

**DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY,
LONERE – RAIGAD -402 103
Semester Examination – Oct - 2022**

Branch: Electronics & Telecommunication Engg.

Sem.:- II

Subject with Subject Code:- Embedded System Design (MTETE233B)

Date:- 18/10/2022

Time:- 3 Hr.

Marks: 60

Instructions to the Students

1. Each question carries 12 marks.
2. Attempt **any five** questions of the following.
3. Illustrate your answers with neat sketches, diagram etc., wherever necessary.
4. If some part or parameter is noticed to be missing, you may appropriately assume it and should mention it clearly

		(Marks)
Q.1 A)	What are the different challenges in embedded systems design?	(06)
B)	What are advantages and disadvantages of embedded system?	(06)
Q.2 A)	Differentiate between RISC and CISC	(06)
B)	Draw and explain Pentium Processor architecture.	(06)
Q.3 A)	Write a C program to display message “DrBATU” on LCD connected to 8051 microcontroller.	(06)
B)	Explain following addressing modes of 8051 with suitable examples of each. i) Direct addressing mode ii) Indirect addressing mode iii) Indexed addressing mode	(06)
Q.4 A)	Write a short note on SRAM, DRAM, SSRAM.	(06)
B)	Explain different characteristics of DSP processors.	(06)
Q.5 A)	With neat diagram explain Multiplier and Adder unit of DSP processor.	(06)

B)	Describe the classification of real time system.	(06)
Q.6 A)	Explain in brief about I2C protocol.	(06)
B)	Distinguish between native compiler and cross compiler.	(06)