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

[MS 0524] **MAY 2024** **Sub. Code: 4001**

M.S. DEGREE EXAMINATION

BRANCH I – GENERAL SURGERY

PAPER I – BASIC SCIENCES

Q.P. Code: 224001

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

Write notes on:

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

1. Mesentery.
2. Palmar spaces.
3. Retropharyngeal space.
4. Segments of Liver.

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

1. Gastrointestinal tract peristalsis.
2. Gall stones.
3. Iodine metabolism.
4. Cerebrospinal fluid.

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

1. Blood transfusion.
2. Hyponatremia.
3. Glucose tolerance test.

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

1. Radiomimetic drugs.
2. Adriamycin.
3. Antibiotics for Surgical prophylaxis.

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

1. Carcinoma Grading and Staging.
2. Premalignant lesions of Oral Cavity.
3. Immunohistochemistry.

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

1. Biomedical waste management.
2. Tumour antigen.
3. Hepatitis B.

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

[MS 1224] **DECEMBER 2024** **Sub. Code: 4001**

(OCTOBER 2024 EXAM SESSION)

M.S. DEGREE EXAMINATION

GENERAL SURGERY

PAPER I – BASIC SCIENCES

Q.P. Code: 224001

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

Write notes on:

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

1. Parotid gland.
2. Blood supply and development of pancreas.
3. Circle of Willis.
4. Ischiorectal fossa.

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

1. Functions of spleen.
2. Physiological events following surgery.
3. Hyperbaric oxygen.
4. Calcium homeostatis.

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

1. Biochemical abnormalities in pyloric stenosis.
2. Hypokalemia.
3. Warburg Effect.

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

1. Antituberculous therapy.
2. Gemcitabine.
3. Warfarin.

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

1. Paraneoplastic syndrome.
2. Types of necrosis.
3. Lymphoma.

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

1. Rabies.
2. HLA typing.
3. Post exposure prophylaxis for HIV.

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

[MS 0525] **MAY 2025** **Sub. Code: 4001**

M.S. DEGREE EXAMINATION

GENERAL SURGERY

PAPER I – BASIC SCIENCES

Q.P. Code: 224001

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

Write notes on:

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

1. Laparoscopic anatomy of inguinal region.
2. Triangles of Neck.
3. Blood supply of oesophagus.
4. Anorectal malformations.

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

1. Calcium homeostasis.
2. Functions and regulation of exocrine pancreatic secretion.
3. Hypovolemic shock.
4. Enterohepatic circulation of bile.

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

1. Thyroid function test.
2. Tumour markers.
3. Metabolic acidosis.

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

1. Immunomodulators.
2. Sclerosing agents.
3. Medical treatment of ulcerative colitis.

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

1. Multiple endocrine neoplasia.
2. Polyps of colon.
3. Sentinel lymph node biopsy.

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

1. Pseudo membranous colitis.
2. Sterilisation of laparoscopic equipment.
3. Gas gangrene.

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

[MS 1025] **OCTOBER 2025** **Sub. Code: 4001**

M.S. DEGREE EXAMINATION

GENERAL SURGERY

PAPER I – BASIC SCIENCES

Q.P. Code: 224001

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

Write notes on:

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

1. Deep cervical fascia and its surgical importance.
2. Sphincter complex of Boyden.
3. Lattissimus dorsi.
4. Waldeyer's ring.

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

1. Complications of massive blood transfusion.
2. Verner Morrison syndrome.
3. Metabolic acidosis.
4. Events during defecation.

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

1. Liver function test.
2. Biomarkers in acute pancreatitis.
3. Lactate dehydrogenase.

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

1. H. Pylori regime.
2. Tamoxifen.
3. Tranexamic acid.

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

1. Tumor lysis syndrome.
2. Sentinel node biopsy.
3. Gleason grading.

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

1. Human papilloma virus.
2. Culture medium for tuberculous bacteria.
3. Tetanus.

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

[MS 0526] **MAY 2026** **Sub. Code: 4001**

M.S. DEGREE EXAMINATION

GENERAL SURGERY

PAPER I – BASIC SCIENCES

Q.P. Code: 224001

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

Write notes on:

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

1. Lymphatic drainage of stomach.
2. Popliteal fossa.
3. Factors preventing rectal prolapse.
4. Branchial cyst.

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

1. Iodine metabolism and its significance.
2. Functions and regulation of gastric secretion.
3. Septic shock.
4. Different types of jaundice.

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

1. Total parenteral nutrition.
2. Serum amylase.
3. Massive blood transfusion.

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

1. Immunomodulators.
2. Sclerosing agents used in varicose vein treatment.
3. Medical treatment of ulcerative colitis.

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

1. Marjolin’s ulcer.
2. Adenoma carcinoma sequence.
3. Cystic hygroma.

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

1. Immunohistochemistry.
2. Echinococcus granulosus.
3. Hospital acquired infection.

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