

**INSTITUTE OF AERONAUTICAL ENGINEERING**

(Autonomous)

Dundigal-500043, Hyderabad

B.Tech VII SEMESTER END EXAMINATIONS (REGULAR) - FEBRUARY 2022

Regulation: R18

CLOUD COMPUTING

Time: 3 Hours

(IT)

Max Marks: 70

Answer FIVE Questions choosing ONE question from each module
(NOTE: Provision is given to answer TWO questions from any ONE module)

All Questions Carry Equal Marks

All parts of the question must be answered in one place only

MODULE – I

1. (a) Explain in detail about evaluation of service oriented architecture. [7M]
(b) Sketch a three cloud service model in a cloud landscape of major providers. [7M]
2. (a) Describe in detail about technologies for network based systems with necessary diagrams. [7M]
(b) Explain the following terms in detail:
 - i) Multi-core CPU technologies for network based systems
 - ii) Many-core GPU Technologies for network based systems. [7M]

MODULE – II

3. (a) Discuss the importance of cloud resource virtualization. Explain in detail about basics of virtualization with a suitable example. [7M]
(b) Explain the level of virtualization implementation along with abstraction levels. [7M]
4. (a) Give a detailed explanation on hypervisor architecture along with Xen architecture. [7M]
(b) What is memory virtualization? Explain the live migration process of a VM from one host to another. [7M]

MODULE – III

5. (a) Describe the service models of cloud computing along with suitable examples. [7M]
(b) Explain the basic architecture of the types of clouds and their functionality with neat sketch. [7M]
6. (a) List and explain the three types of capabilities offered by Aneka which are essential for clouds and their applications. [7M]
(b) Discuss in detail about public and private clouds along with its advantages and disadvantages. [7M]

MODULE – IV

7. (a) Discuss in detail about borrowed virtual time and cloud scheduling subject to deadlines with example. [7M]
(b) Explain the programming environment for google app engine with neat diagrams. [7M].

8. (a) Describe the features of the Azure cloud platform with a neat sketch. [7M]
(b) What does map reduce mean? Explain in detail about map reduce scheduling [7M]

MODULE – V

9. (a) Illustrate in detail the mechanisms for the implementation of cloud resource management policies. [7M]
(b) What is admission control? Explain about quality of service and value composition [7M]
10. (a) Discuss in detail about coordination of specialized autonomic performance managers. [7M]
(b) Explain in detail about cloud scheduling algorithms for computing clouds. [7M]

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