



MAK-4650

Seat No. _____

First Year M. B. B. S. Examination

October / November – 2016

Physiology : Paper - I

Time : 3 Hours]

[Total Marks : 50

- Instructions :** (1) Write each section in separate answer books.
(2) Write legibly and precisely.
(3) Draw diagram whenever necessary.

SECTION - I

- 1 Describe structure, functions, catabolism and different varieties of Haemoglobin. 8

OR

- 1 Describe Landsteiner law, Rh System and hazards of mismatched blood transfusion. 8

- 2 Write short notes : 8

(a) Lung Compliance.

OR

(a) Transport of Oxygen in blood.

(b) Bile.

OR

(b) Movements of large intestine.

- 3 (a) What is renal clearance ? Describe clearance based tests for renal function. 5

(b) Explain in a few sentences : 4

(i) RBC size increases in Pernicious anemia.

(ii) Prayer before meal is beneficial.

(iii) Edema develops in renal diseases.

(iv) Salty foods are not advisable for hypertensive patients.

SECTION - II

- 4 Define cardiac output. Describe factors affecting it and methods of its measurement. 8

OR

- 4 Define Heart rate. Describe factors affecting it and its control. 8

- 5 Write short notes : 8

(a) Glomerular filtration rate.

OR

(a) Renal Counter-current mechanism.

(b) Dead Space of lung.

OR

(b) Periodic breathing.

- 6 (a) Describe Respiratory and Cardiovascular changes during exercise. 5

- (b) Explain in a few sentences : 4

(i) Performance of a person mainly depends upon his cardiovascular efficiency not upon his respiratory efficiency.

(ii) 2nd heart sound is markedly split during deep inspiration.

(iii) Surfactant is important at the time of birth.

(iv) Alkaline tide is observed after food intake.