Reg. No. : | | | | | | | | | | | | | |

Question Paper Code : J1521

M.Sc. DEGREE EXAMINATION, FEBRUARY/MARCH 2018

Fourth Semester (Elective)

Computer Science

DCS 7007 — CLOUD COMPUTING

(Regulations 2013)

Time : Three hours Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. Define a cloud. List its limitations.
2. Abbreviate SaaS and IaaS. Give examples for both.
3. What is virtualization?
4. List the types of mechanisms available for virtualization.
5. What is platform deployment? Give eg.
6. Write an example of cloud infrastructure components.
7. What is Apache? Mention its features.
8. What are the types of cloud software environments?
9. Define virtual machine security.
10. Explain the term "security" in an hybrid cloud.

PART B — (5 × 13 = 65 marks)

11. (a) Describe NIST cloud computing reference architecture.

Or

(b) Write about

(i) Elasticity in cloud (6)

(ii) Private cloud. (7)

12. (a) Explain

(i) Virtualization structures (7)

(ii) Levels of virtualization. (6)

Or

(b) Describe CPU virtualization.

13. (a) Detail on Architectural design of compute and storage clouds.

Or

(b) Explain

(i) Global exchange of resources (6)

(ii) Inter cloud resource management. (7)

14. (a) Illustrate MapReduce.

Or

(b) Give an account of

(i) Amazon AWS (6)

(ii) Design challenges of cloud architecture. (7)

15. (a) With an example security monitoring in cloud.

Or

(b) What are cloud?

(i) Risk management (7)

(ii) Data security. (6)

PART C — (1 × 15 = 15 marks)

16. (a) Design and justify the requirements for design and implementation of types of cloud with supply chain management as case study. (15)

Or

(b) Explain on Open Stack and programming support for cloud storage.

(7 + 8 = 15)

———————

Reg. No. : | | | | | | | | | | | | |

Question Paper Code : BS2521

M.Sc. DEGREE EXAMINATION, AUGUST/SEPTEMBER 2017.

Fourth Semester (Elective)

Computer Science

DCS 7007 – CLOUD COMPUTING

(Regulations 2013)

Time : Three hours Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. What is virtualization?

2. List the characteristics service of Elasticity in cloud.

3. What is hypervisor?

4. Mention the side effects of the Server Virtualization.

5. What are the factors that demand for the Cloud users?

6. What is cloud exchange?

7. Short note on Map function.

8. List the uses of Big Table.

9. What is virtual patching?

10. How trust the data to your service provider?

PART B — (5 × 13 = 65 marks)

11. (a) Explain On–Demand Computing with its advantages.

Or

(b) Discuss the SaaS implementation issues with key characteristics and benefits.

12. (a) Explain the five abstraction levels of Virtualization ranging for applications with neat sketch.

Or

(b) (i) Describe the Xen Architecture. (7)

(ii) Explain about I/O devices Virtualization. (6)

13. (a) Discuss the Layered Cloud Architecture with neat sketch.

Or

(b) Elaborate the cases of resource Provisioning Methods.

14. (a) Illustrate the system issues of running a parallel programming.

Or

(b) Discuss HDFS Architecture.

15. (a) Explain the evolution of Cloud services.

Or

(b) Describe the SaaS Security with its features.

PART C — (1 × 15 = 15 marks)

16. (a) Illustrate about Hadoop MapReduce frame work.

Or

(b) Explain the software environments to design and setup cloud platform.

———————

Reg. No. : | | | | | | | | | | | | |

Question Paper Code : KJ1521

M.Sc. DEGREE EXAMINATION, FEBRUARY/MARCH 2017.

Fourth Semester (*Elective*)

Computer Science

DCS 7007 — CLOUD COMPUTING

(Regulations 2013)

Time : Three hours Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. What is IaaS?

2. Define Private cloud.

3. What is virtualization? Mention the levels of virtualization.

4. List the requirements of VMM.

5. Define VM cloning.

6. Explain runtime support service.

7. Define HDFS.

8. Define iterative MapReduce.

9. Define Security governance.

10. Define VM security.

PART B — (5 × 16 = 80 marks)

11. (a) Explain the architecture of P2P system.

Or

(b) Explain distributed cloud system models.

12. (a) Explain different types of virtualization in detail.

Or

(b) Explain virtualization of CPU, memory and I/O devices.

13. (a) Explain layered cloud architecture deployment.

Or

(b) Explain cloud service tasks and trends.

14. (a) Explain a user view of Google App Engine with suitable block schematic diagram.

Or

(b) Explain the architecture of MapReduce in Hadoop.

15. (a) Explain the Secure Software Development Life Cycle.

Or

(b) Explain the two fundamental functions, identity management and access control, which are required for secure cloud computing.

Reg. No. : | | | | | | | | | | | | | |

Question Paper Code : S1521

M.Sc. DEGREE EXAMINATION, FEBRUARY/MARCH 2016.

Fourth Semester (*Elective*)

Computer Science

DCS 7007 — CLOUD COMPUTING

(Regulations 2013)

Time : Three hours Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. Define cloud computing.

2. What is elasticity in cloud?

3. List the pitfalls of virtualization.

4. What are the various levels of virtualization?

5. List the challenges in designing a cloud.

6. What are the enabling technologies for building a cloud?

7. What is Iterative Map Reduce?

8. What is Hadoop?

9. What is the major stumbling block for cloud adoption?

10. What is security governance?

PART B — (5 × 16 = 80 marks)

11. (a) (i) With neat illustration, discuss the service models of a cloud with examples. (10)

(ii) How does cloud support on-demand provisioning? (6)

Or

(b) (i) Discuss the deployment models of a cloud. (10)

(ii) What is the history behind the evolution of cloud? Brief your answer. (6)

12. (a) (i) Virtualization is critical for cloud computing. Justify. (8)

(ii) Write notes on: Desktop virtualization. (8)

Or

(b) With a neat sketch, discuss the taxonomy of virtual machines. (16)

13. (a) (i) With neat sketch, explain the layered cloud architecture development. (8)

(ii) Discuss about resource provisioning and platform deployment techniques in building a cloud. (8)

Or

(b) (i) How do you manage resource between two different clouds? (8)

(ii) Explain the global exchange of cloud resources. (8)

14. (a) (i) Explain the Map Reduce model with suitable example and compute its parallel efficiency. (10)

(ii) Compare and contrast the various cloud software environments. (6)

Or

(b) (i) Discuss about the parallel and distributed programming paradigms. Suggest them for a cloud environment. (8)

(ii) Write notes on: Google App Engine and Twister. (8)

15. (a) Write short notes on:

(i) Software -as-services Security (8)

(ii) Application Security. (8)

Or

(b) Write short notes on:

(i) Virtualization security (8)

(ii) Risk Management in cloud. (8)
