[MBBS 0221] **FEBRUARY 2021** **Sub.Code :6054**

M.B.B.S. DEGREE EXAMINATION
FIRST YEAR
PAPER II – PHYSIOLOGY

Q.P. Code: 526054

Time: Three hours **Maximum : 100 Marks (80 Theory + 20MCQs)**

Answer All Questions

I. Essay: **(2 x 15 = 30)**

1. Name the functional divisions of the Cerebellum. Describe the structure, connections and functions of cerebellum .Mentions two signs of cerebellar lesions.

2. Describe the Arterial Blood Pressure. Describe nervous regulation of Arterial Blood Pressure.

II. Write notes on: **(10 x 5 = 50)**

1. Chloride Shift.
2. Changes that occur in acclimatization.
3. Draw a normal spirogram and write about the volumes and capacities of lung.
4. Polysomnography.
5. Functions of Hypothalamus.
6. Peculiarities of pulmonary circulation.
7. Hypovolemic Shock.
8. Cardiopulmonary resuscitation.
9. Control of Appetite.
10. Colour vision.

[MBBS 0521] MAY 2021 **Sub.Code :6054**

M.B.B.S. DEGREE EXAMINATION
FIRST YEAR
PAPER II – PHYSIOLOGY

Q.P. Code: 526054

Time: Three hours **Maximum: 100 Marks (80 Theory + 20MCQS)**

Answer All Questions

I. Essay: **(2 x 15 = 30)**

1. Discuss about transport of oxygen in blood. Draw and explain Oxygen – Hemoglobin dissociation curve. Add a note on significance of P_{50}.

2. Enumerate the Ascending tracts of Spinal cord. Explain in detail the pathway for pain. Add a note on Analgesic system.

II. Write notes on: **(10 x 5 = 50)**

1. Dark Adaptation.
2. Baroreceptors.
3. Speech areas and Aphasia.
4. Physiological changes in human body during exercise.
5. Acclimatization at high altitude.
6. Functions of Hypothalamus.
7. Taste pathway.
8. Properties of Cardiac Muscle.
9. Hypoxia and its Types.
10. Otolith Organ.

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

[MBBS 0222] FEBRUARY 2022 **Sub.Code : 6054**

M.B.B.S. DEGREE EXAMINATION

(For the candidates admitted from the Academic Year 2019-2020)

FIRST YEAR

PAPER II – PHYSIOLOGY

Q.P. Code: 526054

Time: Three hours **Maximum: 100 Marks (80 Theory + 20MCQs)**

Answer All Questions

I. Essay: **(2 x 15 = 30)**

1. Explain in detail about the conduction system of heart. Add a note on action potentials of ventricular muscle and pacemaker.

2. Classify synapse. Mention the various properties of synapse. Add a note on central neuro transmitters.

II. Short Notes: **(10 x 5 = 50)**

1. Intrapleural pressure.
2. ODC curve.
3. Renin-angiotensin system.
4. Photo receptors.
5. Tract of Goll and Burdach.
6. Referred pain.
7. Berger's rhythm.
8. Jugular venous pulse.
9. Foetal circulation.
10. Auditory pathway.

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

[MBBS 0522] **MAY 2022** **Sub. Code : 6054**

M.B.B.S. DEGREE EXAMINATION

(For the candidates admitted from the Academic Year 2019-2020)

FIRST YEAR – SUPPLEMENTARY (CBME)

PAPER II – PHYSIOLOGY

Q.P. Code: 526054

Time: Three hours **Maximum: 100 Marks (80 Theory + 20MCQs)**

Answer All Questions

I. Essay: **(2 x 15 = 30)**

1. Define cardiac output. Factors regulating cardiac output. Discuss one method for measuring cardiac output.

2. Discuss about the nuclei, connections and functions of Basal ganglia. Add a note on Parkinson's disease.

II. Short Notes: **(10 x 5 = 50)**

1. Pain pathway.
2. Composition and functions of CSF.
3. Respiratory membrane.
4. Periodic breathing.
5. Features of hypovolemic shock.
6. Non respiratory functions of lung.
7. Muscle spindle.
8. Anterior spino-thalamic tract.
9. Intra-ocular fluids.
10. Rinnes test and its significance.

****

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

[MBBS 0123] **JANUARY 2023** **Sub. Code : 6054**

M.B.B.S. DEGREE EXAMINATION
(For the candidates admitted from the Academic Year 2019-2020)

FIRST YEAR – (CBME)

PAPER II – PHYSIOLOGY

Q.P. Code: 526054

Time: Three hours **Maximum: 100 Marks (80 Theory + 20MCQs)**

Answer All Questions

I. Essay: **(2 x 15 = 30)**

1. A 60 year old man who is a smoker, diabetic was brought to the emergency department with complaints of retrosternal pain radiating to the medial side of the left arm on exertion, palpitation, sweating and shortness of breath.
    a) What is the likely diagnosis?
    b) Discuss the peculiarities and regulation of coronary circulation.
    c) Add a note on cardiac biomarkers specific to the above said condition.

2. Describe the various Respiratory Centres and discuss in detail about the neural regulation of respiration.

II. Write Short Notes on: **(10 x 5 = 50)**

1. Describe the Left ventricular pressure changes in cardiac cycle.
2. Write the factors influencing venous return.
3. Describe the mechanism of CO_2 transport in blood.
4. What are the non-respiratory functions of lung?
5. Mention the differences between REM and NREM sleep.
6. What is Brown-Sequard syndrome? Write its clinical features.
7. What are the functions of hypothalamus?
8. Trace the Olfactory pathway
9. Mention the tests of hearing.
10. Write a note on errors of refraction.

****