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Name.....

Reg. No.....

SIXTH SEMESTER B.TECH. (ENGINEERING) [09 SCHEME] DEGREE EXAMINATION, APRIL 2016

CS/PTCS 09 601—EMBEDDED SYSTEMS

Time : Three Hours Maximum : 70 Marks

Part A

Answer **all** *questions.*

1. What is LCD ? Mention its use.
2. What do you mean by memory access ?
3. Write about the DRAM integration problem.
4. What is the need for a model and language in process models ?
5. What do you mean by compilation ?

(5 × 2 = 10 marks)

Part B

Answer any **four** *questions.*

6. Write a short note on keypad controllers.
7. Explain in detail about optimizing data path of custom single purpose processor.
8. Explain in detail about cache impact on system performance.
9. Bring out the user's perspective of a simple digital camera.
10. Write about the role of an appropriate model and language.
11. Explain in detail about behavioural synthesis.

(4 × 5 = 20 marks)

Part C

Answer **all** *questions.*

12. (a) Discuss in detail about the hardware implementation of single purpose processors.

Or

(b) Explain in detail about the working of analog-digital converter.

13. (a) Discuss in detail about common memory types and its applications.

Or

(b) Explain in detail about the working of DMA.

Turn over

14. (a) Explain in detail about FSM with datapath model FSDM.

Or

(b) Discuss in detail about terminate, suspend, resume and join operations of a concurrent process model.

15. (a) Explain in detail about integration logic synthesis and physical design.

Or

(b) Explain in detail about new challenges posed by cores to processor providers and users.

(4 × 10 = 40 marks)