

Total No. of Questions : 12]

[Total No. of Pages : 2

P953

[3844] - 103

I - M.B.B.S

PHYSIOLOGY (Paper - I)

Time : 3 Hours]

[Max. Marks : 100

Instructions to the candidates:

- 1) Answer any five questions from each section.*
- 2) Answers to the two sections should be written in separate answer books.*
- 3) Neat diagrams should be drawn wherever necessary.*
- 4) All questions carry equal marks.*

SECTION - I

- Q1)** Explain the term “Homeostasis”. Describe the negative feedback mechanism with suitable example. Add a note on feedback gain. **[10]**
- Q2)** Enlist the different blood group systems. Describe in detail the ABO blood group system. Add a note on mismatched blood transfusion. **[10]**
- Q3)** Draw a well labeled diagram of skeletal muscle neuromuscular junction. Describe the various steps in transmission of nerve impulse through it. **[10]**
- Q4)** Describe the role of proximal convoluted tubules in the process of urine formation. **[10]**
- Q5)** Write notes on: **[10]**
- a) Thrombocytopenic purpura.
 - b) Rigor mortis.
- Q6)** Write notes on: **[10]**
- a) Facilitated diffusion.
 - b) Micturation reflex.

P.T.O.

SECTION - II

- Q7)** Define cardiac cycle. Describe the ventricular events occurring during cardiac cycle. Add a note on heart sounds. **[10]**
- Q8)** Draw a well labeled diagram of respiratory membrane. Describe the various factors affecting the diffusion of gases across the respiratory membrane. **[10]**
- Q9)** Define blood pressure. Describe the sinoaortic mechanism of blood pressure regulation. **[10]**
- Q10)** Define and classify hypoxia. Describe the causes, bodily effects and physiological basis of treatment of hypoxic hypoxia. **[10]**
- Q11)** Write notes on: **[10]**
- a) P-R interval & its significance.
 - b) Factors affecting heart rate.
- Q12)** Write notes on: **[10]**
- a) Muscles of inspiration.
 - b) Vital capacity.
