Reg. No. :

## **Question Paper Code: 35084**

B.E. / B.Tech. DEGREE EXAMINATION, NOV 2017

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. Give an example for register indirect addressing in ARM.
- 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 is design technology?
- 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 diagrams.	appropriate (16)
Or	
(b) Describes why automobile engines require multi-rate control.	(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)