

SSGMCE SHEGAON

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

COURSE OUTCOMES OF ALL COURSES OF FOURTH SEMESTER BE CSE (COMPUTER SCIENCE AND ENGINEERING)

4KS01 ARTIFICIAL INTELLIGENCE

On completion of the course, the students will be able to:

- 1. Explain concepts of Artificial Intelligence and different types of intelligent agents and their architecture.
- 2. Formulate problems as state space search problem & efficiently solve them.
- 3. Summarize the various searching techniques, constraint satisfaction problem and example problems game playing techniques.
- 4. Apply AI techniques in applications which involve perception, reasoning and learning.
- 5. Compare the importance of knowledge, types of knowledge, issues related to knowledge acquisition and representation.

4KS02 DATA COMMUNICATION AND NETWORKING

On completion of the course, the students will be able to:

- 1. Describe data communication Components, Networks, Protocols and various topology-based network architecture.
- 2. Design and Test different encoding and modulating techniques to change digital –to- digital conversion, analog-to-digital conversion, digital to analog conversion, analog to analog conversion.
- 3. Explain the various multiplexing methods and evaluate the different error detection & correction techniques.
- 4. Illustrate and realize the data link control and data link protocols.
- 5. Describe and demonstrate the various Local area networks and the IEEE standards.

4KS03 OPERATING SYSTEM

On completion of the course, the students will be able to:

- 1. Explain memory management issues like external fragmentation, internal fragmentation.
- 2. Illustrate multithreading and its significance.
- 3. List various protection and security mechanisms of OS.
- 4. Analyze and solve the scheduling algorithms.
- 5. Analyze the deadlock situation and resolve it.
- 6. Compare various types of operating systems.

4KS04 MICROPROCESSOR & ASSEMBLY LANGUAGE PROGRAMMING

On completion of the course, the students will be able to:

- 1. Describe 8086 microprocessor and its architecture; also understand instruction processing during the fetch-decode-execute cycle.
- 2. Design and Test assembly language programs using 8086 microprocessor instruction set.
- 3. Demonstrate the implementation of standard programming constructs, including control structures and functions, in assembly language.
- 4. Illustrate and realize the Interfacing of memory & various I/O devices with 8086 microprocessors.
- 5. Explain the basic concepts of Internet of Things

4KS05 THEORY OF COMPUTATION

On completion of the course, the students will be able to:

- 1. To construct finite state machines to solve problems in computing.
- 2. To write regular expressions for the formal languages.
- 3. To construct and apply well defined rules for parsing techniques in compiler.
- 4. To construct and analyze Push Down, Turing Machine for formal languages.
- 5. To express the understanding of the Chomsky Hierarchy.
- 6. To express the understanding of the decidability and un-decidability problems.

4KS06 DATA COMMUNICATION & NETWORKING LAB

On completion of the course, the students will be able to:

- 1. Analyze performance of various communication protocols.
- 2. Implement Configure various network protocols.
- 3. Compare IP Address classes of networks.

4KS07 OPERATING SYSTEM LAB

On completion of the course, the students will be able to:

- 1. Explain memory management issues like external fragmentation, internal fragmentation.
- 2. Illustrate multithreading and its significance.
- 3. List various protection and security mechanisms of OS.
- 4. Analyze and solve the scheduling algorithms.
- 5. Analyze the deadlock situation and resolve it.
- 6. Compare various types of operating systems.

4KS08 MICROPROCESSOR & ASSEMBLY LANG. PROG LAB

On completion of the course, the students will be able to:

- 1. Analyze the internal workings of the microprocessor.
- 2. Design and develop programs in Assembly Language Programming.
- 3. Describe 8086 microprocessor and its architecture; also understand instruction processing during the fetch-decode-execute cycle.
- 4. Design and Test assembly language programs using 8086 microprocessor instruction set.
- 5. Demonstrate the implementation of standard programming constructs, including control structures and functions, in assembly language.
- 6. Illustrate and realize the Interfacing of memory & various I/O devices with 8086 microprocessor.

4KS09 C-SKILL-LAB II

On completion of the course, a student will be able to:

- 1. Develop client server program and web applications.
- 2. Make use of project-based experience for web application development.
- 3. Create embedded systems using Raspberry Pi/Arduino.