B.E./B.Tech. DEGREE EXAMINATION, APRIL/MAY 2017.

Seventh Semester

Computer Science And Engineering

CS 6703 — GRID AND CLOUD COMPUTING

(Common to Information Technology)

(Regulations 2013)

Time : Three hours   Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. Tabulate the differences between high performance computing and high throughput computing.

2. Give the basic operations of a VM.

3. What do you understand by the term 'data intensive'?

4. Define "OGSA".

5. Mention the characteristic features of the cloud.

6. Summarize the differences between PaaS and SaaS.

7. Write the significant use of GRAM.

8. Name the different modules in Hadoop framework.

9. What are the various challenges in building the trust environment?

10. Write a brief note on the security requirements of a grid.

PART B — (5 × 16 = 80 marks)

11. (a) Brief the interaction between the GPU and CPU in performing parallel execution of operations. (16)

Or

(b) Illustrate with a neat sketch, the grid computing infrastructure. (16)

12. (a) Write a detailed note on OGSA security models. (16)

Or

(b) Explain how migrations of grid services are handled. (16)

13. (a) Discuss how virtualization is implemented in different layers. (16)

Or

(b) What do you mean by data centre automation using virtualization? (16)

14. (a) Discuss MAPREDUCE with suitable diagrams. (16)

Or

(b) Elaborate HDFS concepts with suitable illustrations. (16)

15. (a) Write detailed note on identity and access management architecture. (16)

Or

(b) Explain grid security infrastructure. (16)

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