SYLLABI OF COURSES FOR DIPLOMA PROGRAMME IN MEDICAL ELECTRONICS, LEVEL IV & V

~ <u>~~~~</u>	41	33 - BLEC	TRO	DNIC	C W	OR	KSH	OP &	DRA	WING			
Teaching Schedule Per Week				Progressive			Examination Schedule (Marks)						
Lectures Practical		Credits	Asuessment				Theory			Practical Ex.		Total	
-	4	4	-	4	50)	-	l	- 1	50		100	
Pre-requisite		Source	C.	Semester		The	eory	Test	Tota		PR	Gr Total	
Nil		EXN	Semester		.01	-		-	-	50		50	

COURSE CONTENTS

Miks Hrs

1. ELECTRONIC WORKSHOP

To study and test various types of resistors and potentiometers. Standard values, sizes, typical ratings and applications.

To study and test various types of capacitors Fixed and variable, ceramic, mica, paper, electrolytic, polyester, tantalum, etc., standard values, typical ratings, and

applications.

To study and test types of inductors Sizes, practical ratings, decade inductance box. To study various types of standard diodes Packages, important ratings, testing using

multimeter.

To study various standard transistors Packages, important rating, testing using multimeter, identification of various leads npn and pnp types.

To study typical IC packages

Lentification of pins and IC testing including digital display devices.

To volder a simple circuits and be familiar with various precautions to be taken

d ring soldering. To study various types of transformers Their ratings, sizes and testing.

To design and prepare a PCB for a simple circuit.

To studyvarious types of relays their ratings and testing. Acquainta ce with various components like wires, cables, connectors, mounting

accessor s, tagblocks, heatsinks and their specifications. Acquaintance, with data sheets Of various components like diode, transistor, IC and interpretatics of important specifications.

2. DRAWING

Neat symbols of Various types of R, C, L, diode, transistor, IC.

Various types of wirs, cables, earthling, cell. Battery, fuse, transformer. Generators, Power supplies, Frequency Multipliers, Microphones, Loudspeakers, lamp meters.

- Neat drawings of Basic circuits like biasing circuit, various amplifiers and oscillators. Circuits like clipper, clamper, Integrator, differentiator, halfwave
 - rectifier, full wa : rectifier (single and 3 phase).

Neat symbols of various logic gaus and basic circuits using them

Total

HUMAN RESOURCE & CURRICULUM ENVELOPMENT CEL DIRECTORATE OF TECHNICAL EDN, GOA. VL-XIV, 11-2000