

**DIPLOMA IN CARDIAC NON-INVASIVE TECHNOLOGY
SECOND YEAR**

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 in detail about the causes, types, morphology and ECG features of atrio ventricular block.
2. Draw the hexaxial reference frame and discuss its applications.
3. Discuss the absolute indications for stopping the TMT test.

II. Write Notes on:

(10 x 5 = 50)

1. Write about Wilson central terminal.
2. Explain the causes of false positive, false negative and positive treadmill test.
3. What are the ECG changes in left anterior and left posterior fascicular block?
4. Discuss the importance of QT interval.
5. Explain about the various methods of calculating heart rate in an ECG.
6. Discuss about the primary and secondary T wave changes.
7. Discuss about standardization and its errors.
8. How will you record a 12 lead ECG and a rhythm strip?
9. Explain the ECG changes in hyperacute phase of myocardial infarction.
10. Discuss the arrhythmias that occur during tread mill test.

III. Short answers on:

(10 x 2 = 20)

1. What is sinus pause and sinus arrhythmia?
2. What is over damping ECG?
3. What are the leads associated with inferior and posterior segments of left ventricle?
4. Describe the morphology of atrial premature beat.
5. What is modified Bruce protocol?
6. What is the normal P wave duration and amplitude in II and V1?
7. What are the causes for ventricular tachycardia?
8. Causes for artefacts in Holter recording.
9. Emergency drugs used in cardiac arrest.
10. What are the ECG changes in Hypothermia?
