Code: 9A05703

R09

B.Tech IV Year I Semester (R09) Regular & Supplementary Examinations December 2014

GRID AND CLUSTER COMPUTING
(Computer Science and Engineering)

Time: 3 hours

Max. Marks: 70

Answer any FIVE questions
All questions carry equal marks
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1   (a)   Discuss the strengths and weaknesses of distributed computing.
    (b)   How to choose a paradigm for distributed applications? Quote suitable examples.

2   (a)   Explain the strategies for developing parallel applications.
    (b)   Discuss the advantages of programming skeletons for parallel programming.

3   With a diagram give the detailed architecture of a cluster discuss each component.

4   (a)   How does the collective layer of a grid coordinates multiple resources? Explain.
    (b)   What are the essential capabilities of business on demand operating environment?

5   (a)   Explain the web service architecture.
    (b)   Describe WSDL document structure.

6   Discuss the core concepts, scenarios and the requirements drawn from "National Fusion Collaboratory".

7   Explain factory callback mechanism, Grid service lifecycle callbacks and lifecycle management.

8   (a)   Write about component model for information services.
    (b)   Give a note on the OGSI.NET architecture and request flow.

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