

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

[BOT 0921]

SEPTEMBER 2021  
(FEBRUARY 2021 EXAM SESSION)

Sub. Code: 6173

**BOT DEGREE EXAMINATION**  
**FIRST YEAR - (Regulations for the candidates admitted from 2014-2015 onwards)**  
**PAPER III – PHYSIOLOGY**  
*Q.P. Code : 786173*

**Time : Three hours**

**Answer ALL Questions**

**Maximum : 100 Marks**

**I. Elaborate on:**

**(2 x 20 = 40)**

1. Define respiration. Explain in detail the physiology of respiration.
2. Explain the chemical regulation of respiration. Add note on Hypoxia.

**II. Write notes on:**

**(8 x 5 = 40)**

1. Baroreceptor reflex.
2. Describe the phases of gastric juice secretion.
3. Classification of nerve fibres.
4. Give an account on micturition.
5. Hormones regulating calcium homeostasis.
6. Spermatogenesis.
7. Conducting system of the Heart.
8. Excitation-contraction coupling in skeletal muscle.

**III. Short answers on:**

**(10 x 2 = 20)**

1. Functions of mitochondria.
2. Contents of middle ear.
3. Myasthenia gravis.
4. Refractory period.
5. Mention four Peculiarities of coronary circulation.
6. List out two differences between UMN and LMN lesions.
7. What is referred pain?
8. Mention four non respiratory functions of lung.
9. Enumerate heat loss mechanism.
10. Hemophilia.

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