PART – A

UNIT - 1
INTRODUCTION TO REAL-TIME SYSTEMS: Historical background, RTS Definition, Classification of Real-time Systems, Time constraints, Classification of Programs.

6 Hours

UNIT - 2
CONCEPTS OF COMPUTER CONTROL: Introduction, Sequence Control, Loop control, Supervisory control, Centralized computer control, Distributed system, Human-computer interface, Benefits of computer control systems.

6 Hours

UNIT - 3
COMPUTER HARDWARE REQUIREMENTS FOR RTS: Introduction, General-purpose computer, Single chip microcontroller, Specialized processors, Process-related Interfaces, Data transfer techniques, Communications, Standard Interface.

6 Hours

UNIT - 4
LANGUAGES FOR REAL-TIME APPLICATIONS: Introduction, Syntax layout and readability, Declaration and Initialization of Variables and Constants, Modularity and Variables, Compilation, Data types, Control Structure, Exception
Handling, Low-level facilities, Co routines, Interrupts and Device handling, Concurrency, Real-time support, Overview of real-time languages.

8 Hours

PART – B

UNIT - 5 & 6


12 Hours

UNIT - 7


8 Hours

UNIT - 8


6 Hours
TEXT BOOKS:


REFERENCE BOOKS:

