

GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER –VII • EXAMINATION – SUMMER 2014

Subject Code: 170704**Date: 29-05-2014****Subject Name: Advance Computing Technology****Time: 02.30pm to 05.00pm****Total Marks: 70****Instructions:**

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

- Q.1** (a) What is cluster computing? Explain different scalable computer architecture in detail. **07**
(b) Explain cluster classification in detail. **07**
- Q.2** (a) What is Resource Management Scheduling (RMS) in cluster computing? Explain the services provided by it. **07**
(b) Explain High performance virtual machine (HPVM) project and Beowulf project in cluster computing? **07**
- OR**
- (b) What is cluster tuning? Explain the policies used for cluster tuning. **07**
- Q.3** (a) Define Grid Computing? What are components of Grid? Explain the applications of Grid Computing. **07**
(b) What is Virtual organization? Explain different protocol, services, and tools to build scalable Virtual organization? **07**
- OR**
- Q.3** (a) Explain Grid architecture in detail. **07**
(b) Why there is need of Grid Computing? Explain Web Resource Framework in detail in Grid Computing. **07**
- Q.4** (a) Define Cloud Computing? Explain the features of Cloud Computing. **07**
(b) Explain benefit and limitations of Cloud Computing. **07**
- OR**
- Q.4** (a) Explain Private Cloud, Public Cloud and Hybrid Cloud in detail. **07**
(b) Explain Infrastructure as a Service(IaaS), Platform as a Service(PaaS) and Software as a Service(SaaS) in Cloud Computing. **07**
- Q.5** (a) Explain the Cloud Components in detail. **07**
(b) Explain the situation when we can use Cloud Computing and when we can not use Cloud Computing. **07**
- OR**
- Q.5** (a) Mention the characteristics of Workload and Explain the different types of Workload. **07**
(b) List different types of data stored in Cloud. Compare traditional IT Service Provider and Cloud Service Provider. **07**
