Roll No. Total No. of Pages : 02

Total No. of Questions: 11

B.Sc (Cardiac Care Technology) (Sem.-3)

# ANATOMY AND PHYSIOLOGY OF CARDIOVASCULAR SYSTEM

Subject Code: BCCT-301-21

M.Code: 92687

Date of Examination: 12-12-22

Time: 3 Hrs. Max. Marks: 60

#### **INSTRUCTIONS TO CANDIDATES:**

- 1. SECTION-A is COMPULSORY consisting of EIGHT questions carrying TWO marks each.
- 2. SECTION-B contains EIGHT questions carrying FOUR marks each and students have to attempt any SIX questions.
- 3. SECTION-C will comprise of two compulsory questions with internal choice in both these questions. Each question carries TEN marks.

### **SECTION-A**

- 1. a) What is the difference of SA node and AV node?
  - b) Why blood transfusion cause hypocalcemia?
  - c) Write Fick principle and its equation.
  - d) Write cardiac innervations and its types.
  - e) Write down the mechanical events of the cardiac cycle.
  - f) What is stroke and what is the cause of the stroke?
  - g) What does lymphatic drainage do?
  - h) What are the 5 points of auscultation of the heart?

### **SECTION-B**

2. Write down coagulation definition, coagulation pathways and disorders of the coagulation.

1 M-92687 (S111)-1744

- 3. Write detailed note on the cardiac output. How cardiac output measured and calculated?
- 4. What is hematology? What is difference between the hematologist and hematopathologist?
- 5. What is cardiac output? How it can be measured and what are the factors influencing the cardiac output? Discuss about the Fick's principle.
- 6. What is Cerebral circulation? Describe in detail Anterior cerebral circulation, Posterior cerebral circulation and Venous drainage.
- 7. Describe about systemic circulation.
- 8. Write a note on the structural features of the Atrium and Ventricle.
- 9. What are types of the WBC's and functions?

## **SECTION-C**

10. Define and classify Anaemia. Write a note on blood transfusion.

Or

Write a note on the anatomy and physiology of heart and its parts.

11. Describe about the mechanical events of the cardiac output.

Or

Describe the hepatic portal system.

NOTE: Disclosure of Identity by writing Mobile No. or Marking of passing request on any paper of Answer Sheet will lead to UMC against the Student.

**2** M-92687 (S111)-1744