0715 E035

First Year MBBS Examination

I MBBS Physiology Paper 1

Time: 3 hours Max Marks: 50

Date: 06-07-2015

Instructions: 1. Answer to the points. 2. Use separate answer books for each section. 3. Draw diagrams wherever necessary.

Section 1

1. Write briefly on (any two): (10)
   a. Describe the process of diffusion of gases across the respiratory membrane. What is respiratory distress syndrome.
   b. Describe the ECG in lead I What is the significance of PR interval. (556,557)
   c. What is the clinical importance of Rh group. What is erythroblastosisfoetalis. How it is treated?
2. Write briefly on (any two): (6)
   a. What is immunity? Describe cellular immunity.
   b. Functions of plasma proteins.(59)(95)

c. Describe the extrinsic mechanism of initiation of clotting.

3. Write briefly on (any on: (3)
   a. Enumerate the different transport mechanism across the cell membrane. (27)
   b. What is resting membrane potential? How is it produced?
4. Write briefly on (any on: (6)
   a. Describe the functions of proximal convulated tubule. (318)(378)
   b. Describe the micturition reflex (355)(432)
   c. Role of skin in temperature regulation. (367) (273)

Section 2

1. Write briefly on (any two): (10)
   a. Role of baroreceptors in regulation of blood pressure (605) (246)
   b. Describe the production and propagation of cardiac impulse.
   c. What is cardiac output? Describe the factors regulating it. (599)(215)
2. Write briefly on (any two): (6)
   a. Vital capacity (696) (301)
   b. Chemoreceptors(751)(341)
   c. Neurotoxic centers

3. Write briefly on (any on: (3)
   a. Decompression sickness (775)
   b. Respiratory changes during exercise
4. Write answers in two or two sentences (any six): (6)
   a. Angina pectoris
   b. What is anemia?
   c. Homeostasis (38)
   d. Functions of juxtamedullary nephron (379)
   e. Sinus arrhythamia (562)
   f. Cyanosis(763)(354)
   g. Land Steinerâ€™s law
   h. Erythropoitin