

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 CO₂ 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.
