

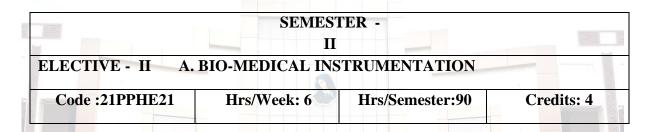


St. Mary's College (Autonomous) Reaccredited with 'A+' Grade by NAAC (Cycle IV) Thoothukudi



Criterion: I – Curricular Aspects 1.1 – Curriculum Design and Development Year: 2018-2023

Programme: M. Sc. Physics



Course Outcomes:

CO No.	Upon completion of this course, students will be able to	PSOs	CL
		addressed	
CO 1	Define resting and action potentials	1	Re
CO 2	Classify the uses of electrode paste	1	Ap
CO 3	Discuss the principle of operation of different types of transducers	1	Un
CO 4	Interpret the output of bio potential recorders such as ECG, EEG and EMG	1	Ev
CO 5	Investigate internal and external pacemakers	1	An
CO 6	Illustrate the working of different kinds of radiation monitoring instruments	1	Ap
CO 7	Recognise the importance of computers in medicine	1	Un
CO 8	Evaluate the need for various imaging techniques such as Computer Tomography, Thermography and MRI	1	Ev

Criterion I SSR Cycle V

SEMESTER -				
III				
ELECTIVE -III B. ENERGY SOURCES				
Code: 21PPHE32	Hrs/Week: 6	Hrs/Semester:90	Credits: 4	

Course Outcomes:

CO	Upon completion of this course, students will be able to	PSOs	CL
No.		addressed	
CO 1	outline the technologies that are used to harness the power of solar energy	1	An
CO 2	discuss the positive and negative aspects of solar energy in relation to natural and human aspects of the environment	5	Un
CO 3	Summarize the structure of biomass.	8	Ev
CO 4	Assess economic factors affecting geothermal energy production	5	Ev
CO 5	Analyse and critically evaluate emerging geothermal technologies.	8	An
CO 6	Compare chemical energy to mechanical energy.	1	An
CO 7	Write the uses of Hydrogen energy	5	Cr
CO 8	List the main characteristics (advantages/disadvantages) for fuel cells.	8	Ap

Criterion I SSR Cycle V

SEMESTER - I			
Core - III Electronics and Experimental Methods			
Code: 19PPHC13	Hrs/Week: 6	Hrs/Semester: 90	Credits:4

Course Outcome

CO No.	Upon completion of this course, students will be able to	PSO	CL
		addressed	
CO - 1	discuss the working principle of Tunnel Diode,	1	Un
	photodiode,		
	LED, LCD, photo conductor and Gunn diode		[25]
CO - 2	define Hall Effect	1	Re
CO - 3	sketch waveform generators such as Square wave	1,	Ap
	generator, triangular wave generator and Schmitt trigger	3	
CO - 4	discuss the functions of registers and counters	1	Un
CO - 5	describe the different types of registers	1 2	Un
CO - 6	explain the working of D/A and A/D converters	1	Un
CO - 7	identify the working mechanism of different types	1	Un
	transducers		
CO - 8	recognise intrinsic and extrinsic semiconductors	1	Un



Criterion I SSR Cycle V