Allergy

(b) Eliza test

(c) Disputed paternity

(d) Chemical tests for semen

(e) Punctate basophilia

(f) Spalding's sign.

[KR 165]

Sub. Code : 2061

M.D. DEGREE EXAMINATION.

Branch XIV — Forensic Medicine

FORENSIC PATHOLOGY, FORENSIC
IMMUNOLOGY AND FORENSIC BIOCHEMISTRY

Common to Paper II – (Old/New/Revised Regulations)

(Candidates admitted from 1988-89 onwards) and

Paper II – (For candidates admitted from 2004-2005
onwards)

Time : Three hours

Maximum : 100 marks

Theory : Two hours and
forty minutes

Theory : 80 marks

M.C.Q. : Twenty minutes

M.C.Q. : 20 marks

Answer ALL questions.

Draw suitable diagrams wherever necessary.

I. Essay :

1. Describe the Post Mortem enzymatic and biochemical changes with special reference to their value in determining the TSD. (20)

2. Draw out as a Forensic Pathologist, how will you plan for the investigation in mass disaster death. (15)

3. Enumerate the 'Artefacts in Forensic Pathology'. (15)

II. Short notes : (6 × 5 = 30)

(a) Features of entry wound produced by a shot gun fired from different ranges.

(b) Fat Embolism and autopsy findings

(c) Drug Idiosyncrasy

(d) Spurious wounds of Burn

(e) Auto Erotic asphyxia

(f) Obscure Autopsy.

MARCH 2008**[KS 153]****Sub. Code : 2048**

M.D. DEGREE EXAMINATION.

Branch XIV — Forensic Medicine

Paper II — FORENSIC PATHOLOGY, FORENSIC IMMUNOLOGY
AND FORENSIC BIOCHEMISTRY

(Common to all regulations)

Q.P. Code : 202048

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

Draw suitable diagrams wherever necessary.

- I. Write Essay : (2 × 20 = 40)
1. What is Medical and Medico Legal classification of wounds? Discuss the various types of blunt force injuries and the Medico legal importance. (20)
 2. How will you establish the cause of death in a 30-year-old male, who has died suddenly, as due to HIV infection? What will be the autopsy procedure in a case of HIV? (20)
- II. Write short notes on : (10 × 6 = 60)
1. Post Mortem Biochemistry
 2. Germ warfare
 3. Circle of Willis
 4. Gas Chromatography
 5. Secretors
 6. Endotoxic Shock
 7. Interferons
 8. Junk DNA
 9. Malignant hyperthermia
 10. Baro trauma.
-

September 2008

[KT 153]

Sub. Code: 2048

M.D. DEGREE EXAMINATION

Branch XIV – Forensic Medicine

**Paper II – FORENSIC PATHOLOGY, FORENSIC
IMMUNOLOGY AND FORENSIC BIOCHEMISTRY**

(Common to all Regulations)

Q.P. Code : 202048

Time : Three hours

Maximum : 100 marks

Draw suitable diagram wherever necessary.

Answer ALL questions.

I. Essay questions :

(2 X 20 = 40)

1. Write an essay on DNA typing.
2. Write an essay on clinical and immunological manifestations of anaphylactic reaction.

II. Write short notes on :

(10 X 6 = 60)

1. Red cell enzymes.
 2. Thin layer chromatography.
 3. Histological techniques in diagnosis of myocardial infarction.
 4. Shock lung.
 5. Acid phosphatase test.
 6. Delayed traumatic apoplexy.
 7. Forensic Serology.
 8. Fetal hemoglobin.
 9. Genomes.
 10. Reverse cross matching.
-

March 2009

[KU 153]

Sub. Code: 2048

M.D. DEGREE EXAMINATION

Branch XIV – FORENSIC MEDICINE

(Common to all candidates)

**Paper II – FORENSIC PATHOLOGY, FORENSIC IMMUNOLOGY
AND FORENSIC BIOCHEMISTRY**

Q.P. Code : 202048

Time : Three hours

Maximum : 100 marks

Draw suitable diagram wherever necessary.

Answer ALL questions.

I. Essay questions :

(2 x 20 = 40)

1. Define embolism. Outline the different forms of embolism and their medico legal injunction.
2. Describe various legal problems involved in cases of organ transplantation.

II. Write short notes on :

(10 x 6 = 60)

1. Lucid interval in insane.
2. Legal implication of seminal fluid.
3. Preservation of materials for DNA – analysis.
4. Criminal abortion.
5. Chromatography.
6. Blood group antigens.
7. Locard's principle of exchange.
8. Shock lung.
9. Brain mapping.
10. HLA typing.

March 2010

[KW 153]

Sub. Code: 2048

M.D. DEGREE EXAMINATION

Branch XIV – FORENSIC MEDICINE

(Common to all candidates)

**Paper II – FORENSIC PATHOLOGY, FORENSIC IMMUNOLOGY
AND FORENSIC BIOCHEMISTRY**

Q.P. Code : 202048

Time : Three hours

Maximum : 100 marks

Draw suitable diagram wherever necessary.

Answer ALL questions.

I. Essay questions :

(2 x 20 = 40)

1. Describe the process of healing of wounds and medico legal issues concerned with determination of the age of the wounds.
2. Discuss the procedure of investigations and autopsies of multiple deaths due to bomb blasts. Add a note on the visit and examination of the scene of the incidence.

II. Write short notes on :

(10 x 6 = 60)

1. Ante mortem and post mortem injuries.
2. Fat embolism.
3. Curling's ulcer.
4. CSF examination and time since death.
5. Pugilistic attitude.
6. Railway spine.
7. Presumption of survivorship.
8. Sudden death in sports.
9. Overlying.
10. Obscure autopsy.

MAY 2011

[KY 153]

Sub. Code: 2048

M.D. DEGREE EXAMINATION
BRANCH XIV – FORENSIC MEDICINE
FORENSIC PATHOLOGY, FORENSIC IMMUNOLOGY
AND FORENSIC BIOCHEMISTRY

Q.P. Code : 202048

Time : 3 hours
(180 Min)

Maximum : 100 marks

Answer ALL questions in the same order.

	Pages (Max.)	Time (Max.)	Marks (Max.)
I. Essay:			
1. Discuss the laboratory diagnosis of HIV infection and medicolegal problems in the management of AIDS patients.	6	15	10
2. Describe the Post Mortem enzymatic and biochemical changes with reference to their value in determining the time since death.	6	15	10
II. Short Questions:			
1. Definition and pathogenesis of atherosclerosis.	3	8	5
2. Viral carcinogens.	3	8	5
3. Enzyme histochemistry in myocardial infarction.	3	8	5
4. Disseminated intravascular coagulation.	3	8	5
5. Red cell enzymes.	3	8	5
6. Thin layer chromatography.	3	8	5
7. Sago spleen.	3	8	5
8. Delayed typed hypersensitivity.	3	8	5
III. Reasoning Out:			
1. Artefacts in forensic pathology.	4	10	5
2. Biochemical tests for semen analysis.	4	10	5
3. Serological tests for pregnancy.	4	10	5
4. Immunological manifestations of drug allergy.	4	10	5
IV. Very Short Answers :			
1. Shock lung.	1	4	2
2. Secretors.	1	4	2
3. Barotrauma.	1	4	2
4. Interferons.	1	4	2
5. Aschoff bodies.	1	4	2
6. Iso Enzymes.	1	4	2
7. Junk DNA.	1	4	2
8. Phagocytosis.	1	4	2
9. Acute Tubular Necrosis.	1	4	2
10. Air embolism.	1	4	2

April 2012

[LA153]

Sub. Code: 2048

**M.D. DEGREE EXAMINATION
BRANCH XIV – FORENSIC MEDICINE
FORENSIC PATHOLOGY, FORENSIC IMMUNOLOGY AND FORENSIC
BIOCHEMISTRY
Q.P. Code : 202048**

**Time : 3 hours
(180 Min)**

Maximum : 100 marks

Answer ALL questions in the same order.

	Pages (Max.)	Time (Max.)	Marks (Max.)
I. Essay:			
1. Discuss the various types of embolism and the techniques for demonstration of fat embolism and air embolism.	9	15	10
2. Discuss the Microbiological Application in Forensic medicine.	9	15	10
II. Short Questions:			
1. Antigen Antibody test in Forensic Medicine.	3	8	5
2. Primary Shock.	3	8	5
3. Polygraph.	3	8	5
4. Anaphylaxis.	3	8	5
5. Sago spleen.	3	8	5
6. Pathogenesis of Edema.	3	8	5
7. Medicolegal aspects of Cloning.(Human)	3	8	5
8. White cell antigens.	3	8	5
III. Reasoning Out:			
1. Autopsy evidence of cerebral compression.	5	10	5
2. Hit by a speeding Train.	5	10	5
3. Alcohol and heart.	5	10	5
4. Factors affecting Bruising.	5	10	5
IV. Very Short Answers:			
1. Mismatched Blood transfusion.	1	4	2
2. Ewing's Postulates.	1	4	2
3. ATP in Post Mortem Changes.	1	4	2
4. Nuclear Sexing	1	4	2
5. Histopathological changes in Myocardium.	1	4	2
6. Chromatography.	1	4	2
7. Malignant hyperthermia.	1	4	2
8. Barr Bodies.	1	4	2
9. Blood Stain Test.	1	4	2
10. Precipitin test.	1	4	2

[LB153]

OCTOBER 2012

Sub. Code: 2048

M.D. DEGREE EXAMINATION
BRANCH XIV – FORENSIC MEDICINE
FORENSIC PATHOLOGY, FORENSIC IMMUNOLOGY AND FORENSIC
BIOCHEMISTRY
Q.P. Code : 202048

Time : 3 hours
(180 Min)

Maximum : 100 marks

Answer ALL questions in the same order.

	Pages	Time	Marks
	(Max.)	(Max.)	(Max.)
I. Essay:			
1. Discuss the Postmortem enzymatic and biochemical changes with special references to their values in determining the TSD	9	15	10
2. Describe various legal problems involved in cases of Organ transplantation.	9	15	10
II. Short Questions:			
1. Punctate Basophila.	3	8	5
2. Spurious Wounds of Burns.	3	8	5
3. Germ warfare.	3	8	5
4. Fetus Hemoglobin.	3	8	5
5. Seminoma.	3	8	5
6. Botulism.	3	8	5
7. Negative Autopsy	3	8	5
8. Chromatography.	3	8	5
III. Reasoning Out:			
1. Stature from Skeletal remains.	5	10	5
2. Conditions that replace putrefaction.	5	10	5
3. Difficulties in diagnosis of Death from Hanging.	5	10	5
4. Time since injury of skull fractures.	5	10	5
IV. Very Short Answers:			
1. Genetic Engineering.	1	4	2
2. Ghost well.	1	4	2
3. Wound Healing Process.	1	4	2
4. Haptoglobulin .	1	4	2
5. Carotid artery thrombosis.	1	4	2
6. Secretors.	1	4	2
7. Leukemia.	1	4	2
8. Red cell enzyme.	1	4	2
9. Atherosclerosis.	1	4	2
10. Carcinogen.	1	4	2

(LC 153)

APRIL 2013

Sub. Code: 2048

M.D. DEGREE EXAMINATION
BRANCH XIV – FORENSIC MEDICINE
FORENSIC PATHOLOGY, FORENSIC IMMUNOLOGY AND FORENSIC
BIOCHEMISTRY
Q.P. Code : 202048

Time: Three Hours

Maximum: 100 marks

I. Essay: **(2X10=20)**

- 1) Describe substances resembling blood stains and discuss in detail about collection of blood stains and various biochemical tests to find out and confirm it.
- 2) Describe in detail about assessing time since death using post-mortem changes.

II. Short Questions: **(8X5=40)**

- 1) Write about complications of MYOCARDIAL INFARCTION.
- 2) Write about SUDDEN DEATH.
- 3) Write medico legal importance of SEMINAL STAINS.
- 4) Write about HLA TYPING and its medico legal importance.
- 5) Describe medico legal importance of BRAIN STEM DEATH.
- 6) Write about peculiar effects of fire arm wounds.
- 7) Write about injuries produced by HEAT.
- 8) Discuss in detail about causes of death in HANGING and add a note about TRAUMATIC ASPHYXIA.

III. Reasoning Out: **(4X5=20)**

- 1) During wars fully jacketed bullet is used.
- 2) Fresh water drowning is more dangerous than sea water drowning.
- 3) Dead body found in closed burnt room having head injury.
- 4) Head rest in a four wheeler is not for resting head.

IV. Very Short Answers: **(10X2=20)**

- 1) Types of skull bone fracture.
- 2) Medico legal importance of LACERATION.
- 3) CASPER'S dictum.
- 4) Instantaneous rigor.
- 5) Souvenir bullet.
- 6) Black eye.
- 7) SIX PENNY bruises.
- 8) Importance of forensic ENTOMOLOGY.
- 9) Punch drunk syndrome.
- 10) LOVE BITES.

[LE 153]

APRIL 2014

Sub. Code: 2048

M.D. DEGREE EXAMINATION
BRANCH XIV – FORENSIC MEDICINE
FORENSIC PATHOLOGY, FORENSIC IMMUNOLOGY AND
FORENSIC BIOCHEMISTRY
Q.P. Code :202048

Time : Three Hours

Maximum : 100 marks

I. Essay:

(2X10=20)

1. Write in detail about pathophysiology and chemical reactions taking place in adipocere formation.
2. Classify Immunoglobulins. Write about the structure and applications of Immunoglobulins - G.

II. Short Questions:

(8X5=40)

1. Write about histochemical changes in WOUND HEALING.
2. Write in detail about gross and histological features of ELECTROCUTION.
3. Write about EWINGS postulates and about trauma and tumour.
4. Discuss about Anaphylactic death.
5. Describe medico legal importance of AIDS.
6. Define STAB injury, classify them and write about its complications and medico legal significance.
7. Describe injuries sustained by a car driver in TAIL GATING.
8. Role of Microbes in Putrefaction.

III. Reasoning Out:

(4X5=20)

1. Depressed fracture of skull is called as FRACTURE A LA SIGNATURE.
2. Differentiating epidermal and dermoepidermal burns in dead is difficult.
3. Dried salivary stain an indicator of ante mortem hanging.
4. Rifled fire arm exit wound is bigger than entry wound.

IV. Very Short Questions:

(10X2=20)

1. Medico legal importance of blood stains.
2. POND fracture.
3. Shock Lung.
4. Interferons.
5. FABRICATED INJURY.
6. SLE antibiotics.
7. Factors causing death in BOMB BLAST.
8. BANSDOLA.
9. PRECIPITIN test.
10. Hyper Gamma Globulinaemia.
