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Question Paper Code: 35804

B.E. / B.Tech. DEGREE EXAMINATION, MAY 2018

Fifth Semester

Information Technology

01UIT504 – EMBEDDED COMPUTING SYSTEMS

(Regulation 2013)

Duration: Three hours

Maximum: 100 Marks

Answer ALL Questions

PART A - (10 x 2 = 20 Marks)

1. Define embedded systems with examples.
2. List out the major goals of the embedded system design.
3. What is interrupting masking?
4. What is a cache memory?
5. Define preemption.
6. What are requirements and specification?
7. What are the five levels of capability maturity model?
8. What is a logic analyzer?
9. What are the inputs of telephone answering machine?
10. Define data flow graphs.

PART - B (5 x 16 = 80 Marks)

11. (a) Explain in detail about the embedded system design process. (16)

Or

(b) Describe in details about the ARM processor. (16)

12. (a) Describe in detail about the components of embedded programs. (16)

Or

(b) Explain in detail about the software performance optimization. (16)

13. (a) Explain the Inter-Process Communication (IPC) mechanisms with appropriate diagrams. (16)

Or

(b) Explain the priority based scheduling and types with example. (16)

14. (a) Explain about the distributed embedded systems. (16)

Or

(b) Discuss the quality assurance required for an embedded system. (16)

15. (a) Discuss the architecture of digital still cameras. (16)

Or

(b) Explain about the digital telephone answering machine. (16)