

# REPORT ON INTERNSHIP PROGRAM

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## ACCURATE 3 TO 12 LEAD ECG RECONSTRUCTION FOR REMOTE HEALTH CARE MONITORING

### • **Introduction:-**

- Electrocardiography is the process of producing an electrocardiogram , a recording -a graph of voltage

versus time- of the electrical activity of the heart using electrode placed on the skin .This electrode placed on the skin.

- **Main Components:-**

- There are three main component of an ECG:P Wave , which represent the depolarization of the atria , the QRS complex ,which represent the depolarization of the ventricles and the T waves , which represent the repolarization of the ventricles.

- **Medical uses:-**

- Symptoms such as shortness of breath , murmurs , fainting , seizures, arrhythmias including new onset palpitation or monitoring of known cardiac arrhythmias.

- **Working:-**

- The electrode placed in skin detect the small electrical changes that are a consequences or cardiac abnormalities ,

including cardiac rhythm disturbances (such as atrial fibrillation and ventricular tachycardia), inadequate coronary artery blood flow (such as myocardial ischemia and myocardial infarction), and electrolyte disturbances (such as hypokalemia and hyperkalemia). cycle (heartbeat). Changes in the normal ECG pattern occur in numerous cardiac abnormalities, including cardiac rhythm disturbances (such as atrial fibrillation and ventricular tachycardia), inadequate coronary artery blood flow (such as myocardial ischemia and myocardial infarction), and electrolyte disturbances (such as hypokalemia and hyperkalemia).