Reg. No. : | | | | | | | | | | |

Question Paper Code: 52273

M.E. DEGREE EXAMINATION, JUNE 2016

Second Semester

VLSI Design

15PVL203 – REAL TIME EMBEDDED SYSTEMS

(Regulation 2015)

Duration: Three hours Maximum: 100 Marks

Answer ALL Questions

PART A - (5 x 20 = 100 Marks)

1. (a) Explain in detail the various steps involved in the design of model train controller. (20)

Or

(b) (i) Summarize the Challenges in the embedded computing system design. (10)

(ii) Explain the characteristics of embedded computing applications. (10)

2. (a) With neat diagram explain the processor and memory organization of ARM processor with data operations. (20)

Or

(b) Describe in detail about the design of an alarm clock. (20)

3. (a) Write notes on:

(i) I^2C and CAN bus Structure (10)

(ii) Myrinet and Ethernet (10)

Or

(b) Describe in detail the design of Elevator controller. (20)

4. (a) Explain Clock driven approach and priority driven approach. (20)

Or

(b) Describe in detail about the Earliest Deadline First (EDF) scheduling algorithm. (20)

5. (a) Elaborate about design methodologies and Requirement analysis in embedded system design. (20)

Or

(b) (i) Discuss about the inkjet Printer Hardware design. (10)

(ii) Detail the Personal digital assistant design techniques. (10)

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