

Roll No.

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Total No. of Pages : 02

Total No. of Questions : 11

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

ELECTROCARDIOGRAPHY (ECG)

Subject Code : BCCT-304-21

M.Code : 92690

Date of Examination : 19-12-22

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. Answer briefly :**

- a) What is U wave?
- b) What are Transducers?
- c) How to Calibrate ECG?
- d) Differentiate between aortic stenosis based on echo gradients (peak and mean).
- e) Define and draw ECG waveform.
- f) Classification of atrial septal defect.
- g) Define Einthoven's triangle.
- h) Define Pressure half time.

SECTION-B

2. Write about 2-D echocardiography.

3. Define M-mode and give the measurement of Cardiac dimensions taken using M-mode.
4. Give a note on pulse oximeter. How to measure oxygen saturation?
5. Which method of ECG lead is best suited for analyzing rhythm abnormalities? What is complete heart block.
6. **Define the following terms :**
 - Rotation of the heart
 - Rate and rhythm
 - P-R segment.
7. What is Auscultatory gap.
8. Brief discussion on stages of Hypertension.
9. Explain basic principle of ultrasound.

SECTION-C

10. Describe various methods to reduce radiation exposure.

OR

Discuss different types of scanning modes on Medical Ultrasound.

11. Write a note on doppler principle. Write difference between pulse wave doppler and continuous wave doppler?

OR

Describe echocardiographic detection aortic stenosis and constrictive pericarditis.

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.