

MBBS I (First) Professional Examination 2017-18

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’

- Discuss the following: (5x2=10)
 - Short term regulation of blood pressure
 - Digestion and absorption of fats
- Describe in brief: (5x2=10)
 - Excitation contraction coupling in skeletal muscle
 - Erythroblastosis fetalis
- Write in brief: (5x2=10)
 - Surfactant
 - Structure of nephron
- Describe the process of erythropoiesis. Enumerate the factors affecting it. (10)

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Roll No.	Student's Name
<div></div>	<div></div>
Student's Signature	Invigilator's Signature
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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.

- | | |
|----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| Q.1 Power house in the cell is: | a) Deoxyhemoglobin |
| a) Endoplasmic reticulum | b) Carboxyhemoglobin |
| b) Golgi apparatus | c) Carbaminohemoglobin |
| c) Nucleus | d) Reduced hemoglobin |
| d) Mitochondria | |
| Q.2 Glucose is transported across the intestinal mucosa by: | Q.7 Which of the blood vessel has maximum compliance: |
| a) Simple diffusion | a) Arteries |
| b) Facilitated diffusion | b) Veins |
| c) Active transport | c) Arterioles |
| d) Co- transport | d) Capillaries |
| Q.3 When compared to ECF, the ICF has: | Q.8 Pulmonary artery carries deoxygenated blood from: |
| a) High sodium concentration | a) Right atrium |
| b) Low potassium concentration | b) Left atrium |
| c) Equal chloride concentration | c) Right ventricle |
| d) High protein concentration | d) Left ventricle |
| Q.4 Pernicious anemia is an example of: | Q.9 If radius of blood vessel is decreased to half, blood flow will change to: |
| a) Hypochromic anemia | a) 1/2 |
| b) Nutritional anemia | b) 1/4 |
| c) Hemolytic anemia | c) 1/8 |
| d) Hemorrhagic anemia | d) 1/16 |
| Q.5 The first step during hemostasis is: | Q.10 To allow atrial contraction prior to ventricular contraction, cardiac impulse is held up at: |
| a) Platelet plug formation | a) S.A. Node |
| b) Clot formation | b) A.V. Node |
| c) Vasoconstriction | c) Bundle of His |
| d) None of the above | d) Purkinje fibers |
| Q.6 The form of hemoglobin that has CO ₂ attached to it is called as: | |

PTO

- Q.11 Resistance vessels are:
- a) Capillaries
 - b) Veins
 - c) Arterioles
 - d) Arteries
- Q.12 Plateau in the action potential is seen in:
- a) Nerve
 - b) Muscle fiber
 - c) S.A. Node
 - d) None of the above
- Q.13 Inspired air is warmed, moistened and cleaned in all except:
- a) Trachea
 - b) Larynx
 - c) Nose
 - d) Alveoli
- Q.14 One of the following statements is TRUE for alveolar ventilation:
- a) More than pulmonary ventilation
 - b) Same as pulmonary ventilation.
 - c) Less than pulmonary ventilation
 - d) Is a product of tidal volume and respiratory rate
- Q.15 All of the following are TRUE for intra pleural pressure EXCEPT:
- a) It is a negative pressure
 - b) Becomes more negative during inspiration
 - c) Becomes positive during inspiration
 - d) Prevents collapsing of lungs
- Q.16 Pancreatic juice rich in bicarbonates is because of:
- a) Cholecystokinin
 - b) Pancreozymin
 - c) Secretin
 - d) Gastrin
- Q.17 In infants, defecation following a meal is caused by:
- a) Gastroileal reflex
 - b) Gastro colic reflex
 - c) Enterogastric reflex
 - d) Peristalsis
- Q.18 Majority of the water and salts reabsorption occurs in:
- a) Proximal tubule
 - b) Distal tubule
 - c) Loop of Henle
 - d) Collecting tubule
- Q.19 Major source of NH_3 in kidney is:
- a) Glycine
 - b) Glutamate
 - c) Uric acid
 - d) None of the above
- Q.20 Transport maximum for glucose is closest to:
- a) 100 mg
 - b) 180 mg
 - c) 250 mg
 - d) 325 mg