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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. Make suitable assumptions wherever necessary. 3. Figures to the right indicate full marks. **Q.1** 07 (a) Draw and explain the cluster computer and its architecture. (b) What is resource management and scheduling (RMS)? Describes the services 07 provided by a RMS environment. **Q.2** (a) Describes the flexible load sharing (FLS) algorithm in details with its analysis. **07 (b)** Explain the security policies in cluster. 07 **(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 **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 07 virtual organization. 0.4 (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 (a) Explain the evolution of grid with respect to first, second and third generation. Q.5 07 (b) Define Cloud. Compare Cloud providers with traditional IT service provider. 07 OR (a) Explain Architecture of the NOW System and Classify cluster computers. **Q.5** 07 (b) Define Cloud computing, Enlist and explain essential characteristics of cloud **07** computing.
