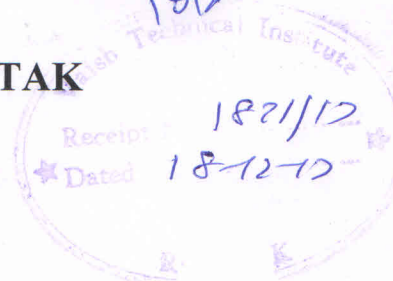


ELECTRONICS DEPARTMENT, VTI ROHTAK

Name of Faculty : Vikas Jain (Theory and Practical)
Discipline : Electronics and Communication
Semester : 6th Sem.
Subject : Medical Electronics
Lesson Plan I : 15 Weeks (From January 2018 to April 2018)

Dr. Anam
 18/12/12



Week	Theory		Practical	
	Lecture Day	Topic (Including Assignment/Test)	Practical Day	Topic
1st	1st	Anatomy and physiology Elementary ideas of cell structure	1st	1. To operate and feminization with: a) B.P. Apparatus b) ECG Machine
	2nd	Heart and circulatory system. Central nervous system		
	3rd	Muscle action Respiratory system		
2nd	4th	Body temperature and reproduction system Overview of Medical Electronics Equipments classification	2nd	2. To measure the concentration of blood sugar with Glucometer (fasting, P.P., Random)
	5th	Application and specifications of diagnostic,		
	6th	Therapeutic and clinical laboratory equipment,		
3rd	7th	Method of operation of these Instruments	3rd	3. To measure the a) Respiration rate b) Pulse rate
	8th	Electrodes, Bioelectric signals,		
	9th	Bio electrodes, Electrode,		
4th	10th	Electrode tissue interface,	4th	4. Installation of small medical equipment in laboratories of Hospital precautions to be taken.
	11th	contact impedance		
	12th	Assignment No. 1 (Unit 1, 2 & 3) Test No. 1		
5th	13th	Types of Electrodes	5th	5. Study of large medical equipment in Hospital / Nursing home.
	14th	Electrodes used for ECG , EEG		
	15th	Transducers		

ELECTRONICS DEPARTMENT, VTI ROHTAK

Name of Facu : Vikas Jain (Theory and Practical)
Dicipline : Electronics and Communication
Semester : 6 TH SEM.
Subject : Medical Electronics
Lesson Plan I : 15 Weeks (From January 2018 to April 2018)

Week	Theory		Practical	
	Lecture Day	Topic (Including Assignment/Test)	Practical Day	Topic
6th	16th	Typical signals from physiological parameters	6th	6. Operation and use of Electro-physiotherapy
	17th	pressure transducer		
	18th	flow transducer temperature transducer,		
7th	19th	pulse sensor, respiration sensor	7th	Experiment No 1 Repeat
	20th	Bio Medical Recorders		
	21st	Block diagram description and application of ECG machin		
8th	22nd	Block diagram description and application of EMG machin	8th	Experiment No 2 Repeat
	23rd	Block diagram description and application of EEG machin		
	24th	Assignment 2 (Unit 4 &5), Test No 2		
9th	25th	Patient Monitoring Systems	9th	Experiment No 3 Repeat
	26th	Heart rate measurement		
	27th	Pulse rate measurement		
10th	28th	Respiration rate measurement	10th	Experiment No 4 Repeat
	29th	Blood pressure measurement		
	30th	Principle of defibrillator and pace mark		

ELECTRONICS DEPARTMENT, VTI ROHTAK

Name of Facu : Vikas Jain (Theory and Practical)
Dicipline : Electronics and Communication
Semester : 6 TH SEM.
Subject : Medical Electronics
Lesson Plan I : 15 Weeks (From January 2018 to April 2018)

Week	Theory		Practical	
	Lectu re Day	Topic (Including Assignment/Test)	Practical Day	Topic
11th	31st	Use of Microprocessor in patent monitoring	11th	Experiment No 5 Repeat
	32nd	Blood Sugar Measurement		
	33rd	Safety Aspects of Medical Instruments		
12th	34th	Gross current shock	12th	Experiment No 6 Repeat
	35th	Micro current shock		
	36th	Special design from safety		
13th	37th	Safety standards.	13th	Hospital No 1 Visit
	38th	Assinment No. 3 (Unit 6 &7) Test No.3		
	39th	Unit 1 Revision		
14th	40th	Unit 2 Revision	14th	Hospital No 2 Visit
	41st	Unit 3 Revision		
	42nd	Unit 4 Revision		
15th	43rd	Unit 5 Revision	15th	Hospital No 3 Visit
	44th	Unit 6 & 7 Revision		
	45th	Full Syllabus Revision		