



M.Tech I Semester Regular & Supplementary Examinations January/February 2019

**ADVANCED MICROPROCESSORS & MICROCONTROLLERS**

(Common to ECE & DSCE)

(For students admitted in 2017 & 2018 only)

Time: 3 hours

Max. Marks: 60

Answer all the questions

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- 1 Write is an addressing mode? Explain the different types of addressing modes with examples.

**OR**

- 2 Explain about reduced instruction set & compare CISC and RISC.

- 3 Explain in detail about pipeline operation and floating point unit operation.

**OR**

- 4 Write short notes on the following:

- (a) Paging.
- (b) Multitasking.
- (c) Branch prediction.

- 5 Explain the programming concepts of the ARM processor.

**OR**

- 6 Discuss with examples about addressing modes of ARM processor.

- 7 Explain the operation modes and interrupt systems.

**OR**

- 8 (a) How to interface the A/D converter with a microcontroller?  
(b) Discuss the instruction set of 68HC11 microcontroller.

- 9 Explain about the CPU architecture of PIC microcontroller.

**OR**

- 10 Explain the interfacing of I2C bus organization and UART.

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