

MBBS I (First) Professional Examination 2016-17**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. Explain the following: (5x2=10)
 - a) Baroreceptor mechanism
 - b) Counter current mechanism
2. Write in brief: (2.5x4=10)
 - a) Oxygen dissociation curve
 - b) T lymphocyte
 - c) Saltatory conduction
 - d) Normal E.C.G.
3. Discuss into following: (5x2=10)
 - a) Prevention of intravascular clotting
 - b) Mechanism of skeletal muscle contraction
4. Describe the following: (5x2=10)
 - a) Functions of liver
 - b) Hypoxia

MBBS I (First) Professional Examination 2016-17**Roll No.**

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Student's Signature

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Course Code:MBS102**Student's Name**

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Invigilator's Signature

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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.2 Which of the following plasma protein is not synthesized in liver:

- a) Albumin
- b) Fibrinogen
- c) Prothrombin
- d) Immunoglobulin

Q.3 Erythroblastosis fetalis has the features of:

- a) Anemia
- b) Jaundice
- c) kernicterus
- d) All of the above

Q.4 Which clotting factor has not been discovered so far?

- a) Factor III
- b) Factor IV
- c) Factor V
- d) Factor VI

Q.5 Normal P-R interval is:

- a) 0.1 second
- b) 0.2 second
- c) 0.16 second
- d) 0.24 second

Q.6 Size of potential in the augmented leads is increased by:

- a) 25%
- b) 50%
- c) 75%
- d) None

Q.7 Cardiac muscle is except:

- a) Striated muscle
- b) Involuntary in nature
- c) Supplied by somatic nerves
- d) Supplied by autonomic nerves

Q.8 Concentration of a gas in a solution is directly proportional to its partial pressure is known as:

- a) Charle's law
- b) Henry's law
- c) Boyle's law
- d) Avogadro's hypothesis

Q.17 Main buffers in tubular fluid is:

- a) Bicarbonates
- b) Proteins
- c) Phosphates
- d) All of the above

Q.18 Normal heart with maximum sympathetic stimulation can increase cardiac output up to:

- a) 10 L
- b) 15 L
- c) 20 L
- d) 25 L

Q.19 P wave of ECG is caused by depolarization of:

- a) Atria
- b) A-V septum
- c) Ventricle
- d) Purkinje fibres

Q.20 Na⁺ - K⁺ pump is inhibited by:

- a) Digitalis
- b) Ouabin
- c) Both a & b are correct
- d) None of the above

Q.10 Lungs act as a reservoir for blood and holds about _____ of blood.

- a) 2-5% of total blood volume
- b) 9-11% of total blood volume
- c) 15-20% of total blood volume
- d) Insignificant blood volume

Q.11 At higher altitude there is:

- a) Decrease in pO₂
- b) Decrease in concentration of oxygen
- c) Both a & b are correct
- d) None of the above

Q.12 Net filtration pressure in glomerular capillaries is:

- a) 10 mmHg
- b) 20 mmHg
- c) 30 mmHg
- d) 40 mmHg

Q.13 Fraction of glomerular filtrate reabsorbed in proximal tubule is:

- a) 35%
- b) 65%
- c) 85%
- d) None of the above

Q.14 Gastric acid secretion is inhibited :

- a) Somatostatin
- b) G.I.P.
- c) Enterogastric reflex I
- d) All of the above

Q.15 Plateau phase of action potential is found in:

- a) S. A. node
- b) Atrial muscle fiber
- c) Ventricular muscle fiber
- d) Skeletal muscle fiber

Q.16 Largest fluid compartment of body is:

- a) Intracellular fluid
- b) Extracellular fluid
- c) Plasma
- d) Blood