

SVCR GOVT. DEGREE COLLEGE, PALAMANER
FIRST YEAR B.Sc. - ELECTRONICS
FIRST SEMESTER
Revised Syllabus under CBCS W.E.F. 2020-21
PAPER - I: CIRCUIT THEORY AND ELECTRONIC DEVICES

Programme Outcomes:

- PO1: To produce graduates who excel in the competencies and values required for leadership to serve a rapidly evolving global community.**
- PO 2: To motivate the student to pursue PG courses in reputed institutes.**
- PO 3: To learn the fundamental principles and scientific theorems related to basic sciences and their relevance in daily life.**
- PO 4: To kindle the interest for research in students.**
- PO 5: To acquire placement in educational institutions, engineering and Industrial firms**
- PO 6: To endow the students with creative and analytical skills; this will equip them to become Entrepreneurs.**

Programme Specific Outcomes:

- PSO 1: Interpret the principles, classifications, concepts, theories and mechanisms.**
- PSO 2: Analyse hypothesis, procedures, properties, experimental facts and draw conclusions.**
- PSO 3: Apply techniques in solving problems, results, sample analysis and production.**
- PSO 4: Discuss the latest trends and applications pertinent to higher studies and employability.**
- PSO 5: Exhibit communicative competence and apply skills in computers, creative and critical thinking, interpersonal relationships and managing emotions in real life situations.**

Course outcomes:

CO 1: Apply concepts of electric network topology, nodes, branches, loops to solve circuit problems including the use of computer simulation.

CO 2: Apply time and frequency concepts of analysis.

CO 3: Synthesize the network using passive elements.

CO 4: Design and construction of a power supply.

Course Outcomes with Programme Outcomes and Programme Specific Outcomes

	PO1	PO2	PO3	PO4	PO5	PO6	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	2	-	-	-	-	-	2	-	-	-	-
CO2	1	2	1	1	2	3	1	2	2	-	2
CO3	2	3	3	2	2	2	2	2	1	2	1
CO4	2	2	2	2	1	1	2	2	2	2	2
Avg	1.75	2.33	2	1.66	1.66	2	1.75	2	1.66	2	1.66

1: Poor, 2: Average, 3: Good, 4: Excellent

**FIRST YEAR B. Sc - ELECTRONICS
SECOND SEMESTER
(Revised Syllabus under CBCS w.e.f. 2020-21)
PAPER - 2: DIGITAL ELECTRONICS**

Programme Outcomes:

- PO1: To produce graduates who excel in the competencies and values required for leadership to serve a rapidly evolving global community.**
- PO 2: To motivate the student to pursue PG courses in reputed institutes.**
- PO 3: To learn the fundamental principles and scientific theorems related to basic sciences and their relevance in daily life.**
- PO 4: To kindle the interest for research in students.**
- PO 5: To acquire placement in educational institutions, engineering and Industrial firms**
- PO 6: To endow the students with creative and analytical skills; this will equip them to become Entrepreneurs.**

Programme Specific Outcomes:

- PSO 1: Interpret the principles, classifications, concepts, theories and mechanisms.**
- PSO 2: Analyse hypothesis, procedures, properties, experimental facts and draw conclusions.**
- PSO 3: Apply techniques in solving problems, results, sample analysis and production.**
- PSO 4: Discuss the latest trends and applications pertinent to higher studies and employability.**

Course outcomes:

CO 1: Develop a digital logic and apply it to solve real life problems.

CO 2: Analyse, design and implement combinational logic circuits.

CO 3: Classify different semiconductor memories.

CO 4: Analyse, design and implement sequential logic circuits.

Course Outcomes with Programme Outcomes and Programme Specific Outcomes

	PO1	PO2	PO3	PO4	PO5	PO6	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	2	-	-	-	-	-	2	-	-	-	-
CO2	1	2	1	1	2	3	1	2	2	-	2
CO3	1	2	2	2	2	2	1	2	2	2	2
CO4	2	2	1	1	1	1	2	1	1	1	1
Avg	1.5	1.5	1.33	1.33	1.66	2	1.5	1.66	1.66	1.5	1.66

1: Poor, 2: Average, 3: Good, 4: Excellent

SECOND YEAR B. Sc - ELECTRONICS
THIRD SEMESTER
(Revised Syllabus under CBCS w.e.f. 2021-22)
PAPER - 3: ANALOG CIRCUITS AND COMMUNICATION

Programme Outcomes:

- PO 1: To produce graduates who excel in the competencies and values required for leadership to serve a rapidly evolving global community.**
- PO 2: To motivate the student to pursue PG courses in reputed institutes.**
- PO 3: To learn the fundamental principles and scientific theorems related to basic sciences and their relevance in daily life.**
- PO 4: To kindle the interest for research in students.**
- PO 5: To acquire placement in educational institutions, engineering and Industrial firms**
- PO 6: To endow the students with creative and analytical skills; this will equip them to become Entrepreneurs.**

Programme Specific Outcomes:

- PSO 1: Interpret the principles, classifications, concepts, theories and mechanisms.**
- PSO 2: Analyse hypothesis, procedures, properties, experimental facts and draw conclusions.**
- PSO 3: Apply techniques in solving problems, results, sample analysis and production.**
- PSO 4: Discuss the latest trends and applications pertinent to higher studies and employability.**

Course OUTCOMES:

CO 1: Understand the fundamentals and areas of applications for the integrated circuits.

CO 2: Demonstrate the ability to design practical circuits that perform the desired operation.

CO 3: Use of different modulation and demodulation techniques used in analog communication.

CO 4: Identify and solve basic communication problems and analyse transmitters and receiver circuits.

Course Outcomes with Programme Outcomes and Programme Specific Outcomes

	PO1	PO2	PO3	PO4	PO5	PO6	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	2	-	-	-	-	-	2	-	-	-	-
CO2	1	2	1	1	2	3	1	2	2	-	2
CO3	2	2	2	2	2	2	2	2	1	2	2
CO4	1	1	1	1	1	1	2	1	2	1	1
Avg	1.5	1.66	1.33	1.33	1.66	2	1.75	1.66	1.66	1.5	1.66

1: Poor, 2: Average, 3: Good, 4: Excellent

**SECOND YEAR B. Sc - ELECTRONICS
FOURTH SEMESTER
(Revised Syllabus under CBCS w.e.f. 2021-22)**

PAPER - 4: MICROPROCESSOR SYSTEMS

Programme Outcomes:

- PO1: To produce graduates who excel in the competencies and values required for leadership to serve a rapidly evolving global community.**
- PO 2: To motivate the student to pursue PG courses in reputed institutes.**
- PO 3: To learn the fundamental principles and scientific theorems related to basic sciences and their relevance in daily life.**
- PO 4: To kindle the interest for research in students.**
- PO 5: To acquire placement in educational institutions, engineering and Industrial firms**
- PO 6: To endow the students with creative and analytical skills; this will equip them to become Entrepreneurs.**

Programme Specific Outcomes:

- PSO 1: Interpret the principles, classifications, concepts, theories and mechanisms.**
- PSO 2: Analyse hypothesis, procedures, properties, experimental facts and draw conclusions.**
- PSO 3: Apply techniques in solving problems, results, sample analysis and production.**
- PSO 4: Discuss the latest trends and applications pertinent to higher studies and employability.**

Course outcomes:

CO 1: The student can gain good knowledge on microprocessor and implement in practical applications

CO 2: Design system using memory chips and peripheral chips for 16 bit 8086 microprocessor.

CO 3: Understand and devise techniques for faster execution of instructions, improve speed of operations and enhance performance of microprocessors.

CO 4: Understand multi core processor and its advantages.

Course Outcomes with Programme Outcomes and Programme Specific Outcomes

	PO1	PO2	PO3	PO4	PO5	PO6	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	2	-	-	-	-	-	2	-	-	-	-
CO2	1	2	1	1	2	3	1	2	2	-	2
CO3	2	1	2	2	1	2	2	2	2	2	2
CO4	1	2	1	2	2	1	1	1	1	1	1
Avg	1.5	1.66	1.33	1.66	1.66	2	1.5	1.66	1.66	1.5	1.66

1: Poor, 2: Average, 3: Good, 4: Excellent

**SECOND YEAR B. Sc - ELECTRONICS
FOURTH SEMESTER
(Revised Syllabus under CBCS w.e.f. 2021-22)**

Course - 5: MICROCONTROLLER AND INTERFACING

Programme Outcomes:

- PO1: To produce graduates who excel in the competencies and values required for leadership to serve a rapidly evolving global community.**
- PO 2: To motivate the student to pursue PG courses in reputed institutes.**
- PO 3: To learn the fundamental principles and scientific theorems related to basic sciences and their relevance in daily life.**
- PO 4: To kindle the interest for research in students.**
- PO 5: To acquire placement in educational institutions, engineering and Industrial firms**
- PO 6: To endow the students with creative and analytical skills; this will equip them to become Entrepreneurs.**

Programme Specific Outcomes:

- PSO 1: Interpret the principles, classifications, concepts, theories and mechanisms.**
- PSO 2: Analyse hypothesis, procedures, properties, experimental facts and draw conclusions.**
- PSO 3: Apply techniques in solving problems, results, sample analysis and production.**
- PSO 4: Discuss the latest trends and applications pertinent to higher studies and employability.**

Course outcomes:

CO 1: The student can gain good knowledge on microcontrollers and implement in practical applications.

CO 2: Learn Interfacing of Peripherals to Microcontroller.

CO 3: Get familiarized with Real time operating system.

Course Outcomes with Programme Outcomes and Programme Specific Outcomes

	PO1	PO2	PO3	PO4	PO5	PO6	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	2	-	-	-	-	-	2	-	-	-	-
CO2	1	2	1	1	2	3	1	2	2	2	2
CO3	2	2	2	2	2	2	2	2	1	1	1
Avg	1.66	2	1.5	1.5	2	2.5	1.66	2	1.5	1.5	1.5

1: Poor, 2: Average, 3: Good, 4: Excellent