

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-VII • EXAMINATION – WINTER • 2014****Subject Code: 170704****Date: 27-11-2014****Subject Name: Advance Computing Technology****Time: 10:30 am - 01:00 pm****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) Draw and explain the cluster computer and its architecture. **07**
(b) What is resource management and scheduling (RMS)? Describes the services provided by a RMS environment. **07**
- Q.2** (a) Describes the flexible load sharing (FLS) algorithm in details with its analysis. **07**
(b) Explain the security policies in cluster. **07**
- OR**
- (b) How can locality be improved in a complex network environment in cluster? **07**
- Q.3** (a) Explain cross-site trust management in production Grid. **07**
(b) Define grid computing and explain the various building blocks of the Grid. **07**
- OR**
- Q.3** (a) Write a short note on Grid resource brokers and schedulers. **07**
(b) Explain virtual organization in Grid computing. Discuss with some example of virtual organization. **07**
- Q.4** (a) Draw and explain the cloud computing architecture. **07**
(b) Write a short note on software as a service in cloud. **07**
- OR**
- Q.4** (a) Explain the different types of clouds in details. **07**
(b) What is virtualization? Give the comparisons between IaaS, PaaS and SaaS. **07**
- Q.5** (a) Explain the evolution of grid with respect to first, second and third generation. **07**
(b) Define Cloud. Compare Cloud providers with traditional IT service provider. **07**
- OR**
- Q.5** (a) Explain Architecture of the NOW System and Classify cluster computers. **07**
(b) Define Cloud computing, Enlist and explain essential characteristics of cloud computing. **07**
