



**MBBS FIRST PROFESSIONAL (PART-I)**  
**MODEL PAPER FOR ANNUAL 2009**

**Physiology**  
**(Short Essay Questions)**

Max. Marks 45 Time Allowed 2 hours 15 minutes

1. Compare the features and functions of LYSOSOMES and PEROXISOMES. 5
2. Mr. Ali goes to a hilly area at an altitude of 10,000 feet. What will be the effect on erythropoiesis? Explain the mechanism of this effect. 5
3. Mr. Jamal developed intravascular blood clot. Explain the mechanism of this blood clotting with the help of a sketch. 5
4. Define REFRACTORY PERIOD and its types. What is its mechanism? Give the normal value of ABSOLUTE REFRACTORY PERIOD of the ventricular muscle. 2,2,1
5. What is END-PLATE POTENTIAL? How is it produced? In which disease end-plate potential is of low voltage? 2,2,1
6. A middle aged man riding on a bicycle was hit by a speedy car. He got multiple injuries and fell on the ground. He was taken to emergency department of the hospital after one hour. He was bleeding profusely from wounds. He was drowsy. On examination, radial pulse was rapid and thready. Skin was pale, cold and clammy. Arterial blood pressure was 70/50 mmHg: 5
  - a) Which type of shock was he having?
  - b) Why was radial pulse rapid and thready?
  - c) Why was skin pale, cold and clammy?
  - d) Why was arterial blood pressure low?
7. Draw the NORMAL ELECTROCARDIOGRAM (ECG). Show its waves and intervals. Give TWO changes in the ECG in a patient of ACUTE MYOCARDIAL INFARCTION. 3,2
8. What are PERIPHERAL CHEMORECEPTORS? Give their role in the control of RESPIRATION. 5
9. Give FIVE functions of the SKIN. What are various temperature decreasing mechanisms in the human body? 5