

# SARDAR PATEL UNIVERSITY

Programme: B.Sc (Physics)

Semester: IV

Syllabus with effect from: November/December-2012

<b>Paper Code: US04CPHY03</b>	<b>Total Credit: 2</b>
<b>Title Of Paper: Physics Practical</b>	

	Description in detail	
<b>List of Practical:</b>		
1	Characteristics of FET	
2	Miller Indices using X-Ray diffraction pattern.	
3	De-Broglie Relation using electron diffraction pattern.	
4	Wave length of a monochromatic light ' $\lambda$ ' using Double Slit method.	
5	Study of a Hartley Oscillator	
6	Study of a Colpitts Oscillator	
7	Thermal Conductivity (K) by Lee's method	
8	Frequency Response of RC Coupled amplifier (with negative feedback).	
9	Study of L-C-R Parallel Resonance	
10	Wave length of a monochromatic light ' $\lambda$ ' using Lloyd's mirror	
11	Study of a Thermocouple	
12	Cauchy's Constants	
13	Find the Stefan's Index	
14	Numerical Integration	
15	Propagation of errors in observation.	

**Note:** To provide flexibility up to the maximum of 20% of total experiments can be replaced/ added to the list by the board of studies.

## Basic Text & Reference Books:-

- Advanced Practical Physics for students  
B L Wosnop and H T Flint  
Methuen and Co. Ltd., London
- B.Sc. Practical Physics  
C L Arora  
S.Chand & Co. Ltd., New Delhi
- Advanced Practical Physics  
M S Chauhan and S P Singh  
Pragati Prakashan, Meerut
- Advanced Practical Physics  
S L Gupta and V Kumar  
Pragati Prakashan, Meerut

