APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

FIRST SEMESTER M.TECH DEGREE EXAMINATION, DECEMBER 2015

Computer Science and Engineering

(Computer Science and Systems Engineering)

04CS6413 Computer Systems Engineering

Max. Marks: 60 Duration: 3 Hours

Part A(Answer all ,each carrying 3 marks)

- 1. What is the importance of Complexity in engineering?
- 2. What is meant by RPC?
- 3. What are the problems created by congestion?
- 4. What do you mean by the term availability?
- 5. What is the need for Atomicity?
- 6. What do you mean by consistency?
- 7. How is the issue of old data solved in DNS?
- 8. How do you enforce authenticity?

[03 * 08 = 24 Marks]

Part B(Answer all, each carrying 6 marks)

9. Explain the importance of Systems engineering in Computer Science?

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- 10. Explain the various factors adding to the complexity of a system.
- 11.Explain the working of DNS

Or

- 12. Explain the concept of virtual addresses and modularity
- 13.Explain the methods used to control congestion

Or

- 14.Explain about the evolution of modularity in Intel X86 architecture.
- 15. What are the challenges faced and their resolution in Ethernet to internet transactions?

Or

- 16.Explain the relevance of redundancy in fault tolerance.
- 17. Explain about the atomicity in Machine languages

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- 18.Explain about atomicity enforcement for threads.
- 19.Explain the concept of cache coherence.

Or

20. Explain the concept of message confidentiality.

[06 * 06 = 36 Marks]