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

**[LR 1220] DECEMBER 2020 Sub. Code: 2411**

**(AUGUST 2020 EXAM SESSION)**

**DIPLOMA IN CARDIAC NON-INVASIVE TECHNOLOGY**

**SECOND YEAR – (Regulation from 2014 -2015 & 2018-2019)**

**PAPER I – BASIC CARDIOVASCULAR INVESTIGATIONS**

***Q.P. Code: 842411***

**Time : Three Hours** **Maximum : 100 Marks**

**Answer all Questions**

**I. Elaborate on:** **(3 x 10 = 30)**

1. Discuss the ECG abnormalities in various faulty Lead placements.
2. Discuss in detail about the principles, indications and precautions to be taken during Holter Testing.
3. Discuss in detail about the causes, mechanism and ECG features of Left Bundle branch Block and Right Bundle branch Block.

**II. Write Notes on:** **(10 x 5 = 50)**

1. Explain the steps in interpretation of ECG.
2. Explain the causes of Ventricular Arrhythmias and Atrial Arrhythmias.
3. What are the causes and ECG changes in Right Axis Deviation?
4. Explain the types of ST Depression.
5. Explain about normal Q wave morphology and pathological Q waves.
6. Torsedes de pointes.
7. Describe the ECG findings in Pericardial disorders.
8. Write about Einthoven's triangle.
9. Explain the ECG changes in Left Ventricular Hypertrophy.
10. Electrolyte and Metabolic ECG abnormalities.

**III. Short answers on:** **(10 x 2 = 20)**

1. What is normal Sinus rhythm?
2. What is the influence of Beta blockers on TMT?
3. What is the significance of Osborn wave?
4. Where will you see the U wave prominently in ECG? Does it have any significance?
5. What are the causes of Myocardial Ischemia?
6. What is Sub maximal work load in Tread mill test?
7. What are the ECG changes in Atrial Fibrillation?
8. What are the parts in Tread mill testing Equipment?
9. What is a Rhythm Strip and why is it important?
10. Write about Wiring diagram of Heart.

*******