

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

[MD 0723]

**JULY 2023
(MAY 2023 EXAM SESSION)**

Sub. Code: 2019

M.D. DEGREE EXAMINATION

BRANCH V – PHYSIOLOGY

**PAPER II – CIRCULATION, RESPIRATION, ENVIRONMENTAL
PHYSIOLOGY, COMPARATIVE PHYSIOLOGY AND EXCRETION**

Q.P. Code: 202019

Time : Three Hours

Maximum : 100 Marks

I. Essay Questions:

(2 x 15 = 30)

1. Explain in detail about Neural Regulation of Respiration. Add a note on Ondine's Curse.
2. Define Glomerular Filtration Rate (GFR) and describe the factors influencing GFR.

II. Short notes:

(10 x 5 = 50)

1. Histotoxic hypoxia.
2. Compliance of Lungs.
3. Physiological dead space.
4. Factors influencing Heart Rate.
5. Speciality of Pulmonary circulation.
6. Distal Tubular events.
7. Cystometrogram.
8. Autoregulation in Myocardial perfusion.
9. Hyperstimulation Nervous Syndrome.
10. Cushing's Reflex.

III. Reasoning Out:

(4 x 5 = 20)

1. Meta arterioles – The seat of peripheral vascular resistance. Reason out.
2. White coat hypertension.
3. Death in AC current shock.
4. Loop diuretics are safe in clinical practice. Reason out.
