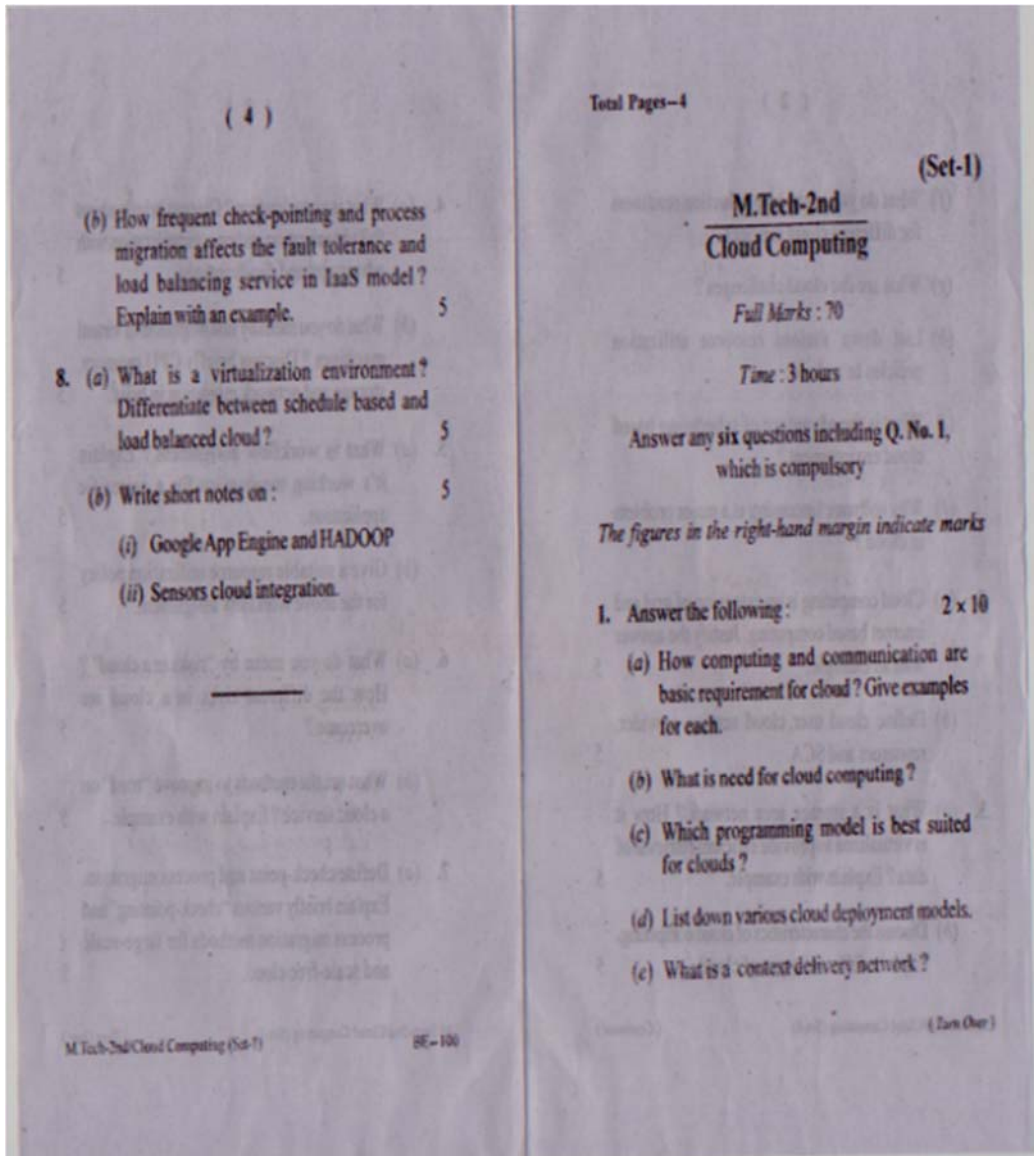# VEER SURENDRA SAI UNIVERSITY OF TECHNOLOGY, BURLA

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

& INFORMATION TECHNOLOGY

SESSION 2014-2015 (EVEN SEMESTER)

(b) How frequent check-pointing and process migration affects the fault tolerance and load balancing service in IaaS model? Explain with an example.   5

8. (a) What is a virtualization environment? Differentiate between schedule based and load balanced cloud?   5

(b) Write short notes on :   5

    (i) Google App Engine and HADOOP

    (ii) Sensors cloud integration.

———————

(Set-1)

M.Tech-2nd

Cloud Computing

Full Marks : 70

Time : 3 hours

Answer any six questions including Q. No. 1, which is compulsory

The figures in the right-hand margin indicate marks

1. Answer the following :   2 × 10

    (a) How computing and communication are basic requirement for cloud? Give examples for each.

    (b) What is need for cloud computing?

    (c) Which programming model is best suited for clouds?

    (d) List down various cloud deployment models.

    (e) What is a content delivery network?

(2)

(f) What do you mean by production readiness for different cloud services ?

(g) What are the cloud challenges ?

(h) List down various resource utilization policies in a cloud.

(i) What is the advantage of scheduling based cloud environment ?

(j) Why software lincensing is a major problem in cloud ?

2. (a) Cloud computing is an extension of grid and internet based computing. Justify the answer with an example. 5

(b) Define cloud user, cloud service provider, resources and SCA. 5

3. (a) What is a storage area network ? How it is virtualized to provide efficient retrieval of data ? Explain with example. 5

(b) Discuss the characteristics of cloud computing. Explain different types of cloud. 5

(3)

4. (a) What is virtualization ? Discuss briefly about full virtualization and para virtualization with advantages and disadvantages. 5

(b) What do you mean by line migration of virtual machines ? Discuss briefly CPU memory, storage and network migration in brief. 5

5. (a) What is workflow assignment ? Explain it's working mechanism for a scientific application. 5

(b) Give a suitable resource utilization policy for the above workflow assignment. 5

6. (a) What do you mean by "risks in a cloud" ? How the different risks in a cloud are overcome ? 5

(b) What are the methods to improve "trust" on a cloud service ? Explain with example. 5

7. (a) Define check-point and process migration. Explain briefly various "check-pointing" and process migration methods for large-scale and scale-free cloud. 5