BACHELOR OF SCIENCE (PERFUSION TECHNOLOGY) (CBCS – 2022 COURSE)
B.Sc. (Perfusion Technology) Sem - I : WINTER- 2022
SUBJECT : PHYSIOLOGY

Day : Wednesday | Time : 10:00 AM-12:00 PM

Date : 18-01-2023 | **W-25361-2022** | Max. Marks : 10

N.B.

1) There are **THREE** sections as
   Section – A – Objective Type Questions - 10 marks
   Section – B – Long Answer Questions - 20 marks
   Section – C – Short Answer Questions - 10 marks
2) Section A is given in **SEPARATE** sheet and has to be answered on the same sheet. This sheet should be completed with the first 20 minutes of starting of the examination. This sheet with Section A only will be collected by Supervisor.
3) Section B has four long questions and **ANY TWO** questions have to be answered.
4) Section C has six short questions and **ANY FIVE** questions have to be answered.
5) You have to make ☑ such kind of mark in the box of the appropriate answer.

Seat No. _____

SECTION – A

MCQs **(10)**

1) Long refractory period is a property shown by
   a) ☐ Cardiac muscle
   b) ☐ Skeletal muscle
   c) ☐ Single unit muscle
   d) ☐ Smooth muscle
2) All of the following are plasma proteins except
   a) ☐ Albumin
   b) ☐ Globulin
   c) ☐ Fibrinogen
   d) ☐ Myoglobin
3) Which of the following is not a phase of action potential ?
   a) ☐ Depolarisation
   b) ☐ Repolarisation
   c) ☐ Hyperpolarisation
   d) ☐ Resting membrane potential
4) Which of the following is muscle of inspiration ?
   a) ☐ Internal intercostal
   b) ☐ External intercostal
   c) ☐ Latissimus dorsi
   d) ☐ Muscles of anterior abdominal wall

P.T.O.

5) Normal rate of respiration per minute is

a) ☐ 4 -8

b) ☐ 12 – 20

c) ☐ 21 – 28

d) ☐ 30 – 35

6) QRS complex in electrocardiogram is due to

a) ☐ Atrial depolarisation

b) ☐ Atrial repolarisation

c) ☐ Ventricular depolarisation

d) ☐ Ventricular repolarisation

7) Long term mechanism for regulation of blood pressure is

a) ☐ Baroreceptor reflex

b) ☐ Chemoreceptor reflex

c) ☐ CNS ischaemic response

d) ☐ Renin-Angiotensin-Aldosterone mechanism

8) Surface tension lowering agent present in alveoli is

a) ☐ Histamine

b) ☐ Serotonin

c) ☐ Surfactant

d) ☐ Immunoglobulin A

9) Resting membrane potential in skeletal muscle is

a) ☐ - 60 mV

b) ☐ - 90 mV

c) ☐ - 40 mV

d) ☐ - 150 mV

10) Normal cardiac output in healthy adults is

a) ☐ 3 L/min

b) ☐ 5 L/min

c) ☐ 10 L/min

d) ☐ 15 L/min

Total Marks Obtained_____ Signature of Invigilator_____

Signature of Examiner _____

* * * *

BACHELOR OF SCIENCE (PERFUSION TECHNOLOGY) (CBCS – 2022 COURSE)
B.Sc. (Perfusion Technology) Sem - I : WINTER- 2022
SUBJECT : PHYSIOLOGY

Day : Wednesday | Time : 10:00 AM-12:00 PM

Date : 18-01-2023 | **W-25361-2022** | Max. Marks : 30

N.B.

1) There are **THREE** sections as
   Section – A – Objective Type Questions - 10 marks
   Section – B – Long Answer Questions - 20 marks
   Section – C – Short Answer Questions - 10 marks
2) Section B has four long questions and **ANY TWO** questions have to be answered.
3) Section C has six short questions and **ANY FIVE** questions have to be answered.
4) Answer to both the section should be written in the **SAME** answer book.

SECTION – B

Long Answer (Attempt **ANY TWO**) **(20)**

1) Define blood pressure. Enumerate various mechanisms involved in regulation of blood pressure. Describe baroreceptor mechanism in detail.

2) How are the white blood cells classified? Describe structure & functions of various white blood cells.

3) With the help of diagram, describe various volumes & capacities of lungs.

4) Define glomerular filtration rate. Discuss various factors affecting it

SECTION – C

Short Answer (Attempt **ANY FIVE**) **(10)**

1) Enumerate transport mechanisms across cell membrane.

2) State mechanisms of hemostasis.

3) List the functions of surfactant.

4) List the sensations carried by spinothalamic tracts.

5) State functions of saliva.

6) List functions of cerebellum.

* * * *