

APRIL 2001

[KD 351]

**M.D.S. DEGREE EXAMINATION
(New/Revised Regulations)**

Part I

Paper I – APPLIED BASIC SCIENCES

Time : Three hours

Maximum : 180 marks

Answer each subject in a separate answer book.

Answer briefly any THREE short notes in each subject.

All questions carry equal book.

(ANATOMY)

1. (a) Digastric Triangle.
(b) Falx cerebri.
(c) Derivatives of first bronchial arch.
(d) Applied anatomy of maxillary sinus.

(PHYSIOLOGY)

2. (a) Cardiac cycle.
(b) Growth hormone.
(c) Visual pathway.
(d) Juxtaglomerular apparatus.

(BIOCHEMISTRY)

3. (a) Deficiency and toxicity symptoms of fluorides.
(b) Glucose tolerance test.
(c) Vitamin K.
(d) Balanced diet.

(PHARMACOLOGY)

4. (a) Classify NSAIDs. Explain four therapeutically useful pharmacological action of Aspirin.
(b) Write brief notes on Glucocorticoids.
(c) Explain the pharmacological basis for the following:
(i) Phenytoin sodium in grandmal epilepsy.
(ii) Sodium thiopentone as including agent for general anaesthesia.
(d) Bacterial endocarditis prophylaxis.

(PATHOLOGY)

5. (a) Define thrombosis. Discuss the pathogenesis of thrombosis formation.
(b) Define Repair. Describe the process of healing of a surgical wound.
(c) Briefly write in the modes of spread of tumours.
(d) Haemochromatosis.

(MICROBIOLOGY)

6. (a) Hepatitis B vaccination.
(b) Define sterilization and disinfection. Mention methods of moist heat sterilization.
(c) Microbiology of dental caries.
(d) Write about laboratory diagnosis of pulmonary tuberculosis.

NOVEMBER 2001

[KE 351]

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(ANATOMY)

1. (a) Inferior alveolar nerve.
(b) Parotid Gland.
(c) Maxillary air sinus.
(d) Intrinsic muscles of Larynx.

(PHYSIOLOGY)

2. (a) Mastication.
(b) Primary and secondary bone.
(c) Digestion of proteins.
(d) Cough reflex.

(BIOCHEMISTRY)

3. (a) Cholecalciferol.
(b) Mucopolysaccharides.
(c) Prostaglandins.
(d) Anaerobic glycolysis.

(PHARMACOLOGY)

4. (a) Adverse effects of Corticosteroids.
(b) Clinical uses of muscle relaxants.
(c) Oral sulphonylureas.
(d) Calcitonin.

(PATHOLOGY)

5. (a) Actinomycosis.
(b) Granulomatous inflammation.
(c) Phagocytosis.
(d) Fat Embolism.

(MICROBIOLOGY)

6. (a) Antibiotic sensitivity test.
(b) Viral inclusion bodies.
(c) Disposal of infectious waste.
(d) Anaphylaxis.

MARCH 2002

[KG 351]

M.D.S. DEGREE EXAMINATION

(New/Revised Regulations)

Part I

Paper I – APPLIED BASIC SCIENCES

Time : Three hours

Maximum : 180 marks

Answer each subject in a separate answer book.

Answer briefly any THREE short notes in each subject.

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(ANATOMY)

1. (a) Developmental of palate and its anomalies.
(b) Thyroid Gland.
(c) Temporo Mandibular joint.
(d) Taste pathway.

(PHYSIOLOGY)

2. (a) Perception of pain in the mouth.
(b) Deglutition.
(c) Adrenal medulla.
(d) Functions of platelets.

(BIOCHEMISTRY)

3. (a) Citric acid cycle.
(b) Ptyalin.
(c) Glucose tolerance test.
(d) Ascorbic acid.

(PHARMACOLOGY)

4. (a) Thrombolytic drugs.
(b) Surface analgesics.
(c) Uses of antiseptics in dentistry.
(d) Fluorides in dental caries.

(PATHOLOGY)

5. (a) Define and classify embolus.
(b) Preneoplastic conditions.
(c) Transfusion reactions
(d) Healing in bone fracture.

(MICROBIOLOGY)

6. (a) Elisa.
(b) Microbiology of wound infection.
(c) Anaerobic culture methods.
(d) WIDAL test.

SEPTEMBER 2002

[KH 351]

M.D.S. DEGREE EXAMINATION

(Revised Regulations)

Part I

Paper I – APPLIED BASIC SCIENCES

Time : Three hours

Maximum : 180 marks

Answer each subject in a separate answer book.

Answer briefly any THREE short notes in each subject.

All questions carry equal book.

(ANATOMY)

1. (a) Temporo Mandibular joint.
(b) Soft Palate.
(c) Motor Speech Area.
(d) Maxillary Antery.

(PHYSIOLOGY)

2. (a) Neurohormones.
(b) Formation of Lymph.
(c) Glycosuria.
(d) Functions of Trigeminal Nerve.

(BIOCHEMISTRY)

3. (a) Flurosis.
(b) Scurvy.
(c) Respiratory acidosis.
(d) Classification of jaundice.

(PHARMACOLOGY)

4. (a) Drugs in myocardial infarction.
(b) Expectorants.
(c) Uses of opioids in dentistry.
(d) Role of diuretics in hypertension.

(PATHOLOGY)

5. (a) Fate of thrombus.
(b) Healing in bone fracture.
(c) Vascular changes in acute inflammation.
(d) Human Papilloma virus and neoplosia.

(MICROBIOLOGY)

6. (a) Sterilization by chemical agents.
(b) Laboratory diagnosis of streptococcal infection
(c) Serologic markers for HBV infection.
(d) Mechanism of drug resistance.

APRIL 2003

[KI 351]

Sub. Code : 9000

M.D.S. DEGREE EXAMINATION

(Revised Regulations)

Part I

Paper I – APPLIED BASIC SCIENCES

Time : Three hours

Maximum : 180 marks

Answer each subject in a separate answer book.

Answer briefly any THREE short notes in each subject.

All questions carry equal book.

(ANATOMY)

1. (a) Innervation and muscles of Tongue.
(b) Thoracic Duct.
(c) Hyoid Arch.
(d) Circle of WILLIS.

(PHYSIOLOGY)

2. (a) Artificial respiration.
(b) Glomerular filtration.
(c) Digestion of carbohydrates.
(d) Division of Autonomic Nervous System.

(BIOCHEMISTRY)

3. (a) Hyperkalimea.
(b) Cholecalciferol.
(c) Vitamin K.
(d) Bilirubinemias.

(PHARMACOLOGY)

4. (a) Lignocaine.
(b) Anti pseudomonal penicillins.
(c) Chlorhexidine.
(d) Ibuprofen.

(PATHOLOGY)

5. (a) Endogenous pigments.
(b) Acquired Immunity.
(c) Healing by second intention.
(d) Metaplasia.

(MICROBIOLOGY)

6. (a) Toxins of Streptococci.
(b) Gaseous Disinfectants.
(c) Coagulase test.
(d) Pathogenesis of tetanus.

OCTOBER 2003

[KJ 351]

Sub. Code : 9000

**M.D.S. DEGREE EXAMINATION
(Revised Regulations)**

Part I

Paper I – APPLIED BASIC SCIENCES

Time : Two hours

Maximum : 90 marks

Theory : One hours

Theory : 30 marks

M.C.Q : One hours

M.C.Q : 60 marks

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

**Answer each subject in a SEPARATE answer book.
Answer briefly any THREE short notes in each subject.
All questions carry equal book.**

SECTION A

(ANATOMY)

(3 x 5 = 15)

1. (a) Lingual artery.
- (b) Inferior alveolar nerve.
- (c) Spheno mandibular ligament.
- (d) Development of palate.

(PHYSIOLOGY)

(3 x 5 = 15)

2. (a) Draw and label a normal E.C.G. Define and describe the different waves of E.C.G.
- (b) Deglutition : Define and describe the different phases of deglutition.
- (c) Define Tubular maximum for Glucose (TMG)
What is the normal value? Mention the other substances which have Tubular maximum (Tm).
- (d) What is meant by Excitation-contraction coupling? Explain the mechanism.

OCTOBER 2003

[KJ 351]

Sub. Code : 9000

**M.D.S. DEGREE EXAMINATION
(Revised Regulations)**

Part I

Paper I – APPLIED BASIC SCIENCES

Time : Two hours

Maximum : 60 marks

Theory : Two hours

Theory : 60 marks

**Answer each subject in a SEPARATE answer book.
Answer briefly any THREE short notes in each subject.
All questions carry equal book.**

SECTION B

(BIOCHEMISTRY)

(3 x 5 = 15)

1. (a) LDH (Lactic acid Dehydrogenase).
(b) Urea formation in the body.
(c) Inborn errors in Tyrosine metabolism.
(d) Hydrogen ion concentration (pH).

(PHARMACOLOGY)

(3 x 5 = 15)

2. (a) Lignocaine.
(b) Parental route of administration.
(c) Frusemide.
(d) Oral antifungal agents.

(PATHOLOGY)

(3 x 5 = 15)

3. (a) Phagocytosis.
(b) Fate of thrombus.
(c) Spread of tumours.
(d) Pathologic calcification.

(MICROBIOLOGY)

(3 x 5 = 15)

4. (a) Surface active agents.
(b) Gram negative bacterial cell wall.
(c) Human immuno deficiency virus.
(d) Type III hypersensitivity reaction.

APRIL 2004

[KK 351]

Sub. Code : 9000

**M.D.S. DEGREE EXAMINATION
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Part I

Paper I – APPLIED BASIC SCIENCES

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Maximum : 90 marks

Theory : One hours

Theory : 30 marks

M.C.Q : One hours

M.C.Q : 60 marks

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**Answer each subject in a SEPARATE answer book.
Answer briefly any THREE short notes in each subject.
All questions carry equal book.**

SECTION A

(ANATOMY)

(3 x 5 = 15)

1. Structures short notes :

- (a) First pharyngeal arch.
- (b) Functions of temporomandibular joint.
- (c) Circulus arteriosus.
- (d) Innervation of tongue.

(PHYSIOLOGY)

(3 x 5 = 15)

- 2. (a) Effects of platelet deficiency on the bleeding time and clot retraction.
- (b) Role of intralobular ducts in the secretion of saliva.
- (c) Trace the pathway for taste.
- (d) Cardio vascular adjustments in response to severe hemorrhage.

AUGUST 2004

[KL 351]

Sub. Code : 9000

**M.D.S. DEGREE EXAMINATION
(Revised Regulations)**

Part I

Paper I – APPLIED BASIC SCIENCES

Time : Two hours

Maximum : 60 marks

Theory : Two hours

Theory : 60 marks

**Answer each subject in a SEPARATE answer book.
Answer briefly any THREE short notes in each subject.
All questions carry equal book.**

SECTION B

(BIOCHEMISTRY)

(3 x 5 = 15)

1. (a) Outline the steps of urea cycle add a note on its regulation.
(b) Describe the steps of gluconeogenesis in liver.
(c) What are lipoproteins? Describe their composition and functions.
(d) Define pH and buffer.
Mention the buffer systems present in plasma, erythrocytes and urine.

(PHARMACOLOGY)

(3 x 5 = 15)

2. (a) Lignocaine.
(b) Atropine sulfate.
(c) Long acting glucocorticoids.
(d) Calcium preparations.

(PATHOLOGY)

(3 x 5 = 15)

3. (a) Types of shock
(b) Phagocytosis.
(c) Pathogenesis of oedema.
(d) Characteristics of malignancy.

(MICROBIOLOGY)

(3 x 5 = 15)

4. (a) Oral thrush.
(b) Prophylaxis for the control of Hepatitis B virus infection.
(c) Vincent's angina.
(d) VDRL test.

FEBRUARY 2005

[KM 351]

Sub. Code : 9000

**M.D.S. DEGREE EXAMINATION
(Revised Regulations)**

Part I

Paper I – APPLIED BASIC SCIENCES

Time : Two hours

Maximum : 90 marks

Theory : One hours

Theory : 30 marks

M.C.Q : One hours

M.C.Q : 60 marks

**M.C.Q. must be answered SEPARATELY on the
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**Answer each subject in a SEPARATE answer book.
Answer briefly any THREE short notes in each subject.
All questions carry equal book.**

SECTION A

(ANATOMY)

(3 x 5 = 15)

1. (a) Hyoglossus muscle and its relations.
- (b) Microscopic structure of palatine tonsil.
- (c) Pharyngeal arches and its derivatives.
- (d) Cavernous sinus.

(PHYSIOLOGY)

(3 x 5 = 15)

2. (a) Describe coagulation of blood.
- (b) Acromegaly.
- (c) Respiratory centres.
- (d) Describe pathway for pain..

MARCH 2007

[KQ 351]

Sub. Code : 9000

**M.D.S. DEGREE EXAMINATION
(Revised Regulations)**

Part I

Paper I – APPLIED BASIC SCIENCES

Time : Two hours

Maximum : 60 marks

Theory : Two hours

Theory : 60 marks

**Answer each subject in a SEPARATE answer book.
Answer briefly any THREE short notes in each subject.
All questions carry equal book.**

SECTION B

(BIOCHEMISTRY)

(3 x 5 = 15)

1. (a) Use of blood urea in assessment of kidney function.
(b) Lipid absorption from the intestine.
(c) Caloric values for carbohydrates, fats and proteins.
(d) Clinical interpretation of serum cholesterol levels.

(PHARMACOLOGY)

(3 x 5 = 15)

2. (a) Preanaesthetic medication.
(b) Drug antagonism.
(c) Sulfonylureas.
(d) Extended spectrum penicillins.

(PATHOLOGY)

(3 x 5 = 15)

3. (a) Factors involved in delay in wound healing.
(b) Granuloma.
(c) Virchow's triad.
(d) Cancer suppressor genes.

(MICROBIOLOGY)

(3 x 5 = 15)

4. (a) Autoclave.
(b) Acute ulcerative gingivitis.
(c) Common anaerobic infections.
(d) Modes of transmission of Hepatitis B infection.
