



M.Tech II Semester Supplementary Examinations January/February 2019

**SYSTEM ON CHIP DESIGN**

(Digital Systems and Computer Electronics)

(For students admitted in 2017 only)

Time: 3 hours

Max. Marks: 60

Answer all the questions

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- 1 (a) Mention the instruction execution sequence of processor.
- (b) List out the SOC memory considerations.

**OR**

- 2 Comprehend the pipelined processor model.
- 3 Draw and explain the block diagram of processors in SOC model.
- 4 List out the instruction set mnemonic operations.

**OR**

- 5 (a) Write about the WRITE policies of memory design.
- (b) Write about basic DRAM types.
- 6 Write about simple DRAM and their memory array.
- 7 Draw the simplified block diagram of an SOC module and explain.

**OR**

- 8 (a) Compare the bus interconnect architectures.
- (b) Write about commercial logic block architecture of Xilinx CLB.

- 9 Draw and explain the block diagram of JPEG compression.

**OR**

- 10 Write about performance and Area trade-off on Xilinx vertex XCV-1000

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