**Medi-Caps Group of Institutions (MGI), Indore**

End Semester Test**,** B.E. Nov 2015

Subject: Cloud Computing Subject Code: CS-703 Branch: CS Semester: VII

Min Marks: 25 Max Marks: 70 (GS) Duration: 3 Hrs

Note: - Attempt all questions. Internal choices are given.

Q1) (a) Explain how cloud computing reduces the market capital investments. Enlist the characteristics of cloud computing & integration. (7)

(b) What is self provisioning? Also discuss its orientation by taking the data analysis, CRM and ERP process applications in details. (7)

Q2) (a) What do you understand by service oriented architecture (SOA). Give examples. (7)

(d) Discuss the cloud computing reference architecture along with its user types. Give the requirements of cloud computing. (7)

Q3) (a) What is cloud ecosystem? Discuss the benefits of cloud ecosystem. (7)

(b) Explain the types of faults available with cloud scenarios. How these faults can be removed give effective solutions by taking the real software example. (7)

Q4) (a) What is “VENDORLOCK-IN” and “Open virtualization format (OVF)” Concept. Explain it on the basis of cloud interoperability and standards. (7)

**UNIT-III**

Q3) (a) Using virtual desktop infrastructure will reduce the computing capabilities. Discuss the statement and justify whether it is contradictory or not. (2)

(b) Explain how HDFS works in parallel with Map Reduce programming model. (2)

(c) Write the difference between VLAN and VSAN. (3)

(d) What is virtualization hypervisor management software? What are the fundamental differences between the virtual machine as perceived by a traditional operating system processes? (7)

**Or**

(e) Explain resiliency, asset management, cloud governance, high availability and disaster recovery? Also discuss the major components used while applying the above processes. (7)

**UNIT-IV**

Q4) (a) What are the challenges associated with cloud security? (2)

(b) Explain identity management and access control, which are required for secure cloud computing. (2)

(c) What are the objectives, design principles and policies prepared by any organization for cloud security? (3)

(d) Explain different threats and vulnerabilities specific to virtual machines. Discuss the cloud design principles of for improved cloud security using roles and responsibilities in tenancy model. (7)

**Or**

(e) What challenging points are considered during the development of a cloud? Explain virtualization security architecture with its different security services. (7)

**UNIT-V**

Q5) (a) Discuss the market based management of clouds using the third party cloud services? (2)

(b) Explain the process of providing Platform as a service. (2)

(c) What is federated cloud. Give the names of existing federative approaches. (3)

(d) Explain conceptual representation of the Eucalyptus or Aneka Cloud. Explain in brief the components within the system. (7)

**OR**

(e) Explain the following technologies (Any Four) (7)

1. Google AppEngine (ii) Xen Cloud Platform (XCP) (iii) Amazon Web Services (AWS) (iv) ECG Analysis (v) Satellite Image Processing