MBBS I (First) Professional Examination 2014-15

Course Code:MBS102 **Paper ID**: 0322205

Physiology -I

Time: 2 Hours 40 Minutes **Max Marks:** 40

Note: Attempt all questions. Draw proper diagrams to support your answer.

Part 'B'

1. a) Describe the functions of plasma proteins. (5)
   b) Write in brief about hemophilia. (5)

2. Discuss the various cardio respiratory changes that occur during exercise. (10)

3. Write short notes on the following: (2.5x4=10)
   a) Powerhouse of the cell
   b) Heart Sounds
   c) Windkessel's effect
   d) Control of gastric juice secretion

4. Define GFR. Describe various factors affecting GFR. (10)

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Roll No. **Student's Name**

Student's Signature **Invigilator's Signature**

Course Code:MBS102 **Paper ID**: 0322205

Physiology - I

Part 'A'

Time: 20 Minutes **Max Marks:** 10

Note: 1. Attempt all questions and return this part of the question paper to the invigilator after 20 Minutes.
2. Please tick (√) correct one only. Cutting, overwriting or any other marking are not allowed.
3. For answering please use Ball- pen only.

muscular
b) Changes in the ... the
c) Tetany
d) Low thyroxin level

Q.2 Conjugation of bilirubin occurs in:
a) Hepatocytes b) Granulocytes
c) Lymphocytes d) Erythrocytes

Q.3 Bleeding in thrombocytopenic purpura usually occurs when platelet count is reduced below:
a) 1.5 lac/cmm b) 75,000/cmm
c) 50,000/cmm d) 25,000/cmm

Q.4. Post-prandial alkaline tide is caused by:
a) Rise in HCO_3 in systemic blood following a meal
b) Loss of HCO_3 in urine
c) Depressed breathing
d) Rise in alveolar pCO_2

Q.5 Choleretic are the substances which causes:
a) Contraction of the gall bladder
b) Increase biliary secretion from the liver
c) Neutralization of acid from the stomach
d) Solubility of fats in micelles

Q.6 Removal of entire colon would be expected to cause:
a) Death
b) Electrolyte imbalance
c) Megaloblastic anaemia
d) Severe malnutrition

Q.7 'a' wave of jugular venous pulse is caused by:
a) Atrial systole
b) Ventricular systole
c) Atrial diastole
d) Ventricular diastole

Q.8 Which of the following is not recorded in ECG:
a) Atrial depolarization
b) Atrial repolarisation
c) Ventricular depolarization

Q.17 Lungs contain enzyme for conversion of:
a) Prorenin to renin
b) Angiotensinogen to angiotensin-I
c) Angiotensin-I to Angiotensin-II
d) Angiotensin-II to Angiotensin-III

Q.18 Role of cholecystokinin is:
a) Contraction of gall bladder
b) Secretion of bicarbonate rich secretion
c) Increases gastric motility
d) Decreases intestinal motility

Q.19 Intracellular fluid is:
a) 50% of total body water
b) 2/3rd of total body water
c) 1/3rd of total body water
d) 25% of total body water

Q.20 Renal blood flow is:
a) 200 ml/min
b) 1200 ml/min
c) 3000 ml/min
d) 1800 ml/min

d) Capillaries

Q.10 ... with ... phenomenon called:
a) Marey's law
b) Cushing reflex
c) Sinus arrhythmia
d Bainbridge reflex

PTO

Q.11 The volume of gas contained in the lung at the end of maximum inspiration is:
a) Functional residual capacity
b) Inspiratory capacity
c) Inspiratory reserve volume
d) Total lung capacity

Q.12 The amount of oxygen carried in blood in the dissolved form is……. ml/100ml of blood per 100mmHg:
a) 3
b) 0.3
c) 0.03
d) Less than 0.03

Q.13 Glucose reabsorption mainly occurs in:
a) Proximal tubule
b) Distal tubule
c) Loop of henle
d) Collecting duct

Q.14 Na+K+pump is required for:
a) Primary active transport
b) Osmosis
c) Exocytosis
d) Diffusion

Q.15 Normal ejection fraction i:
a) 65%
b) 75%
c) 85%
d) 95%

Q.16 Basic functional unit of the kidney is:
a) Bowan`s capsule
b) Glomerulus
c) Malpighian corpuscle
d) Nephron