



M.Tech II Semester Supplementary Examinations August/September 2018

**MICRO COMPUTER SYSTEM DESIGN**

(Common to DSCE, DECS & ECE)

(For students admitted in 2013, 2014, 2015 & 2016 only)

Time: 3 hours

Max. Marks: 60

Answer any FIVE questions  
All questions carry equal marks

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- 1 (a) Draw a neat architecture diagram of 8088 and explain its components.  
(b) Discuss about instruction set of 8088 processor.
- 2 (a) Describe the memory paging mechanism of 80286.  
(b) Discuss in detail about register organization in 80286.
- 3 (a) Explain the functions of memory management unit in 80386.  
(b) Describe about memory paging mechanism followed in 80386.
- 4 (a) Describe about branch prediction logic in Pentium Pro processor.  
(b) Explain about I/O system organization in Pentium Pro processor.
- 5 (a) Describe about Pentium special register in detail.  
(b) Draw a neat architecture diagram of Pentium dual core microprocessor and explain its components.
- 6 (a) Explain about direct memory access method with a neat diagram.  
(b) Describe about how to design an I/O system. Give an example.
- 7 (a) Explain how memory is managed in a computer.  
(b) Describe about virtual memory concept in 80286.
- 8 (a) Explain about internal architecture of 80387 in detail.  
(b) Describe about various instruction sets of 8087 arithmetic coprocessor.

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