

GUJARAT TECHNOLOGICAL UNIVERSITY**M. E. - SEMESTER – III • EXAMINATION – WINTER • 2014****Subject code: 2735102****Date: 25-11-2014****Subject Name: Data Center Management****Time: 02:30 pm - 05:00 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) Discuss device and service naming in detail covering various best practices for protocols like NIS, DNS and LDAP. **07**
(b) How load balancing help in High Availability? **07**
- Q.2** (a) Discuss Quality of Service Management. **07**
(b) Explain in detail, what is benchmarking and the objectives for benchmarking. Discuss the various system performance aspects related to benchmarking. **07**
- OR**
- (b) Discuss the SPEC benchmarks for microprocessor, memory architecture, and compiler performance. Discuss the difference between base and non-base SPEC benchmarks. **07**
- Q.3** (a) What are the three main actions of SNMP. Explain how they are related to the public and private string concepts. Discuss the various security issues related with the older versions of SNMP and how they are addressed in the new version of SNMP. **07**
(b) What is work automation? Discuss the various system administration work automation in detail. **07**
- OR**
- Q.3** (a) What is HVAC? Why do we need it? How do we measure the cooling requirements? **07**
(b) Explain Point Load and Static Load in detail. Give an example for each type of load. **07**
- Q.4** (a) Discuss the various points that need to be considered when selecting a geographical location for a Data Center. **07**
(b) Explain the differences between a Network Operations Center and a Security Operations Center in details. **07**
- OR**
- Q.4** (a) Discuss in detail some of the system management best practices. **07**
(b) Discuss some of the internet security guidelines in detail **07**
- Q.5** (a) What is a raised floor and non-raised floor? List few instances where a raised floor and a non-raised floor are recommended. What are the advantages and disadvantages of using raised and non-raised floors? **07**
(b) Explain in detail the differences between a Storage Area network and Network Attached Storage solutions. **07**
- OR**
- Q.5** (a) Explain MIB and OID in details. **07**
(b) Calculate the total square feet, if we have a ramp with the following specification: **07**
a. Width of the ramp - 8 foot,
b. Height of the ramp - 3 foot,
c. Gradient steep ration - 1 in 20(foot)
d. Bottom Level Platform - 6 foot
