

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 CO₂ 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