

Reg No.: _____

Name: _____

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

Seventh Semester B.Tech Degree Regular and Supplementary Examination December 2021 (2015 Scheme)

Course Code: MR405**Course Name: Embedded Systems**

Max. Marks: 100

Duration: 3 Hours

PART A*Answer all questions, each carries 5 marks.*

		Marks
1	What are the characteristics of round robin with interrupts architecture?	(5)
2	List out the differences between digital combinational and sequential circuits?	(5)
3	Differentiate static and dynamic memories	(5)
4	What are the processors in embedded system	(5)
5	Compare Superscalar and VLIW architecture	(5)
6	Explain the characteristics of embedded systems	(5)
7	Differentiate half duplex and full duplex types of communications.	(5)
8	What are the features of Real time operating system architecture?	(5)

PART B*Answer any three full questions, each carries 10 marks.*

9	a) Explain following peripherals	(10)
	a) Timers	
	b) ADC	
10	a) Write a note on embedded system and its components	(10)
11	a) Explain the application of embedded system in Health care with block diagram	(10)
12	a) Categorize the application specific instruction set processors in detail.	(10)
13	a) Explain embedded system on chip.	(10)

PART C*Answer any two full questions, each carries 15 marks.*

14	a) What is meant by BUS? What are the applications of BUS?	(6)
	b) Explain any three types of serial buses used in embedded system.	(9)
15	a) What are the features of sophisticated interfacing devices and ports ?	(5)
	b) Explain parallel port interfacing with switches and keypad	(10)

- 16 a) Differentiate between host and target machines (9)
- b) Explain following tools (6)
- a) Assembler
 - b) Cross Compiler
 - c) Linker
- 17 a) Explain about the round robin software architecture (7)
- b) Define different types of RTOS .What are the characteristics of RTOS? (8)
