

B.Tech IV Year I Semester (R09) Supplementary Examinations June 2017

**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) Define the grid problem.  
(b) Explain the concept of virtual organization.  
(c) What is autonomic computing? How is it channeling third generation of grid initiatives?
- 2 (a) Describe the architectural definition of web services.  
(b) What is the significance of WS-addressing in the context of grid services?  
(c) Discuss the relationship between web service and grid service.
- 3 (a) List out the major OGSA goals.  
(b) How to declare service data? Give the details of the service data element attributes.
- 4 (a) Illustrate the service programming model of GT3 toolkit.  
(b) What is the use of JAX-RPC handlers?  
(c) List the server-side handlers in GT3.
- 5 (a) How to generate WSDL file from GWSDL transformation operation? Explain with example.  
(b) Describe EJB delegation model.
- 6 (a) Explain different forms of computing.  
(b) Discuss the weaknesses of distributed computing.  
(c) Describe remote procedure call model for distributed application.
- 7 (a) Discuss the scope of parallelism.  
(b) What are the communication models of parallel platform?  
(c) Differentiate between implicit and explicit parallelism.
- 8 (a) Define cluster. Explain the objectives of cluster computing.  
(b) Explain the grand challenge application of cluster computing.

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