

Q.P. Code:302379

Reg. No:.....

**Third Year M.Sc Medical Physiology Degree Supplementary
Examinations March 2021**

**Physiology of Respiration, Renal Physiology, Skin & Temperature Regulation,
Principles of Biophysics as Applied to Physiology**

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 chemical regulation of respiration.

Short Essays:

(8x10=80)

2. Draw a neat diagram of oxygen dissociation curve and explain the factors influencing right shift and left shift. Add note on chloride shift.
3. Describe lung volumes and capacities with their normal values.
4. Composition and functions of surfactant, add a note on clinical significance
5. Describe respiratory membrane and the factors which influence exchange of gases.
6. Define hypoxia and describe types of hypoxia with examples.
7. Types of dialysis and indications
8. Peculiarities of renal circulation and a method to measure renal blood flow
9. Explain counter current multiplier system in loop of henle
