MARCH 2007

[KQ 204] Sub. Code : 2210

M.S. DEGREE EXAMINATION.

Branch I — General Surgery

(Candidates admitted from 2004–05 onwards)

Paper I — APPLIED BASIC SCIENCES IN GENERAL SURGERY

Time : Three hours Maximum : 100 marks

Theory : Two hours and twenty minutes Theory : 60 marks

M.C.Q. : Forty minutes M.C.Q. : 40 marks

Answer any TWO short notes in each subject.

All questions carry equal marks.

(ANATOMY)

1. (a) The mesentry (2 × 5 = 10)
   (b) Palmar spaces
   (c) Blood supply of thyroid gland.

(PHYSIOLOGY)

2. (a) Blood brain barrier. (2 × 5 = 10)
   (b) Safety factors that prevent oedema.
   (c) Abnormalities of micturition.

(BIOCHEMISTRY)

3. (a) Maco polysaccharides. (2 × 5 = 10)
   (b) Phospholipids.
   (c) Metabolic acidosis.

(PHARMACOLOGY)

4. (a) Clindamycin (2 × 5 = 10)
   (b) Betalactamase inhibitors.
   (c) Sclerosing agents.

(MICROBIOLOGY)

(2 × 5 = 10)

5. (a) Biomedical waste management.
   (b) Prophylaxis of tetanus.
   (c) Tumour antigens.

(PATHOLOGY)

(2 × 5 = 10)

6. (a) Factors influencing wound healing.
   (b) Mechanism of metastasis.
   (c) Hypertrophic cardiomyopathy.

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SEPTEMBER 2007

[KR 206] **Sub. Code : 2214**

M.S. DEGREE EXAMINATION.

Branch I — General Surgery

(Candidates admitted from 2004–05 onwards)

Paper I — APPLIED BASIC SCIENCES IN GENERAL SURGERY

Time : Three hours Maximum : 100 marks

Theory : Two hours and twenty minutes Theory : 60 marks

M.C.Q. : Forty minutes M.C.Q. : 40 marks

Answer any TWO short notes in each subject.

All questions carry equal marks.

ANATOMY (2 × 5 = 10)

1. (a) Duodenum
   (b) Anterior triangle of neck
   (c) Blood supply of breast.

(PHYSIOLOGY) (2 × 5 = 10)

2. (a) Gastric secretion
   (b) Blood components
   (c) Exocrine pancreas.

(BIOCHEMISTRY) (2 × 5 = 10)

3. (a) Metabolic alkalosis
   (b) Essential fatty acids
   (c) Biosynthesis of thyroid harmones.

(PHARMACOLOGY) (2 × 5 = 10)

4. (a) Adriamycin
   (b) Cefazolin
   (c) Local anaesthetics.

(MICROBIOLOGY) (2 × 5 = 10)

›bactor pylori

:itis-B

(c) BCG vaccine

(PATHOLOGY) (2 × 5 = 10)

6. (a) FNAC
   (b) Acute transplant rejection
   (c) Rhabdomyosarcoma.

———————

March 2008

[KS 206] **Sub. Code : 2214**

M.S. DEGREE EXAMINATION.

Branch I — General Surgery

(Candidates admitted from 2004–05 onwards)

Paper I — APPLIED BASIC SCIENCES IN GENERAL SURGERY

Q.P. Code : 222214

Time : Three hours Maximum : 100 marks

All questions carry equal marks.

I. ANATOMY – Answer any FOUR. (4 × 5 = 20)

(1) Anatomy of recurrent laryngeal nerve

(2) Anatomy of femoral canal

(3) Anatomy of scalp

(4) Sequential anatomy of liver

(5) Anatomy of adrenal gland.

II. PHYSIOLOGY – Answer any FOUR. (4 × 5 = 20)

(1) Exocrine secretions of pancreas

(2) Carcinoid syndrome

(3) Theories of blood coagulation

(4) Pathophysiology of shock

(5) Physiology of thyroid hormones.

III. BIOCHEMISTRY – Answer any THREE. (3 × 5 = 15)

(1) Gastric function test

(2) Blood transfusion

(3) Thyroxin metabolism

(4) Metabolic alkalosis.

IV. PHARMACOLOGY – Answer any THREE. (3 × 5 = 15)

(1) Lignocaine

(2) Proton pump inhibitors

(3) Tamoxifen

(4) Short course chemotherapy – in tuberculosis.

V. MICROBIOLOGY – Answer any THREE. (3 × 5 = 15)

(1) Echinococcus Granulosa

(2) Helicobacter pylori

(3) Gas Gangrene

(4) HIV

VI. PATHOLOGY – Answer any THREE. (3 × 5 = 15)

(1) Wilm's tumour

(2) Trucut biopsy

(3) Crush syndrome

(4) Cystic hygroma.

September 2008

[KT 206] **Sub. Code: 2214**

M.S. DEGREE EXAMINATION

Branch I – General Surgery

Paper I – APPLIED BASIC SCIENCES IN GENERAL SURGERY

(For candidates admitted from 2004-2005 onwards)

Q.P. Code : 222214

Time : Three hours **Maximum : 100 marks**

All questions carry equal marks.

I. ANATOMY – Answer any FOUR : **(4 X 5 = 20)**

1. Anatomy of hand spaces.
2. Anatomy of spleen
3. Blood supply of small intestine.
4. Anatomy of femoral triangle
5. Anomalies of cystic duct.

II. PHYSIOLOGY – Answer any FOUR : **(4 X 5 = 20)**

1. Cholecystokinin
2. GI tract peristalsis.
3. Formation of Gall stones
4. Physiology of adrenal cortex
5. Insulinoma.

III. BIOCHEMISTRY– Answer any THREE : **(3 X 5 = 15)**

1. Hyponatremia.
2. Intralipids.
3. Magnesium**.**
4. Liver function tests.

IV. PHARMACOLOGY– Answer any THREE : **(3 X 5 = 15)**

1. Drugs used against H.Pylori
2. Bupivacaine.
3. Narcotic analgesics**.**
4. H2 blockers.

V. MICROBIOLOGY– Answer any THREE : **(3 X 5 = 15)**

1. Clostridium Tetani.
2. Candida albicans.
3. Entamoeba Histolytica.
4. Interleukin.

V1. PATHOLOGY– Answer any THREE : **(3 X 5 = 15)**

1. Sentinal node Biopsy.
2. Soft tissue sarcoma – grading.
3. Metaplasia.
4. Neurofibroma types.

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March 2009

[KU 206] **Sub. Code: 2214**

M.S. DEGREE EXAMINATION

Branch I – GENERAL SURGERY
(Candidates admitted from 2004-2005 to 2008-2009)
Paper I – APPLIED BASIC SCIENCES IN GENERAL SURGERY
Q.P. Code : 222214

Time : Three hours **Maximum : 100 marks**

All questions carry equal marks

I. ANATOMY – Answer any FOUR : **(4 x 5 = 20)**

1. Anatomy of saphenous system.
2. Anatomy of cervical lymph nodes.
3. Anomalies of thyroglossal tract.
4. Subdiaphragmatic spaces.
5. Anatomy of Inguinal canal.

II. PHYSIOLOGY – Answer any FOUR : **(4 x 5 = 20)**

1. Physiology of peripheral arterial system.
2. Iodine metabolism.
3. Secretion of gastric juice.
4. Surgical physiology of gall bladder.
5. Physiology of micturition.

III. BIOCHEMISTRY– Answer any THREE : **(3 x 5 = 15)**

1. Hypokalemia.
2. Thyroid function tests.
3. Blood urea.
4. Alkaline phospatase.

IV. PHARMACOLOGY– Answer any THREE : **(3 x 5 = 15)**

1. Xylocaine.
2. Antacids.
3. Tamoxifen.
4. Drugs uses in thyrotoxisis.

V. MICROBIOLOGY– Answer any THREE : **(3 x 5 = 15)**

1. Bacteroides.
2. H.Pylori.
3. Mycobacterium tuberculosis.
4. Filariasis.

V1. PATHOLOGY– Answer any THREE : **(3 x 5 = 15)**

1. FNAC.
2. Dysplasia.
3. Lipoma.
4. Carcinoma grading and staging.

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September 2009

[KV 206] **Sub. Code: 2214**

M.S. DEGREE EXAMINATION

Branch I – GENERAL SURGERY
(Candidates admitted from 2004-2005 to 2008-2009)
Paper I – APPLIED BASIC SCIENCES IN GENERAL SURGERY
Q.P. Code : 222214

Time : Three hours **Maximum : 100 marks**

All questions carry equal marks

I. ANATOMY – Answer any FOUR : **(4 x 5 = 20)**

1. Anatomy of triangles of neck.
2. Lymphatic drainage of breast.
3. Anomalies of testicular development.
4. Segmental anatomy of liver.
5. Anatomy of femoral canal.

II. PHYSIOLOGY – Answer any FOUR : **(4 x 5 = 20)**

1. Physiology of saphenous venous system.
2. Exocrine secretion of pancreas.
3. Formation of urinary stones.
4. Physiological effects of splenectomy.
5. Surgical physiology of peritoneum.

III. BIOCHEMISTRY– Answer any THREE : **(3 x 5 = 15)**

1. Calcium.
2. Serum bilirubin.
3. Serum creatinine.
4. Acid phosphatase.

IV. PHARMACOLOGY– Answer any THREE : **(3 x 5 = 15)**

1. Ether.
2. Proton pump inhibitors (PPI).
3. NSAIDS (Non steroidal anti-inflammatory drugs).
4. Drugs used in tuberculosis.

V. MICROBIOLOGY– Answer any THREE : **(3 x 5 = 15)**

1. Pseudomonas aeruginosa.
2. Clostridium welchii.
3. Mycobacterium leprae.
4. Echinococcosis.

V1. PATHOLOGY– Answer any THREE : **(3 x 5 = 15)**

1. Biopsy.
2. Anaplasia.
3. Dermoid cyst.
4. Malignant melanoma staging.

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March 2010

[KW 206] **Sub. Code: 2214**

M.S. DEGREE EXAMINATION

Branch I – GENERAL SURGERY

Common to
Paper I - (for candidates admitted from 2004-05 to 2007-08) and
Part I - (for candidates admitted from 2008-2009 onwards)
APPLIED BASIC SCIENCES IN GENERAL SURGERY
Q.P. Code : 222214

Time : Three hours **Maximum : 100 marks**

Answer All questions
Draw suitable diagrams wherever necessary

I. ANATOMY **(4 x 5 = 20)**

1. Anatomy of parathyroids
2. Anatomy of oesophago gastric junction.
3. Subdiaphragmatic spaces.
4. Anatomy of perforator system in the leg.

II. PHYSIOLOGY **(4 x 5 = 20)**

1. Neuro humoral mechanism of acid secretion in stomach.
2. Wound healing – factors influencing.
3. Liver function tests.
4. Pathophysiology of shock in acute burns.

III. BIOCHEMISTRY **(3 x 5 = 15)**

1. Insulin metabolism.
2. Hypokalemia.
3. Glucose tolerance test.

IV. PHARMACOLOGY **(3 x 5 = 15)**

1. Drugs used against H.pylori.
2. 5-fluro uracil.
3. Retroviral drugs.

V. MICROBIOLOGY **(3 x 5 = 15)**

1. Acid fast bacilli.
2. Hepatitis B.
3. Hospital infections.

V1. PATHOLOGY **(3 x 5 = 15)**

1. Sentinel node biopsy.
2. Tumour markers.
3. Compound palmar ganglion.

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[KX 206] September 2010 Sub. Code: 2214

M.S. DEGREE EXAMINATION
Branch I – General Surgery

APPLIED BASIC SCIENCES IN GENERALSURGERY

Paper I - (for candidates admitted from 2004-05 to 2007-08) and
Part I - (for candidates admitted from 2008-2009 onwards)
Q.P. Code : 222214

Time : Three hours **Maximum : 100 marks**

Draw suitable diagram wherever necessary.
Answer ALL questions.

I. ANATOMY **(4 X 5 = 20)**

1. Skin Layers.
2. Waldeyer's Ring.
3. Anatomy of Brachial Plexus.
4. Musculature of tongue.

II. PHYSIOLOGY **(4 X 5 = 20)**

1. Cerebrospinal Fluid.
2. Wound healing.
3. Pancreatic Enzymes.
4. Enterohepatic circulation.

III. BIOCHEMISTRY **(3 X 5 = 15)**

1. Thyroid Hormones.
2. Fluid and electrolyte balance in pyloric stenosis.
3. Metabolic alkalosis.

IV. PHARMACOLOGY **(3 X 5 = 15)**

1. Adriamycin.
2. Chemotherapy of melanoma.
3. Radiomimetic drugs.

V. MICROBIOLOGY **(3 X 5 = 15)**

1. Nosocomial infections.
2. Tetanus.
3. Echinococcosis.

V1. PATHOLOGY **(3 X 5 = 15)**

1. FNAC.
2. Pre-malignant lesions of oral cavity.
3. Mesenteric Cyst.

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May 2011

[KY 206] **Sub. Code: 2214**

M.S. DEGREE EXAMINATION

BRANCH I – GENERAL SURGERY

APPLIED BASIC SCIENCES IN GENERALSURGERY

Q.P. Code : 222214

Time : 3 hours **Maximum : 100 marks**

(180 Min)

Answer ALL questions in the same order.

Write notes on	**Pages (Max.)**	**Time (Max.)**	**Marks (Max.)**
I. ANATOMY			
1. Lymphatic Drainage of Stomach.	3	9	5
2. Carpel tunnel syndrome.	3	9	5
3. Retro Sternal Goiter.	3	9	5
4. Porto Venous Shunts.	3	9	5
II. PHYSIOLOGY			
1. Blood Brain Barrier.	3	9	5
2. Entero hepatic circulation of Bile Salts.	3	9	5
3. Iodine Metabolism.	3	9	5
4. Physiology of micturition.	3	9	5
III. BIOCHEMISTRY			
1. Phospho lipids.	3	9	5
2. Urea Clearance test.	3	9	5
3. Acute intermittent Porphyria.	3	9	5
IV. PHARMACOLOGY			
1. Viral Drugs.	3	9	5
2. Aromatase inhibitors.	3	9	5
3. Gemcitabine.	3	9	5
V. MICROBIOLOGY			
1. Bio-medical Waste Management.	3	9	5
2. HLA typing.	3	9	5
3. Inter Leukins.	3	9	5
VI. PATHOLOGY			
1. Mechanism of Metastasis.	3	9	5
2. Monoclonal anti bodies.	3	9	5
3. Immunohisto Chemistry.	3	9	5

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April 2012

[LA 206] **Sub. Code: 2214**

M.S. DEGREE EXAMINATION

BRANCH I – GENERAL SURGERY

APPLIED BASIC SCIENCES IN GENERALSURGERY

Q.P. Code : 222214

Time : 3 hours **Maximum : 100 marks**

(180 Min)

Answer ALL questions in the same order.

Write notes on	**Pages (Max.)**	**Time (Max.)**	**Marks (Max.)**
I. ANATOMY			
1. Lymphatic drainage of Tongue.	3	9	5
2. Adductor canal	3	9	5
3. Ischiorectal fossa.	3	9	5
4. Histology of skin.	3	9	5
II. PHYSIOLOGY			
1. Chemoreceptors.	3	9	5
2. Components, formation and functions of bile.	3	9	5
3. Plasma proteins.	3	9	5
4. Regulations of salivary secretion.	3	9	5
III. BIOCHEMISTRY			
1. Electrophoresis.	3	9	5
2. Vitamin D and calcium metabolism.	3	9	5
3. Isoenzymes.	3	9	5
IV. PHARMACOLOGY			
1. Proton pump inhibitors.	3	9	5
2. Anticancer antibiotics.	3	9	5
3. Anti-oxidant vitamins.	3	9	5
V. MICROBIOLOGY			
1. Immuno fluorescence technique.	3	9	5
2. Bacterial spores and capsules.	3	9	5
3. Autoclave.	3	9	5
VI. PATHOLOGY			
1. Wilm’s Tumour.	3	9	5
2. Oncogenes.	3	9	5
3. Grading and staging of tumour.	3	9	5

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[LB 206] **OCTOBER 2012** **Sub. Code: 2214**

M.S. DEGREE EXAMINATION

BRANCH I – GENERAL SURGERY

APPLIED BASIC SCIENCES IN GENERAL SURGERY

Q.P. Code: 222214

Time: 3 hours **Maximum : 100 marks**

(180 Min)

Answer ALL questions in the same order.

I. Anatomy	**Pages (Max.)**	**Time (Max.)**	**Marks (Max.)**
1. Layers of scalp.	3	9	5
2. Anal sphincters	3	9	5
3. Perforating veins of lower limb	3	9	5
4. Thyroglossal duct	3	9	5
II. Physiology:			
1. Secretion and functions of Bile.	3	9	5
2. Functions of adrenal gland	3	9	5
3. Factors influencing wound healing	3	9	5
4. Peptides and neuropeptides in the stomach	3	9	5
III. Biochemistry:			
1. Metabolic changes in obesity	3	9	5
2. Tumour markers and its importance .	3	9	5
3. Role of cellulose	3	9	5
IV. Pharmacology:			
1. Neo adjuvant chemotherapy	3	9	5
2. Antibiotics for surgical prophylaxis	3	9	5
3. Tamoxifen – Action and Adverse reaction	3	9	5
V. Micoro Biology:			
1. Bacteria involved in surgical infections	3	9	5
2. Echino coccosis	3	9	5
3. Leprosy – types and lab diagnosis	3	9	5
VI. Pathology:			
1. Cytology and its applications.	3	9	5
2. Pathology of Haemorrhage	3	9	5
3. Pathology in Pyoderma gangrenosum	3	9	5

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[LC 206] **APRIL 2013** **Sub. Code: 2214**

M.S. DEGREE EXAMINATION

BRANCH I – GENERAL SURGERY

APPLIED BASIC SCIENCES IN GENERAL SURGERY

Q.P. Code : 222214

Time: Three Hours **Maximum: 100 marks**

Answer ALL questions in the same order.

Write notes on:

I. ANATOMY **(4 x 5 = 20)**

1. Lymphatic drainage of stomach.
2. Triangles of neck.
3. Waldeyer's ring.
4. Brachial plexus.

II. PHYSIOLOGY **(4 x 5 = 20)**

1. Reflex arc
2. Spinothalamic tract
3. Pituitary hormones
4. Calcium homeostasis

III. BIO-CHEMISTRY **(3 x 5 = 15)**

1. Respiratory alkalosis
2. Gluconeogenesis
3. Synthesis of catecholamines

IV. PHARMACOLOGY **(3 x 5 = 15)**

1. Tacrolimus
2. Loop diuretics
3. Tamoxifen

V. MICROBIOLOGY **(3 x 5 = 15)**

1. MRSA.
2. Gas Gangrene.
3. Tetanus.

VI. PATHOLOGY **(3 x 5 = 15)**

1. Tumor necrosis factor.
2. Thrombocytopenia.
3. Monoclonal antibodies.

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[LD 206] **OCTOBER 2013** **Sub. Code: 2214**

M.S. DEGREE EXAMINATION

BRANCH I – GENERAL SURGERY

APPLIED BASIC SCIENCES IN GENERAL SURGERY

Q.P. Code : 222214

Time: Three Hours **Maximum: 100 marks**

Answer ALL questions in the same order.

Write notes on:

I. ANATOMY **(4 x 5 = 20)**

1. Anatomy of Inguinal canal.
2. Subphrenic spaces.
3. Lymphatic drainage of testis.
4. Thyroglossal cyst.

II. PHYSIOLOGY **(4 x 5 = 20)**

1. Physiological effects of total gastrectomy.
2. Events that occur during Defecation.
3. Functions of spleen.
4. Hyper Parathyroidism.

III. BIO-CHEMISTRY **(3 x 5 = 15)**

1. Synthesis of Thyroid Hormones.
2. Biochemical changes in obstructive Jaundice.
3. KREB's cycle.

IV. PHARMACOLOGY **(3 x 5 = 15)**

1. BEVACIZUMAB.
2. Antibiotic Prophylaxis in surgery.
3. Dopamine and Dolbutamine.

V. MICROBIOLOGY **(3 x 5 = 15)**

1. Helicobacter.
2. Gas Gangrene.
3. Tumour Antigens.

VI. PATHOLOGY **(3 x 5 = 15)**

1. Amoebic liver abscess.
2. Malignant Melanoma.
3. Benign breast Diseases.

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(LI 206) APRIL 2016 **Sub. Code:2214**

M.S. DEGREE EXAMINATION

BRANCH I – GENERAL SURGERY

PAPER I – APPLIED BASIC SCIENCES IN GENERAL SURGERY

Q.P.Code: 222214

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

Write notes on:

I. ANATOMY: **(4 x 5 = 20)**

1. Blood supply of the breast.
2. Anatomy of the triangles of neck.
3. Anomalies of cystic duct.
4. Anatomy of the parathyroid glands.

II. PHYSIOLOGY: **(4 x 5 = 20)**

1. Gastrointestinal peristalsis.
2. Endocrine pancreas.
3. Physiology of salivary secretion.
4. Neurogenic shock.

III.BIO-CHEMISTRY: **(3 x 5 = 15)**

1. Blood urea.
2. Metabolic alkalosis.
3. Renal function tests.

IV. PHARMACOLOGY: **(3 x 5 = 15)**

1. Antithyroid drugs.
2. Tamoxifen.
3. H pylori therapy.

V. MICROBIOLOGY: **(3 x 5 = 15)**

1. HIV.
2. Clostridium tetani.
3. Hospital acquired infection.

VI. PATHOLOGY: **(3 x 5 = 15)**

1. Frozen section biopsy.
2. Papillary carcinoma thyroid.
3. Non hodgkin lymphoma.

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(LJ 206) OCTOBER 2016 **Sub. Code:2214**

M.S. DEGREE EXAMINATION

BRANCH I – GENERAL SURGERY

PAPER I – APPLIED BASIC SCIENCES IN GENERAL SURGERY

Q.P.Code: 222214

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

Write notes on:

I. ANATOMY: **(4 x 5 = 20)**

1. Blood supply of the colon.
2. Anatomy of the femoral canal.
3. Cervical nodes.
4. Surgical anatomy of the spleen.

II. PHYSIOLOGY: **(4 x 5 = 20)**

1. Gastric secretions.
2. Formation of gallstones.
3. GI Peptides.
4. Physiology of peripheral arterial system.

III.BIO-CHEMISTRY: **(3 x 5 = 15)**

1. Hypokalemia.
2. PSA.
3. Thyroxin Metabolism.

IV. PHARMACOLOGY: **(3 x 5 = 15)**

1. Oral hypoglycemic agents.
2. Narcotic analgesics.
3. Combination chemotherapy.

V. MICROBIOLOGY: **(3 x 5 = 15)**

1. Hepatitis ‘C’.
2. Entamoeba histolytica.
3. Pseudomonas aeruginosa.

VI. PATHOLOGY: **(3 x 5 = 15)**

1. Sentinel node biopsy.
2. Hurthle cell carcinoma thyroid.
3. Parotid Tumors.

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(LK 206) MAY 2017 **Sub. Code:2214**

M.S. DEGREE EXAMINATION

BRANCH I – GENERAL SURGERY

PAPER I – APPLIED BASIC SCIENCES IN GENERAL SURGERY

Q.P.Code: 222214

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

Write notes on:

I. ANATOMY: **(4 x 5 = 20)**

1. Blood supply of the stomach.
2. Segmental anatomy of the liver.
3. Surgical anatomy of the recurrent laryngeal nerve.
4. Anatomy of the adrenal gland.

II. PHYSIOLOGY: **(4 x 5 = 20)**

1. Iodine metabolism.
2. Formation of renal stones.
3. Blood coagulation factors.
4. Pathophysiology of shock.

III.BIO-CHEMISTRY: **(3 x 5 = 15)**

1. Hyponatremia.
2. Liver function tests.
3. Alkaline phosphatase.

IV. PHARMACOLOGY: **(3 x 5 = 15)**

1. Retroviral drugs.
2. Monoclonal antibodies.
3. Neoadjuvant chemotherapy.

V. MICROBIOLOGY: **(3 x 5 = 15)**

1. Hepatitis 'B'.
2. Gas gangrene.
3. Staphylococcus infections.

VI. PATHOLOGY: **(3 x 5 = 15)**

1. Trucut biopsy.
2. Tuberculous lymph nodes.
3. Giant cell tumor.

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(LL 206) OCTOBER 2017 **Sub. Code:2214**

M.S. DEGREE EXAMINATION

BRANCH I – GENERAL SURGERY

PAPER I – APPLIED BASIC SCIENCES IN GENERAL SURGERY

Q.P.Code: 222214

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

Write notes on:

I. ANATOMY: **(4 x 5 = 20)**

1. Blood supply, lymphatic supply of stomach.
2. Anatomy of venous drainage of lower limbs.
3. Rectus sheath.
4. Foramen of Winslow.

II. PHYSIOLOGY: **(4 x 5 = 20)**

1. Secretions of pancreas.
2. Parathyroid hormone.
3. Entero- hepatic circulation.
4. Gastro intestinal hormones.

III.BIO-CHEMISTRY: **(3 x 5 = 15)**

1. Blood coagulation factors.
2. Ketone bodies.
3. Mutations.

IV. PHARMACOLOGY: **(3 x 5 = 15)**

1. Bupivacaine.
2. Anti- helicobacter pylori drugs.
3. Aromatase inhibitors.

V. MICROBIOLOGY: **(3 x 5 = 15)**

1. Atypical mycobacteria.
2. Opportunistic infections.
3. Laboratory diagnosis of enteric fever.

VI. PATHOLOGY: **(3 x 5 = 15)**

1. Caseous necrosis.
2. Pathological classification of salivary gland tumors.
3. Pathological classification of testicular tumors.

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(LM 206) MAY 2018 **Sub. Code: 2214**

M.S. DEGREE EXAMINATION

BRANCH I – GENERAL SURGERY

PAPER I – APPLIED BASIC SCIENCES IN GENERAL SURGERY

Q.P.Code: 222214

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

Write notes on:

I. ANATOMY: **(4 x 5 = 20)**

1. Hepatorenal pouch (Morrison's pouch).
2. Flexor Retinaculum.
3. Blood supply of ureter.
4. Cribriform Fascia.

II. PHYSIOLOGY: **(4 x 5 = 20)**

1. Physiological events following major trauma / surgery.
2. Pulmonary functions studies.
3. Metabolic functions of liver.
4. Events in Hemostasis.

III.BIO-CHEMISTRY: **(3 x 5 = 15)**

1. Ketoacidosis.
2. Vitamin D.
3. Urea cycle.

IV. PHARMACOLOGY: **(3 x 5 = 15)**

1. Proton pump inhibitors.
2. Alkylating agents.
3. Sildenafil.

V. MICROBIOLOGY: **(3 x 5 = 15)**

1. KOCH's postulates.
2. Oncogenic Viruses.
3. Chemical agents used in Sterilization.

VI. PATHOLOGY: **(3 x 5 = 15)**

1. Paraneoplastic syndromes.
2. Types of Necrosis.
3. Histological types of Breast Cancer.

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(LN 206) OCTOBER 2018 **Sub. Code: 2214**

M.S. DEGREE EXAMINATION

BRANCH I – GENERAL SURGERY

PAPER I – APPLIED BASIC SCIENCES IN GENERAL SURGERY

Q.P. Code: 222214

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

Write notes on:

I. ANATOMY: **(4 x 5 = 20)**

1. Anatomy of Scalp.
2. Anomalies of cystic artery.
3. Sub diaphragmatic Spaces.
4. Anatomy of brachial Plexuses.

II. PHYSIOLOGY: **(4 x 5 = 20)**

1. Succusentericus.
2. Blood Brain Barrier.
3. Wound healing factors.
4. Pitutary hormones.

III.BIO-CHEMISTRY: **(3 x 5 = 15)**

1. Muco-polysaccharides.
2. Essential Fatty acids.
3. Liver functions tests.

IV. PHARMACOLOGY: **(3 x 5 = 15)**

1. Premedication.
2. Prophylactic antibiotics in surgery.
3. Dopamine and Dobutamine.

V. MICROBIOLOGY: **(3 x 5 = 15)**

1. Helicobacter.
2. Bacteria in surgical infections.
3. HIV.

VI. PATHOLOGY: **(3 x 5 = 15)**

1. Grading up of soft tissue Sarcoma.
2. Anaplasia.
3. Tumor Markers.

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(LO 206) MAY 2019 **Sub. Code: 2214**

M.S. DEGREE EXAMINATION

BRANCH I – GENERAL SURGERY

PAPER I – APPLIED BASIC SCIENCES IN GENERAL SURGERY

Q.P. Code: 222214

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

Write notes on:

I. ANATOMY: **(4 x 5 = 20)**

1. Submandibular salivary gland.
2. Lymphatic drainage of breast.
3. Recurrent laryngeal nerve.
4. Retropharyngeal space.

II. PHYSIOLOGY: **(4 x 5 = 20)**

1. Metabolic response to starvation.
2. Blood grouping.
3. Functions of spleen.
4. Physiology of saphenous system.

III.BIO-CHEMISTRY: **(3 x 5 = 15)**

1. Metabolic alkalosis.
2. Phospholipids.
3. Interleukin.

IV. PHARMACOLOGY: **(3 x 5 = 15)**

1. Tamoxifene.
2. Lignocaine.
3. Radiomimetic drugs.

V. MICROBIOLOGY: **(3 x 5 = 15)**

1. Clostridium Tetani.
2. Hospital infections.
3. HLA typing.

VI. PATHOLOGY: **(3 x 5 = 15)**

1. Sentinel node biopsy.
2. Mechanism of metastasis.
3. Medullary carcinoma of thyroid.

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(LP 206) OCTOBER 2019 **Sub. Code: 2214**

M.S. DEGREE EXAMINATION

BRANCH I – GENERAL SURGERY

PAPER I – APPLIED BASIC SCIENCES IN GENERAL SURGERY

Q.P. Code: 222214

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

Write notes on:

I. ANATOMY: **(4 x 5 = 20)**

1. Arcuvate ligament.
2. Segments of liver.
3. Layers of the skin.
4. Deep cervical fascia.

II. PHYSIOLOGY: **(4 x 5 = 20)**

1. Hyponatremia.
2. Adrenal secretion.
3. Thermo regulation.
4. Iodine metabolism.

III.BIO-CHEMISTRY: **(3 x 5 = 15)**

1. Renal function tests.
2. LDH.
3. Glycolysis.

IV. PHARMACOLOGY: **(3 x 5 = 15)**

1. Proton pump inhibitors.
2. Third generation cephalosporin.
3. Combination chemotherapy.

V. MICROBIOLOGY: **(3 x 5 = 15)**

1. Tetanus.
2. Endotoxin.
3. DNA virus.

VI. PATHOLOGY: **(3 x 5 = 15)**

1. Desmo plastic reaction.
2. Dystrophic calcification.
3. Trophic ulcer.

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[LQ 206] AUGUST 2020 **Sub. Code: 2214**

(MAY 2020 SESSION)

M.S. DEGREE EXAMINATION

BRANCH I – GENERAL SURGERY

PAPER I – APPLIED BASIC SCIENCES IN GENERAL SURGERY

Q.P. Code: 222214

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

Write notes on:

I. ANATOMY: **(4 x 5 = 20)**

1. Blood supply and development of pancreas
2. Discuss the venous drainage of lower limb
3. Carpel tunnel syndrome
4. Musculature and lymphatic drainage of tongue.

II. PHYSIOLOGY: **(4 x 5 = 20)**

1. Central venous pressure
2. Hyperbaric oxygen.
3. Fluid management in burns
4. Thyroid hormones

III.BIO-CHEMISTRY: **(3 x 5 = 15)**

1. Hyperkalemia
2. Metabolic Acidosis.
3. Biochemical changes in Obstructive Jaundice.

IV. PHARMACOLOGY: **(3 x 5 = 15)**

1. Neoadjuvant chemotherapy
2. Chemotherapy of melanoma
3. Tranexamic Acid.

V. MICROBIOLOGY: **(3 x 5 = 15)**

1. Uropathogens
2. Endotoxic shock
3. Clostiridium Perfringes.

VI. PATHOLOGY: **(3 x 5 = 15)**

1. Carcinoma grading and staging.
2. Paraneoplastic syndrome.
3. Immuno histo chemistry.

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[LS 206] NOVEMBER 2020 **Sub. Code: 2214**

(OCTOBER 2020 SESSION)

M.S. DEGREE EXAMINATION

BRANCH I – GENERAL SURGERY

PAPER I – APPLIED BASIC SCIENCES IN GENERAL SURGERY

Q.P. Code: 222214

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

Write notes on:

I. ANATOMY: **(4 x 5 = 20)**

1. Deep cervical fascia and its surgical importance.
2. Segmental anatomy of liver.
3. Palmar spaces of hand.
4. Perforating veins of lower limb.

II. PHYSIOLOGY: **(4 x 5 = 20)**

1. Thyroid hormones- physiology, biosynthesis.
2. Entero-hepatic circulation of bile salts.
3. Neuro-humoral mechanism of acid secretion in stomach.
4. Renal tubular acidosis.

III.BIO-CHEMISTRY: **(3 x 5 = 15)**

1. Hypercalcemia
2. Tumour markers
3. Serum Alkaline Phosphatase

IV. PHARMACOLOGY: **(3 x 5 = 15)**

1. Short course chemotherapy in tuberculosis.
2. Aromatase inhibitors.
3. Parenteral nutrition.

V. MICROBIOLOGY: **(3 x 5 = 15)**

1. Bacteria involved in surgical infections.
2. Necrotising fascitis
3. Filariasis

VI. PATHOLOGY: **(3 x 5 = 15)**

1. Pathological fractures
2. Sterotactic biopsy
3. Carcinoma insitu

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[MS 0721] JULY 2021 **Sub. Code: 2214**

(MAY 2021 SESSION)

M.S. DEGREE EXAMINATION

BRANCH I – GENERAL SURGERY

PAPER I – APPLIED BASIC SCIENCES IN GENERAL SURGERY

Q.P. Code: 222214

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

Write notes on:

I. ANATOMY: **(4 x 5 = 20)**

1. Axilla.
2. Layers of sole of foot.
3. Submandibular triangle.
4. Mesentry.

II. PHYSIOLOGY: **(4 x 5 = 20)**

1. Hypocalcemia.
2. Arterial blood gas.
3. Hyperprolactinemia.
4. Amylase.

III.BIO-CHEMISTRY: **(3 x 5 = 15)**

1. Biochemical parameters in obstructive jaundice.
2. Artificial blood.
3. Parathormone.

IV. PHARMACOLOGY: **(3 x 5 = 15)**

1. Heparin.
2. Doxorubicin.
3. Radioactive Iodine.

V. MICROBIOLOGY: **(3 x 5 = 15)**

1. Microbes in necrotising soft tissue infections.
2. Standard precautions to control infections in health care settings.
3. Human papilloma virus.

VI. PATHOLOGY: **(3 x 5 = 15)**

1. Genetics in colorectal cancer.
2. Frozen section.
3. Chronic pancreatitis.

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

[MS 1121] NOVEMBER 2021 **Sub. Code: 2214**

(OCTOBER 2021 SESSION)

M.S. DEGREE EXAMINATION

BRANCH I – GENERAL SURGERY

PAPER I – APPLIED BASIC SCIENCES IN GENERAL SURGERY

Q.P. Code: 222214

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

Write notes on:

I. ANATOMY: **(4 x 5 = 20)**

1. Femoral triangle.
2. Carotid sheath.
3. Popliteal fossa.
4. Para-aortic nodes.

II. PHYSIOLOGY: **(4 x 5 = 20)**

1. Hyperkalemia.
2. Iodide trapping.
3. Micturition.
4. Enterohepatic circulation.

III.BIO-CHEMISTRY: **(3 x 5 = 15)**

1. Cori cycle.
2. Hybridoma.
3. Biomarkers in pancreatitis.

IV. PHARMACOLOGY: **(3 x 5 = 15)**

1. Herceptin.
2. Anti thyroid drugs.
3. Pantoprazole.

V. MICROBIOLOGY: **(3 x 5 = 15)**

1. Gut microbes in inflammatory bowel disease.
2. Gas gangrene.
3. Genetic engineering.

VI. PATHOLOGY: **(3 x 5 = 15)**

1. Hormone receptors.
2. Insulinoma.
3. DCIS-Breast.

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

[MS 0522] **MAY 2022** **Sub. Code: 2214**

M.S. DEGREE EXAMINATION

BRANCH I – GENERAL SURGERY

PAPER I – APPLIED BASIC SCIENCES IN GENERAL SURGERY

Q.P. Code: 222214

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

Write notes on:

I. ANATOMY: **(4 x 5 = 20)**

1. Palmar spaces.
2. Triangles of neck.
3. Anal sphincter.
4. Duodenum.

II. PHYSIOLOGY: **(4 x 5 = 20)**

1. Gastric acid secretion.
2. ARDS.
3. Islet cells of pancreas.
4. Regulation of biliary secretion.

III.BIO-CHEMISTRY: **(3 x 5 = 15)**

1. Hyper calcemia.
2. Biochemical changes in jaundice.
3. Fatty liver syndrome.

IV. PHARMACOLOGY: **(3 x 5 = 15)**

1. Antibiotic prophylaxis in surgery.
2. Somatostatin.
3. Propofol.

V. MICROBIOLOGY: **(3 x 5 = 15)**

1. Anaphylatic shock.
2. Actinomycosis.
3. Cell mediated immunity.

VI. PATHOLOGY: **(3 x 5 = 15)**

1. Auto transfusion.
2. Hypertrophic scar.
3. Toxic shock syndrome.

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

[MS 1022] **OCTOBER 2022** **Sub. Code: 2214**

M.S. DEGREE EXAMINATION

BRANCH I – GENERAL SURGERY

PAPER I – APPLIED BASIC SCIENCES IN GENERAL SURGERY

Q.P. Code: 222214

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

Write notes on:

I. ANATOMY: **(4 x 5 = 20)**

1. Facial Nerve and general surgeon.
2. Ischiorectal fossa.
3. Nerve supply of stomach and its importance.
4. Thoracic duct.

II. PHYSIOLOGY: **(4 x 5 = 20)**

1. Blood – coagulation.
2. Septic shock.
3. Respiration and acid base balance.
4. Functions of thyroid hormones.

III.BIO-CHEMISTRY: **(3 x 5 = 15)**

1. Hypocalcaemia.
2. Hemoglobin synthesis.
3. Serum protein.

IV. PHARMACOLOGY: **(3 x 5 = 15)**

1. Steroids in surgery.
2. Vitamin K.
3. Heparin in Surgery.

V. MICROBIOLOGY: **(3 x 5 = 15)**

1. Opportunistic infection.
2. Post operative fever.
3. Hepatitis C Virus.

VI. PATHOLOGY: **(3 x 5 = 15)**

1. Gas gangrene.
2. Air embolism.
3. GIST.

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

[MS 0723] **JULY 2023** **Sub. Code: 2214**

(MAY 2023 EXAM SESSION)

M.S. DEGREE EXAMINATION

BRANCH I – GENERAL SURGERY

PAPER I – APPLIED BASIC SCIENCES IN GENERAL SURGERY

Q.P. Code: 222214

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

Write notes on:

I. ANATOMY: **(4 x 5 = 20)**

1. Lymphatic drainage of the stomach.
2. Deep cervical fascia.
3. Cartilages of Larynx.
4. Layers of the sole.

II. PHYSIOLOGY: **(4x5=20)**

1. Blood Brain Barrier.
2. Functions of the spleen.
3. Gastrointestinal peristalsis.
4. Physiology of deglutition.

III. BIO CHEMISTRY: **(3x5=15)**

1. Diabetic Ketoacidosis.
2. RT-PCR.
3. Molecular analysis in colorectal carcinoma.

IV.PHARMACOLOGY: **(3x5=15)**

1. EMLA.
2. Targeted therapy.
3. Total Parenteral nutrition.

V. PATHOLOGY **(3x5=15)**

1. Immunohistochemistry in tumours.
2. Classification of surgical wounds.
3. Carcinoids.

VI. MICROBIOLOGY: **(3x5=15)**

1. Atypical Mycobacteria.
2. H.pylori.
3. Synergistic spreading gangrene

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

[MS 1223] **DECEMBER 2023** **Sub. Code: 2214**

(OCTOBER 2023 EXAM SESSION)

M.S. DEGREE EXAMINATION

BRANCH I – GENERAL SURGERY

PAPER I – APPLIED BASIC SCIENCES IN GENERAL SURGERY

Q.P. Code: 222214

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

Write notes on:

I. ANATOMY: **(4 x 5 = 20)**

1. Blood supply of large bowel.
2. Femoral triangle.
3. Surgical anatomy of rectus sheath.
4. Muscles of the tongue.

II. PHYSIOLOGY: **(4 x 5 = 20)**

1. Enterohepatic circulation.
2. Micturition reflex.
3. Pituitary hormones.
4. Physiology of saphenous venous system.

III. BIO CHEMISTRY: **(3 x 5 = 15)**

1. Diabetic Ketoacidosis.
2. Metabolic markers in obesity.
3. Hyperthyroidism.

IV. PHARMACOLOGY: **(3 x 5 = 15)**

1. Proton pump inhibitors.
2. Fluoroquinolones.
3. Premedication.

V. PATHOLOGY: **(3 x 5 = 15)**

1. ANDI.
2. Necrosis.
3. Frozen section.

IV. MICROBIOLOGY: **(3 x 5 = 15)**

1. Gas gangrene.
2. Oncogenic viruses.
3. Sterilization techniques.

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