

Code: 9A05703

**R09** 

B.Tech IV Year I Semester (R09) Regular & Supplementary Examinations December 2015

## **GRID & CLUSTER COMPUTING**

(Computer Science & Engineering)

Time: 3 hours Max. Marks: 70

Answer any FIVE questions All questions carry equal marks

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- 1 (a) List and explain the different forms of computing.
  - (b) Discuss the strengths and weaknesses of distributed computing.
- 2 (a) Write in detail about parallel and distributed programming models.
  - (b) Define parallel computing. Give a brief note on parallel computing.
- 3 (a) What is meant by computer cluster? Draw and explain the cluster architecture.
  - (b) Make a comparison between the cluster computing and grid computing.
- 4 Briefly explain the grid computing architecture and relationship to other distributed technologies.
- 5 (a) List and explain the grid services families.
  - (b) Draw and explain the web services architecture.
- 6 (a) Define OGSA. List and explain the OGSA platform components.
  - (b) Explain briefly about the following use cases:
    - (i) Commercial data center.
    - (ii) Online media and entertainment.
- 7 (a) Draw and explain the GT3 architecture.
  - (b) How service is created in GT3? Explain.
- 8 (a) Explain the role of middleware in detail.
  - (b) How OGSI.NET address the problems of middleware?

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