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EIGHTH SEMESTER B.TECH. (ENGINEERING) DEGREE EXAMINATION, APRIL 2013

IT 09 804 – L 20 – GRID COMPUTING

(2009 Admissions)

Time : Three Hours

Maximum : 70 Marks

Part A

(Short Answer Questions)

Answer in one / two sentences.

1. Mention some major business areas of grid computing.

2. Classify the different types of grids in grid computing.

3. What are the components of data grid?

4. What are the collective services available in grid computing?

5. What are the layers available in the OGSA architectural organization?

(5 × 2 = 10 marks)

Part B

(Analytical/Problem Solving Questions)

*Answer any **four** questions.*

6. Write about an overview grids in other industry.

7. Explain productivity paradox and information technology.

8. Explain the neat diagram the architecture of MRG. List its components.

9. List the steps to scientific insight with respect to HPC grids.

10. Define Cluster. Explain with neat diagram the layered architecture of HPC clusters.

11. Explain Hive computing for transaction processing grids.

(4 × 5 = 20 marks)

Part C

(Descriptive/Analytical/Problem Solving Questions)

*Answer **all** questions.*

12. (a) What are the different layers in the grid taxonomy? Explain in detail with neat diagram the grid computing architecture.

Or

(b) Explain in detail with neat diagram complete IT infrastructure.

Turn over

13. (a) Explain in detail the process of grid enabling software applications and list the requirements for grid enabling software.

Or

(b) Explain desktop supercomputing and native programming for grids.

14. (a) What is a Genom? Explain in detail how grid computing plays a role in life sciences.

Or

(b) Discuss in detail the role of desktop grids in an enterprise computing infrastructure.

15. (a) Discuss in detail a two step EDR processing platform, using inner grid. Explain Grid technology implementation in Telecommunications sector.

Or

(b) Explain in detail the OGSA. Classify HPC infrastructure with suitable real examples. Write about HPC grids and the open grid services architecture.

(4 × 10 = 40 marks)