

**THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY**

**[AHS 0423]**

**APRIL 2023**

**Sub. Code: 1532**

**B.Sc. CARDIAC TECHNOLOGY**  
**SECOND YEAR (Regulations 2014-2015, 2018-2019 & 2020-2021 onwards)**  
**PAPER II – ADVANCED ECG AND TREADMILL EXERCISE STRESS**  
**TESTING AND 24 HOUR AMBULATORY ECG AND BP RECORDING**  
*Q.P. Code: 801532*

**Time: Three hours**

**Answer ALL Questions**

**Maximum: 100 Marks**

**I. Elaborate on:**

**(3 x 10 = 30)**

1. Discuss various Types of Atrioventricular Blocks (AV Block).
2. Ventricular Arrhythmias – Mechanism and ECG features of Ventricular Tachycardia and Ventricular Fibrillation.
3. Discuss the Patient Preparation and Instructions, Lead systems and Electrocardiographic changes during Treadmill Test.

**II. Write notes on:**

**(8 x 5 = 40)**

1. Left Atrial Enlargement.
2. Tread Mill Dukes score.
3. Torsades de Pointes.
4. Indications for 24 hour Holter monitoring.
5. Repolarisation abnormalities in ECG.
6. DC shock.
7. ECG findings in Left Bundle Branch Block.
8. Advantages and disadvantages of Treadmill Test.

**III. Short answers on:**

**(10 x 3 = 30)**

1. Accelerated Idioventricular Rhythm.
2. Right Ventricular Hypertrophy.
3. Posterior Wall Myocardial Infarction.
4. Draw Normal ECG. Explain the Waves and Intervals.
5. Ventricular couplets.
6. Upslope ST depression in Treadmill Test.
7. Right Atrial enlargement.
8. Non sustained Ventricular Tachycardia.
9. Modified Bruce Protocol.
10. Metabolic Equivalents.

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