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**Question Paper Code : 71765**

B.E./B.Tech. DEGREE EXAMINATION, APRIL/MAY 2015.

Sixth Semester

Computer Science and Engineering

IT 2354/IT 64/10144 IT 605/10144 CSE 26 – EMBEDDED SYSTEMS

(Common to Information Technology)

(Regulation 2008/2010)

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. What are the major levels of abstraction in design process?
2. List the features of ARM processor.
3. What is busy-wait I/O?
4. Differentiate between static and dynamic RAM.
5. Differentiate between task and process.
6. When a program is said to be reentrant?
7. What are the differences between global and a local variable?
8. What is JTAG?
9. List any five embedded systems.
10. What are the benefits of platform-based design?

PART B — (5 × 16 = 80 marks)

11. (a) What are the branching operations supported by 8051 microcontroller? Explain with examples. (16)

Or

- (b) Explain the design challenges in embedded systems. (16)

12. (a) Explain the process of memory management and address translation. (16)
- Or
- (b) Explain interrupt handling mechanism. (16)
13. (a) Write short notes on RMS and EDF scheduling Policies. (16)
- Or
- (b) Explain in detail the inter process communication mechanism. (16)
14. (a) Explain multi-state system and function sequences. (16)
- Or
- (b) Explain the advantage and disadvantage of programming embedded system in C and assembly language with example. (16)
15. (a) Explain the water flow design of embedded system development. (16)
- Or
- (b) Explain the complete design of an intruder alarm system. (16)
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