First M.B.B.S. Examination

/October - 2016

Physiology Paper I

Date:

Time: 2hrs 30 mts

Cade - 3663

Total marks: 50

Instructions: Illegible writing will not fetch marks.

Draw diagrams wherever required.

Answer each section in separate answer book.

## SECTION - I

Q 1) Write notes on any five:

20

- a) Classify anaemia. Write a note on pernicious anaemia.
- b) Definition, indication and complication of blood transfusion.
- c) Definition, origin and phases of action potential.
- d) Sarcotubular system.
- e) Gastric emptying.
- f) Movements of large intestine..

Q 2) Explain in brief any five:

5

- a) Estimation of ESR has less diagnostic and more prognostic importance.
- b) ATP is essential for contraction as well as relaxation of skeletal muscle.
- c) Bile salts are very useful.
- d) Apoptosis has physiologically significant role.
- e) Pancreatic proteolytic enzymes secreted as inactive proenzyme.
- f) Vitamin K deficiency causes prolongation of clotting time and serious haemorrage.

## SECTION - II

Q 3) Write notes on any five:

20

- a) Definition, actions and physiological significance of surfactant.
- b) Lung volumes and capacities.
- c) Buffer systems in the kidney.
- d) Juxtaglomerular apparatus.
- e) Regulation of heart rate.
- f) Give name, cause and duration of waves of normal Electrocardiogram (ECG).

Q 4) Explain in brief any five:

5

- a) Intrapleural pressure is negative.
- b) Cardiac muscle does not show sign of fatigue.
- c) Dead space air is physiologically important.
- d) During exercise venous return increases.
- e) PAH clearance is used to measure renal blood flow.
- f) Glomerular capillary hydrostatic pressure is higher than other systemic capillaries.