

[LN 1018]

OCTOBER 2018

Sub. Code: 1701

**M.Sc. CRITICAL CARE TECHNOLOGY EXAMS
FIRST YEAR
PAPER I – APPLIED ANATOMY & PHYSIOLOGY RELATED TO
CRITICAL CARE**

Q.P. Code: 281701

Time: Three hours

Maximum: 100 Marks

I. Elaborate on: **(2 x 20 = 40)**

1. List out the muscles of thorax. Give details of accessory muscles of respiration.
2. Describe the structure of Nephron. Explain Renal Function Tests.

II. Write notes on: **(10 x 6 = 60)**

1. Cerebro Spinal Fluid.
2. Danger space of scalp.
3. Digestion of food in the stomach.
4. Golgi complex.
5. Electrocardiogram.
6. Bronchopulmonary segments.
7. Phagocytosis.
8. Extraocular muscles.
9. Lacrimal apparatus.
10. Cartilages of larynx.

[LO 0519]

MAY 2019

Sub. Code: 1701

**M.Sc. CRITICAL CARE TECHNOLOGY EXAMS
FIRST YEAR
PAPER I – APPLIED ANATOMY & PHYSIOLOGY RELATED TO
CRITICAL CARE**

Q.P. Code: 281701

Time: Three hours

Maximum: 100 Marks

I. Elaborate on: **(2 x 20 = 40)**

1. Describe the Coronary Circulation. Describe etiology, clinical features and management of Acute Myocardial Infarction.
2. Define the types of Respiratory Failure. Describe Acute Respiratory Distress Syndrome in detail.

II. Write notes on: **(10 x 6 = 60)**

1. Circle of Willis.
2. Draw the Pain Pathway.
3. Explain the Renal Function Tests.
4. Describe the waves of the Normal Electrocardiogram.
5. Brain Death.
6. Lung Volumes and Capacity.
7. Acute Pancreatitis.
8. Homeostasis.
9. Oxygen Delivery Systems.
10. X-ray Features of Tension Pneumothorax.

[LP 1019]

OCTOBER 2019

Sub. Code: 1701

**M.Sc. CRITICAL CARE TECHNOLOGY EXAMS
FIRST YEAR
PAPER I – APPLIED ANATOMY & PHYSIOLOGY RELATED TO
CRITICAL CARE**

Q.P. Code: 281701

Time: Three hours

Maximum: 100 Marks

I. Elaborate on: **(2 x 20 = 40)**

1. Explain the Renal Function Tests. Describe the definition, phases and management of Acute Renal Failure.
2. Describe the anatomy of the Pleura. Enumerate the types of Pneumothorax and Critical Care Management of Tension Pneumothorax.

II. Write notes on: **(10 x 6 = 60)**

1. Resistance and Compliance.
2. Coronary Circulation.
3. Cerebrospinal Fluid.
4. Conduction System of the Heart.
5. Persistent Vegetative State.
6. Lung Volumes and Capacity.
7. Myxedema.
8. Homeostasis.
9. Artificial Airways.
10. ECG findings of Acute Myocardial Infarction.

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

[AHS 0321]

MARCH 2021

Sub. Code: 1701

(OCTOBER 2020 EXAM SESSION)

M.Sc. CRITICAL CARE TECHNOLOGY

FIRST YEAR (From 2017-2018 onwards)

**PAPER I – APPLIED ANATOMY AND PHYSIOLOGY RELATED TO
CRITICAL CARE**

Q.P. Code : 281701

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate notes on:

(2 x 20 = 40)

1. Describe in details about the presenting parts and relations of lung and discuss about the clinical importance.
2. Describe in details about control of arterial blood pressure and heart rate.

II. Write Short Notes on:

(10x6 = 60)

1. Juxtaglomerular apparatus.
2. Surfactant.
3. Parathyroid gland.
4. Cerebrospinal fluid.
5. Nasopharynx.
6. Cardiac output.
7. Circle of Willis.
8. Oxygen–haemoglobin dissociation curve.
9. Diaphragm.
10. Metabolic acidosis.

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

[AHS 0222]

**FEBRUARY 2022
(OCTOBER 2021 EXAM SESSION)**

Sub. Code: 1701

**M.Sc. CRITICAL CARE TECHNOLOGY
FIRST YEAR**

(Candidates admitted from 2017-2018 onwards - Paper I)

(Candidates admitted from 2020-2021 onwards - Paper II)

**PAPER I & II – APPLIED ANATOMY AND PHYSIOLOGY RELATED TO
CRITICAL CARE
Q.P. Code : 281701**

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate notes on: (2 x 20 = 40)

1. Describe in details about the blood supply of Heart and add note its applied aspects.
2. Describe in details about the physiology of respiration and regulation of respiration.

II. Write Short Notes on: (10x6 = 60)

1. Surgical anatomy of trachea
2. Ventilation-Perfusion imbalance
3. Nasal septum
4. Cardiac cycle
5. Hepato-biliary system
6. Lung volumes
7. Intercostal muscles
8. Light reflex
9. Parts & relations of Tongue
10. Intracranial pressure

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[AHS 1022]

OCTOBER 2022

Sub. Code: 1701

M.Sc. CRITICAL CARE TECHNOLOGY

FIRST YEAR

(Candidates admitted from 2017-2018 onwards – Paper - I)

(Candidates admitted from 2020-2021 onwards - Paper - II)

**PAPER I & II – APPLIED ANATOMY AND PHYSIOLOGY RELATED TO
CRITICAL CARE**

Q.P. Code : 281701

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate notes on:

(2 x 20 = 40)

1. Describe in detail about the tracings of pleural reflections and add note on anatomical basis of pleural effusion.
2. Compare the pulmonary and systemic circulations, listing the main differences between them.

II. Write Short Notes on:

(10x6 = 60)

1. Thyroid gland.
2. Laryngopharynx.
3. Brain death.
4. Muscles of tongue.
5. Cardiac arrhythmias.
6. Typical ribs.
7. Hypoxia.
8. Pericardium.
9. Gag reflex.
10. Adrenal gland.
