BACHELOR OF SCIENCE (ANAESTHESIA & OT TECHNOLOGY) (CBCS - 2020 COURSE)
B. Sc. (Anaesthesia & OT Technology) Sem - I : WINTER :- 2021
SUBJECT: PHYSIOLOGY

Day : Friday
Date 18-02-2022

W-23386-2021

Time : 10:00 AM-12:00 PM
Max. Marks: 40

N.B.

1) There are **THREE** section 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 **SEPARATE** sheet and has to be answered on **SAME** sheet. This sheet should be completed within **first 20 minutes** of starting of the examination. The sheet with **section A** will be collected by Supervisor at the end of 20 minutes.
3) You have to make √ such kind of mark in the box of the appropriate answers.
4) There is no negative marking.

Seat No. : _____

SECTION – A

Q.1 Characteristic feature of active transport is _____.

- ☐ does not require energy
- ☐ requires energy
- ☐ it is a downhill process
- ☐ substances move along concentration gradient

Q.2 Normal platelet count is _____.

- ☐ 4000-11000 / mm^3
- ☐ 1.5 lac – 4 lac / mm^3
- ☐ 6 lac – 7 lac / mm^3
- ☐ 1-2 %

Q.3 Neutrophilia occurs in

- ☐ allergic conditions
- ☐ acute bacterial infections
- ☐ chronic bacterial infections
- ☐ parasitic infections

Q.4 If Red Blood Cells are suspended in hypertonic saline, then;

- ☐ Red Blood Cells will shrink
- ☐ Red Blood Cells will swell
- ☐ No change in shape of Red Blood Cells
- ☐ None of the above

PTO

Q.5 Decrease in White Blood Cell count is known as _____ .

- ☐ leucocytosis
- ☐ leucopenia
- ☐ leukemia
- ☐ thrombocytopenia

Q.6 All are plasma proteins, except

- ☐ fibrinogen
- ☐ albumin
- ☐ globulin
- ☐ actin

Q.7 Immediate source of energy for contraction of muscle is _____.

- ☐ ATP
- ☐ Glucose
- ☐ Glycogen
- ☐ Fatty acids

Q.8 Pacemaker of human heart is _____ .

- ☐ Sinoatrial node
- ☐ Atrioventricular node
- ☐ Bundle of His
- ☐ Purkinje fibers

Q.9 Action potential for quiet inspiration is generated by _____.

- ☐ Dorsal respiratory group of neurons
- ☐ Ventral respiratory group of neurons
- ☐ Apneustic center
- ☐ Pneumotaxic center

Q.10 Cause of first heart sound is _____.

- ☐ Opening of Atrioventricular valves
- ☐ Closure of Atrioventricular valves
- ☐ Opening of Semilunar valves
- ☐ Closure of Semilunar valves

Total Marks obtained : _____ Signature of Invigilator

Signature of Examiner

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1) There are **THREE** section 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 answer questions and **ANY TWO** questions have to be answered.
3) Section C has Six short answer questions and **ANY FIVE** questions have to be answered.
4) Section B and C should be written in **SAME** answer sheet.
5) Draw neat diagram wherever necessary.

SECTION – B

Long answer questions (attempt ANY TWO) **(20)**

1) Draw a diagram of Neuromuscular junction. Describe steps in transmission of impulse across Neuromuscular junction.

2) Define cardiac output. Describe various factors that determine cardiac output.

3) Define hypoxia. Enumerate its types. Describe effects of hypoxic hypoxia.

4) Draw and label dorsal column tracts. Enumerate functions of dorsal column tracts.

SECTION – C

Short answer questions (attempt ANY FIVE) **(10)**

1) List functions of surfactant.

2) State functions of platelets.

3) Enumerate functions of saliva.

4) List various plasma proteins in blood.

5) Define glomerular filtration rate.

6) List actions of estrogens.

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