

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**ME - SEMESTER-II(New course)• EXAMINATION (Remedial) – WINTER- 2015**

**Subject Code: 3725504****Date: 11/12/2015****Subject Name: CLOUD COMPUTING****Time: 2:30 pm to 5:00 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) What is TCP/IP? How are TCP/IP and Internet related? **07**  
(b) What are five critical communications functions that TCP/IP can perform? **07**
- Q.2** (a) How do you know when you are using TCP/IP? Explain in detail. **07**  
(b) What can't TCP/IP do? (In other words, what communications functions must it rely on other mechanisms to do?) **07**
- OR**
- (b) Differentiate between circuit switching and packet switching as far as data transferred through net is concerned? **07**
- Q.3** (a) What are the key principles of cloud computing? Explain common types of cloud services. **07**  
(b) Explain different cloud deployment models in detail. **07**
- OR**
- Q.3** (a) Explain the concept of virtualization in detail, using terms like hypervisor, automation, abstraction, etc. **07**  
(b) Explain the concept data centers in terms of servers, data storage, networking and virtualization. **07**
- Q.4** (a) Explain OSI model with every layer in detail. **07**  
(b) Explain Ethernet Network in detail as part of data center networking. **07**
- OR**
- Q.4** (a) What is server virtualization and how it works? **07**  
(b) Explain storage and network virtualization in detail. **07**
- Q.5** (a) Explain vSphere from creating and configuring virtual machines to optimizing performance. **07**  
(b) Explain fault tolerance in virtual machines. Explain it using VMware FT. **07**
- OR**
- Q.5** (a) Explain different power consumption solutions for modern virtual data centers **07**  
(b) What is cloud computing Technology Stack? Explain in detail. What is OpenStack? **07**

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