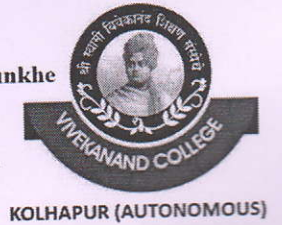




"Education for Knowledge, Science, and Culture"  
- Shikshanmaharshi Dr. Bapuji Salunkhe

Shri Swami Vivekanand Shikshan Sanstha's  
**Vivekanand College, Kolhapur**  
**(Autonomous)**



**Department of Electronics**  
**Course Outcomes (Cos)**

<b>B.Sc. I Electronics (Implemented from JUNE 2021)</b>	
<b>Semester I</b>	
<b>Paper I- DSC-1005A1: ANALOG ELECTRONICS-I</b>	
<b>CO No.</b>	<b>After completion of the courses, students will be able to:</b>
<b>CO1:</b>	Identify and explain electrical components and determine the value of resistor, inductor and capacitor using colour code method.
<b>CO2:</b>	Understand the basic properties of electrical elements, and solve DC circuit analysis problems, DC network theorems.
<b>CO3:</b>	Acquire the knowledge about the characteristics and working principles of PN junction diode, Zener diode, photo diode, LED and different diode applications.
<b>CO4:</b>	Understanding and study of rectifier, filter and voltage regulator circuits.
<b>Paper II- DSC-1005A2: DIGITAL ELECTRONICS-I</b>	
<b>CO1:</b>	Understanding the basics of Digital Electronics, different number systems, Binary Codes and signed representation of binary number. Also understand the conversion between different number systems solve the binary arithmetic problems.
<b>CO2:</b>	Design and construction of the basic and universal logic gates and studying the Boolean algebra and simplification of Boolean expressions using different methods.
<b>CO3:</b>	Understanding and comparing different logic families according to IC specifications and their circuit configurations.
<b>CO4:</b>	Understand, analyze and design various combinational circuits.



**Semester II**

**Paper III- DSC-1005B1: ANALOG ELECTRONICS-II**

CO No.	After completion of the courses, students will be able to:
CO1:	Analyze output in different operating modes of Bipolar Junction Transistor and Demonstrate the operating principle and output characteristics of Bipolar Junction Transistor
CO2:	Explain construction and characteristics of JFETs, MOSFETs and UJT.
CO3:	Design biasing circuits for BJT and study different coupling methods used in multistage amplifiers
CO4:	Analyze the importance of feedback in amplifiers. Apply the Knowledge gained in the design of transistorized circuits and Oscillators.

**Paper IV- DSC-1005B2: DIGITAL ELECTRONICS-II**

CO1:	Understand, analyze and design various sequential circuits.
CO2:	Understanding the working of different shift registers and counters.
CO3:	Became able to know various types of analog to digital converters and digital to analog converters.
CO4:	Explain and compare the working of multivibrators using special application IC 555. Understanding and designing of multivibrator circuit



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