

0714 E037

First Year MBBS Examination

I MBBS Physiology Paper 1

Time: 3 hours

Max Marks: 50

Date: 04-07-2014

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. Regulation of respiration (716, 720)
- b. Transport through cell membrane (27)
- c. Action potential in cardiac muscle

2. Write briefly on (any two): (6)

- a. Microcytic hypochromic anemia
- b. Plasma proteins (59)(95)
- c. Explain the mechanism of neuro-muscular transmission with the help of diagram

3. Write briefly on (any one): (3)

- a. Function of juxta-glomerular apparatus
- b. Reticuloendothelial system of the body

4. Write briefly on (any one): (6)

- a. Define GFR; Explain the factors affecting the GFR. (320) (388)
- b. Counter current mechanism (329)(403)
- c. Erythroblastosis foetalis

Section 2

5. Write briefly on (any two): (10)

- a. Long term regulation of blood pressure (605) (246)
- b. Hypoxia (756)
- c. Respiratory chemoreceptor

6. Write briefly on (any two): (6)

- a. Ventricular diastolic phase of cardiac cycle
- b. O₂-Hb dissociation curve (743)(326)
- c. Blood transfusion hazards (144) (171)

7. Write briefly on (any one): (3)

- a. Sleep apnoea syndrome
- b. Physiology of acclimatization (770)(359)

8. Write answers in two or two sentences (any six): (6)

- a. Functional residual capacity (FR)
- b. Frank-Starling law (575)
- c. Turbulent flow
- d. Peripheral resistance
- e. Pacemaker potential (553)
- f. CD4 cells
- g. PR interval (556, 557)
- h. Chloride shift (744)
