

QP Code:103114

Reg. No.:.....

**PG Degree Regular/Supplementary Examinations in Physiology  
(MD) May 2022**

**Paper III - Physiological Chemistry, Biophysics and Radiation Biology**

**Time: 3 hrs**

**Max marks:100**

- *Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together • Leave sufficient space between answers*
- *Draw table/diagrams/flow charts wherever necessary*

**Essay:**

**(20)**

1. Describe the ionic basis of ventricular action potential. Add a note on the refractory period of cardiac muscle

**Short essays:**

**(8x10=80)**

2. Nigrostriatal pathway
3. Electromyogram
4. Photochemistry of vision
5. Anion gap
6. Physiological changes during slow wave sleep and meditation
7. Gibb's Donnan membrane equilibrium
8. Radiation injuries
9. Physiological functions of Calmodulin

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