

NARSIMHA REDDY ENGINEERING COLLEGE UGC AUTONOMOUS INSTITUTION

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Unit wise Question Bank

Subject: Cloud Computing(CS4110PE)

Unit-I

| S.No | | | Questions | BT | CO | PO | | | |
|------|--|------|--|----|-----|-----|--|--|--|
| | Part –A(Short Answer Questions) | | | | | | | | |
| 1 | What | is n | nean by Virtualization Middleware? | L1 | CO1 | PO1 | | | |
| 2 | Define | e da | tacenter growth and cost breakdown? | L1 | CO1 | PO1 | | | |
| 3 | Difference between distributed and parallel computing? | | | L1 | CO1 | PO1 | | | |
| 4 | List the design issues in clusters? | | | L1 | CO1 | PO1 | | | |
| 5 | Define | e pe | er-to-peer network? | L1 | CO1 | PO1 | | | |
| 6 | What | is n | nean by service oriented architecture? | L1 | CO1 | PO1 | | | |
| 7 | Define | e an | ything-as-a-service? | L1 | CO1 | PO1 | | | |
| 8 | What | is n | nean by SaaS? | L3 | CO1 | PO1 | | | |
| 9 | What | is n | nean by IaaS? | L1 | CO1 | PO1 | | | |
| | | | Part-B(Long Answer Questions) | | | | | | |
| 11 | a | / | Explain HPC Technology? | L2 | CO1 | | | | |
| | b |) | Explain Cluster Computing model in detail? | L2 | CO1 | | | | |
| 12 | a | | Explain the Cluster Architecture in detail? | L2 | CO1 | | | | |
| | b |) | Explain the infrastructure of Grid computing in detail? | L6 | CO1 | | | | |
| 13 | a | 1) | Explain the architecture of Optical Computation system? | L2 | CO1 | PO1 | | | |
| | b |) | Explain the cloud computing service models? | L1 | CO1 | PO1 | | | |
| 15 | a | 1) | Explain the NIST cloud computing reference architecture? | L2 | CO1 | PO1 | | | |
| | b |) | Explain the cloud eco system? | L2 | CO1 | PO1 | | | |
| 16 | a | 1) | Explain QuantumComputation. | L1 | CO1 | PO1 | | | |
| | b |) | Explain parellel and distributed models in detail? | L1 | CO1 | PO1 | | | |

Unit-II

| S.No | | Questions | BT | CO | PO | | | | |
|------|---|--|----|-----|-----|--|--|--|--|
| | Part -A(Short Answer Questions) | | | | | | | | |
| 1 | Explair | Instruction Set Architecture level of virtualization? | L1 | CO1 | PO1 | | | | |
| 2 | Explain hardware abstraction level of virtualization? L1 CO1 PO1 | | | | | | | | |
| 3 | Explair | operating system level of virtualization? | L1 | CO1 | PO1 | | | | |
| 4 | Explair | n library support level of virtualization? | L1 | CO1 | PO1 | | | | |
| 5 | Explain user application level of virtualization? | | | | PO1 | | | | |
| 6 | Write th | he relative merits of virtualization at various levels? | L1 | CO1 | PO1 | | | | |
| | List the | requirements of VMM? | L1 | CO1 | PO1 | | | | |
| | | ntiate full virtualization and para-virtualization? | L3 | CO1 | PO1 | | | | |
| 9 | What a | re the responsibilities of VMM? | L1 | CO1 | PO1 | | | | |
| | | Part– B(Long Answer Questions) | | | | | | | |
| 11 | a) | Explain the different types of virtualization in detail? | L2 | CO1 | PO1 | | | | |
| | b) | Explain the virtualization of CPU, Memory and I/O devices? | L2 | CO1 | PO1 | | | | |
| 12 | | Explain the virtualization of multi core processor? | L2 | CO1 | PO1 | | | | |
| | b) | How do you manage the resources in virtual environment? | L6 | CO1 | PO1 | | | | |
| 13 | a) | Explain the virtual clusters in detail? | L2 | CO1 | PO1 | | | | |
| | b) | You do you migrate memory, files, and network resources? | L1 | CO1 | PO1 | | | | |

| 15 | a) | Explain the concept dynamic deployment of virtual clusters? | L2 | CO1 | PO1 |
|----|----|---|----|-----|-----|
| | b) | Explain the virtualization for data center automation? | L2 | CO1 | PO1 |
| 16 | a) | Explain the trust management in virtual clusters? | L1 | CO1 | PO1 |
| | b) | Explain the different types of virtualization in detail? | L1 | CO1 | PO1 |

| S.No | | Questions | BT | CO | PO |
|----------|---------|---|----|-----|-----------------|
| | | Part –A(Short Answer | • | | • |
| | T | Questions) | T | • | |
| | | ne design goals for generic cloud? | L1 | CO1 | |
| , | | ne cloud enabling technologies? | L1 | CO1 | |
| | | in the QoS factors in cloud? | L1 | CO1 | |
| ļ | | e hardware virtualization? | L1 | CO1 | |
| <u> </u> | _ | in the storage virtualization? | L1 | CO1 | |
| 5 | | e VM cloning? | L1 | CO1 | PO ₁ |
| 7 | Expla | in runtime support service? | L1 | CO1 | PO1 |
| 3 | List th | ne design goals for generic cloud? | L3 | CO1 | PO1 |
|) | Defin | e dynamic resource deployment? | L1 | CO1 | PO1 |
| | | Part- B(Long Answer Questions) | | | |
| 11 | a) | Explain the cloud architecture with suitable block diagram? | L2 | CO1 | |
| | b) | Explain the layered cloud architecture development? | L2 | CO1 | |
| 12 | a) | Explain the virtualization support and disaster recovery? | L2 | CO1 | |
| | b) | Explain the architectural design challenges? | L6 | CO1 | |
| 13 | a) | Explain the cloud service tasks and trends? | L2 | CO1 | |
| | b) | Explain the different methods of resource provisioning? | L1 | CO1 | |
| 15 | a) | Explain the platform deployment in detail? | L2 | CO1 | |
| | b) | Explain the provisioning of storage resources in detail? | L2 | CO1 | |
| 16 | a) | Explain the cloud architecture with suitable block diagram? | L1 | CO1 | PO ₁ |
| | b) | Explain the layered cloud architecture development? | L1 | CO1 | PO ₁ |

Unit-IV

| S.N | Questions Questions | BT | CO | PO | | | |
|-----|---|----|-----|-----|--|--|--|
| | Part -A(Short AnswerQuestions) | | | | | | |
| 1 | Define HDFS? | L1 | CO1 | PO1 | | | |
| 2 | List the characteristics of HDFS? | L1 | CO1 | PO1 | | | |
| 3 | Explain the HDFS operations? | L1 | CO1 | PO1 | | | |
| 4 | Define block replication? | L1 | CO1 | PO1 | | | |
| 5 | Define heart beat in Hadoop? What are the advantages of heart beat? | L1 | CO1 | PO1 | | | |
| 6 | Define GFS? | L1 | CO1 | PO1 | | | |
| 7 | Define BigTable? | L1 | CO1 | PO1 | | | |
| 8 | What is mean by NOSQL? | L3 | CO1 | PO1 | | | |
| 9 | Explain the Google's distributed lock service? | L1 | CO1 | PO1 | | | |
| | | | | | | | |

| | | Part–B(Long AnswerQuestions) | | | |
|----|----|--|----|-----|-----|
| 11 | a) | Explain the architecture of MapReduce in Hadoop? | L2 | CO1 | PO1 |
| | b) | Explain the programming the Google App Engine? | L2 | CO1 | PO1 |
| 12 | a) | Explain the Architecture of Google File System? | L2 | CO1 | PO1 |
| | b) | Explain the structure of BigTable data model? | L6 | CO1 | PO1 |
| 13 | a) | Explain the programming on Amazon EC2? | L2 | CO1 | PO1 |
| | b) | Explain the architecture of Amazon EC2 ? | L1 | CO1 | PO1 |
| 15 | a) | Explain the Microsoft Azure programming support? | L2 | CO1 | PO1 |
| | b) | Explain the architecture of MapReduce in Hadoop? | L2 | CO1 | PO1 |
| 16 | a) | Explain the programming the Google App Engine? | L1 | CO1 | PO1 |
| | b) | Explain the Architecture of Google File System? | L1 | CO1 | PO1 |

Unit-V

| | | Questions | BT | CO | PO | | | |
|----|--|---|----|-----|-----|--|--|--|
| | Part -A(Short Answer Questions) | | | | | | | |
| 1 | Explain | the security awareness in cloud? | L1 | CO1 | PO1 | | | |
| 2 | Define | third party risk management? | L1 | CO1 | PO1 | | | |
| 3 | What are the layers in security architecture design? | | | CO1 | PO1 | | | |
| 4 | Define | VM security? | L1 | CO1 | PO1 | | | |
| 5 | Explain | change management? | L1 | CO1 | PO1 | | | |
| 6 | Define | data privacy? | L1 | CO1 | PO1 | | | |
| 7 | Define | security images? | L1 | CO1 | PO1 | | | |
| 8 | What i | mean by vulnerability assessment? | L3 | CO1 | PO1 | | | |
| 9 | Explain the security awareness in cloud? | | | | PO1 | | | |
| | | Part-B(Long Answer Questions) | | | | | | |
| 11 | a) | Explain the Security challenges in cloud computing in detail? | L2 | CO1 | PO1 | | | |
| | b) | Explain the security architecture in detail? | L2 | CO1 | PO1 | | | |
| 12 | 2 a) | Explain the following | L2 | CO1 | PO1 | | | |
| | b) | Security governance | L6 | CO1 | PO1 | | | |
| 13 | a) | Security monitoring | L2 | CO1 | PO1 | | | |
| | b) | Risk management | L1 | CO1 | PO1 | | | |
| 15 | a) | Explain the Secure Software Development Life Cycle? | L2 | | PO1 | | | |
| | b) | Explain in detail about Software-as-a-Service security? | L2 | | PO1 | | | |
| 16 | (a) | Explain the application security in detail? | L1 | CO1 | PO1 | | | |
| | b) | Explain the data security and virtual machine security in detail? | L1 | CO1 | PO1 | | | |