



**B. Sc. CARDIAC TECHNOLOGY – 2023 BATCH**  
**INTERNAL ASSESSMENT -III**

**Year: II-year**

**Subject Name: Paper II-ADVANCED ECG AND TREADMILL EXERCISE STRESS TESTING AND 24 HOURS AMBULATORY ECG AND BP RECORDINGS**

**Time: 3 hours**

**Subject Code: 801532**

**Maximum: 100 marks**

**Answer all the questions**

**I. Elaborate on**

**10 x 3 = 30**

1. Discuss the ECG findings in ventricular tachycardia. How will you differentiate between ventricular tachycardia and supraventricular tachycardia?
2. How will you set a stress test laboratory? What are the precautions you will take during the test?
3. Discuss about the various types of Heart block.

**II. Write notes on**

**5 x 8 = 40**

1. Discuss about ECG changes in hypokalemia.
2. Discuss about monophasic and biphasic shock.
3. How will you diagnose LVH?
4. Discuss about QT prolongation and its causes.
5. Discuss about ventricular Fibrillation.
6. Discuss about various ECG changes in exercise testing.
7. Normal segments and intervals in ECG.
8. How will Left circumflex infarction manifest on ECG?

**III. Short answers on**

**3 x 10 = 30**

1. Atrial enlargement.
2. Modified Bruce protocol.
3. Connections of Holter.
4. Enumerate three points to diagnose RVH.
5. Enumerate three points to diagnose a malignant VPC.
6. Discuss the applications of Holter.
7. Enumerate the ECG findings in Left anterior hemiblock.
8. Non infarction Q waves.
9. Draw an ECG showing Atrial flutter and mark the salient features.
10. 1. Which of the following statements about defibrillation is *true*?  
A) It is synchronized with the R wave. B) It is used in patients with atrial fibrillation.  
C) It is used in ventricular fibrillation and pulseless VT. D) It uses low energy shocks.
2. Cardioversion is synchronized with which part of the ECG?  
A) P wave B) QRS complex (R wave) C) T wave D) PR interval
3. A 55-year-old patient with atrial flutter and stable blood pressure requires electrical therapy. The preferred management is:  
A) Defibrillation B) Cardioversion (synchronized)  
C) Chest compressions D) Unsynchronized DC shock