



(Following Paper ID and Roll No. to be filled in your Answer Book)

PAPER ID : 121753

Roll No.

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B. Tech.

(SEM. VII) (ODD SEM.) THEORY
EXAMINATION, 2014-15
EMBEDDED SYSTEM

Time : 3 Hours]

[Total Marks : 100

1 Attempt any FOUR parts : **5x4=20**

- (a) Explain the various timer and counting devices
- (b) Explain the classification of IO devices.
- (c) Explain the various bus structures used in embedded systems.
- (d) Explain the working of timers and counters in detail.
- (e) Write short notes on CISC and RISC processors.
- (f) Explain about Assembly language of 8051 processor.

2 Attempt any TWO parts : **10x2=20**

- (a) Describe about Component interfacing.
- (b) Elucidate microprocessor development design.
- (c) Explain in detail about the memory devices of DSP Chips.

- 3** Attempt any TWO parts : **10x2=20**
- (a) Explain the Embedded programming in C++.
 - (b) Explain the various bus structures used in embedded systems
 - (c) (i) Explain the parallel port devices.
(ii) Explain the sophisticated interfacing features in device ports.
- 4** Attempt any TWO parts : **10x2=20**
- (a) With neat sketch explain about architecture of 80386.
 - (b) Explain in detail about the ARM processor.
 - (c) Describe in detail about the Semaphores, Tasks and states.
- 5** Attempt any TWO parts : **10x2=20**
- (a) Interface the DAC, LED and Push Buttons with microcontroller and explain it briefly.
 - (b) Explain about the different types of protocols of embedded systems.
 - (c) Write in detail about the different types of addressing modes of the microcontroller and explain about the I/O concept.