

Date: 06-07-2011

0711 E027

First Year MBBS Examination

I MBBS Physiology Paper 1

Time: 3 hours

Max Marks: 50

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

Section 1

1. Give an account of any TWO of the following (10)

- a. Filtration fraction.
- b. Pluripotent hemopoietic stem cells.
- c. Catabolism of hemoglobin.

2. Write Short notes of (any two) (6)

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- a. Platelets.

- b. Erythroblastosis feotalis
- c. Intrinsic clotting pathway

3. Answer any one (3)

- a. Action potential
- b. Secondary active transport

4. Discuss Any TWO (6)

- a. Sodium reabsorption in proximal renal tubule
- b. Cystometrogram
- c. H⁺ ion secretion in DCT

Section 2

5. Write Short notes on (any two) (10)

- a. Cardiac output regulation
- b. Fetal circulation
- c. Uterine circulation

6. Write Short notes on (any two) (6)

- a. Fetal respiration
 - b. Chloride shift
 - c. Chemical regulation of respiration.
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7. Answer any one (3)

- a. Vital capacity
- b. Steps of skeletal muscle contraction

8. Give your comments with justification of Any SIX (6)

- a. GFR auto regulation.
- b. Emphysema and type of acidosis.
- c. Thrombocytopenia in hemorrhagic fever.
- d. Vitamin B12 deficiency in anemia
- e. Liver cirrhosis will cause bleeding tendencies
- f. Graded potential.
- g. Plateau in cardiac action potential.
- h. Cheyne-Stokes breathing.