MBBS I (First) Professional Examination 2015-16

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. Define B.P. Describe the baroreceptor mechanisms for regulation of systemic arterial blood pressure. (2+8)

2. Write short notes on: (3x4=12)
   a) Active transport
   b) Hemostasis
   c) Glomerular filtration rate
   d) Cholecystokinin

3. Compare and differentiate between: (2x4=8)
   a) Fetal hemoglobin and adult hemoglobin
   b) 1st heart sound and 2nd heart sound
   c) Hepatic bile and gall bladder bile
   d) Forced vital capacity and timed vital capacity

4. Briefly describe: (5x2=10)
   a) Mechanisms of HCI secretion
   b) Mechanisms for carbon dioxide transport in blood

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Roll No. **Student's Name**

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

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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.

d) Lymphocyte

Q.2 The condition in which increased number of erythrocyte is called:
a) Thrombocytosis
b) Polycythemia
c) Granulocytosis
d) Reticulocytosis

Q.3 From which one of the following sites, vitamin B_{12} is absorbed:
a) Stomach b) Duodenum
c) Jejunum d) Ileum

Q.4. Hemophilia A is characterized by the deficiency of clotting factor:
a) VII b) VIII
c) IX d) X

Q.5 Immunoglobulin is secreted by:
a) Neutrophil
b) Plasma cells
c) Monocyte
d) Basophil

Q.6 All of the following are components of gastric juice except:
a) Pepsinogen
b) HCL
c) Mucous
d) Gastrin

Q.7 Bile is required for digestion of:
a) Fat
b) Protein
c) Carbohydrate
d) Cellulose

Q.8 Deficiency of which of the following fat soluble vitamins will lead to coagulation defect:
a) A b) D
c) E d) K

Q.9 Which of the following glands contribute maximum % of daily salivary secretion:
a) Parotid
b) Submaxillary

b) Respiratory acidosis
c) Metabolic alkalosis
d) Respiratory alkalosis

Q.18 Which one of the following hormones will cause contraction of gall bladder:
a) Gastrin
b) Cholecystokinin
c) Secretin
d) Insulin

Q.19 P wave of ECG is caused by depolarization of:
a) Depolarization of ventricle
b) Repolarization of ventricle
c) Depolarization of Atria
d) None

Q.20 Voluntary hyperventilation will:
a) Reduce alveolar PO_2
b) Increase alveolar PCO_2
c) Decrease arterial PCO_2
d) Decrease arterial PO_2

b) Internal intercostal
c) Rectus abdominis
d Sternocleidomastoid

Q.11 Cyanosis is produced when concentration of:
a) Total hemoglobin is decreased
b) Methemoglobin is decreased
c) Reduced hemoglobin is increased
d) Oxyhemoglobin is increased

PTO

Q.12 Pulmonary surfactant is required to prevent:
a) Collapse of alveoli
b) High intrapleural pressure
c) Excess expansion of alveoli
d) Entry of microorganisms

Q.13 Which one of the following hormones acts on epithelial cells of collecting duct for water reabsorption:
a) Endothelin I
b) Angiotensin II
c) Aldosterone
d) Vasopressin

Q.14 Stroke volume in healthy adult is around:
a) 180 ml
b) 120 ml
c) 70 ml
d) 40 ml

Q.15 In hypoproteinemia, edema develops due to:
a) High hydrostatic pressure in capaillary
b) Low hydrostatic pressure in interstitium
c) High oncotic pressure in interstitium
d) Low oncotic pressure in capaillary

Q.16 Max rise of the pressure in the ventricle occurs during
a) Atrial systole
b) Isovolumetric contraction
c) Diastasis
d) Protodiastole

Q.17 Severe vomiting leads to:
a) Metabolic acidosis