

# **2010 Scheme**

**Q.P. Code: 103001**

**Reg. No.: .....**

## **First Professional MBBS Degree Supplementary Examinations March 2021**

### **Physiology - Paper I**

**Time: 3 Hours**

**Total Marks: 50**

- *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*

**Long essay**

**(10)**

1. A 20 year old boy climbing a mountain suffered from shortness of breath after reaching about 3200m from sea level. Answer the following
  - Define hypoxia
  - Probable cause of hypoxia in this case
  - Characteristic features of different types of hypoxia
  - Treatment of hypoxia
  - Different types of cyanosis and their causes

**(1+1+4+2+2)**

**Short essays**

**(2x5 =10)**

2. Describe the mechanisms of blood coagulation
3. Define cardiac output, cardiac index. Regulation of cardiac output

**Answer briefly**

**(5x3=15)**

4. Transport of CO<sub>2</sub> in blood
5. Factor affecting glomerular filtration rate
6. Functions of bile
7. Iron deficiency anaemia
8. Hering –Breuer reflex

**Draw and label**

**(2x2½ =5)**

9. Normal spirogram
10. Juxtaglomerular apparatus

**Explain the physiological basis of the following**

**(5x2=10)**

11. AV nodal delay
12. Hyperthermia
13. Jaundice
14. Polycythemia at high altitude
15. Myocardial infarction