

GUJARAT TECHNOLOGICAL UNIVERSITY**B. E. - SEMESTER – VII • EXAMINATION – WINTER 2012****Subject code: 170704****Date: 27/12/2012****Subject Name: Advanced Computing Technology****Time: 10.30 am - 01.00 pm****Total Marks: 70****Instructions:**

1. Attempt any five questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1** (a) Explain various parallel computer architectures in detail. **07**
(b) Explain cluster classifications in detail. **07**

- Q.2** (a) What is Cloud computing? What is significance of Cloud Computing? **07**
Compare Cloud Providers with Traditional IT Service providers.
(b) Explain HPVM (High Performance Virtual Machine) and CLUMPS **07**
(Clusters of SMP) with their advantages.

OR

- (b) Explain second generation Meta Computing Projects in brief. **07**

- Q.3** (a) Why cluster tuning is performed? Explain different policies used for load **07**
balancing.
(b) Explain in detail Grid Computing architecture with diagram and **07**
components detail.

OR

- Q.3** (a) Why Grid is consider as next generation internet? How Grid provides **07**
restricted access to resources?
(b) Define Grid Computing, Explain Condor middleware in detail. **07**

- Q.4** (a) Explain FLS algorithm for resource sharing in detail along with its **07**
analysis.
(b) Explain the role of RMS (Resource Management and Scheduling) **07**
technique in Resource Scheduling in cluster computing.

OR

- Q.4** (a) List and explain services and tools which are provided by Grid Technology **07**
to build virtual organization.

- Q.4** (b) What is use and significance of Microsoft's Azure platform in cloud **07**
computing? Explain components of Azure.

- Q.5** (a) Explain working of Cloud. Differentiate and compare: Public cloud, **07**
Private Cloud and Hybrid cloud.
(b) Define term workload in Cloud computing. Explain types of workload in **07**
cloud with their characteristics.

OR

- Q.5** (a) Explain model of SaaS in detail. Explain case of significance of **07**
salesforce.com in SaaS
(b) Compare the role of IaaS, PaaS and SaaS in cloud computing **07**
implementation. Also explain role of Virtualization.
