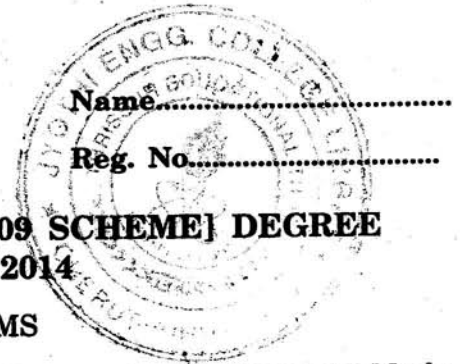**D 70327**

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FIFTH SEMESTER B.TECH. (ENGINEERING) [09 SCHEME] DEGREE EXAMINATION, NOVEMBER 2014

IT 09 503—EMBEDDED SYSTEMS

Time : Three Hours

Maximum : 70 Marks

Part A

Answer all questions.
Each question carries 2 marks.

1. Define an Embedded System.

2. Differentiate RAM and ROM.

3. What is meant by cross-compiler ?

4. What are device drivers ?

5. Define interrupt latency.

(5 × 2 = 10 marks)

Part B

Answer any four questions.
Each question carries 5 marks.

1. Explain any one real time application which makes use of embedded system.

2. Explain about the parallel port devices.

3. Write about the finite state machine models.

4. How is deadline met in an embedded system ? Explain.

5. Discuss about the strategy for synchronization in an RTOS.

6. Explain about the Mobile OS and its advantages.

(4 × 5 = 20 marks)

Part C

Answer all questions.
Each question carries 10 marks.

1. Discuss in detail about the classification of embedded system.

Or

2. Write about the embedded systems on a chip (SOC) and use of VLSI.

Turn over

3. With a neat sketch, explain the working of a DMA.

Or

4. Discuss in detail about the high speed buses and its advantages.

5. Explain with an example about the Petri table for real time programming.

Or

6. Describe about the driver for internal programmable timing devices.

7. Write in detail about the RTOS task scheduling models.

Or

8. Explain about the interrupt routines in RTOS environment.

(4 × 10 = 40 marks)