



**SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY :: PUTTUR
(AUTONOMOUS)**

Siddharth Nagar, Narayanavanam Road – 517583

QUESTION BANK (DESCRIPTIVE)

Subject with Code : Cloud Computing (16CS538)

Course & Branch: B.Tech.- CSE

Year & Sem: IV B.Tech. & II - Sem

Regulation: R16

UNIT –I

INTRODUCTION

1. a) Illustrate the scalable computing over the internet? [L2][CO1] [12M]
2. a) Explain about cloud computing over the internet? [L2][CO1] [6M]
b) Write briefly about grid computing infrastructures? [L2][CO1] [6M]
3. a) Explain briefly about Technologies for network based systems? [L4][CO1] [12M]
4. a) Explain SOA with its applications? [L2][CO1] [6M]
b) Discuss HPC and HTC? [L6][CO1] [6M]
5. a) Elaborate the concept of Virtualization middleware and virtual machines? [L6][CO1] [6M]
b) Explain the data Centre Virtualization for Cloud computing? [L5][CO1] [6M]
6. Classify the following computing environments: [L4][CO1] [12M]
a) Centralized computing c) Distributed computing
b) Parallel computing d) Cloud computing
7. Explain briefly about Multicore CPUs and Multithreading technologies? [L5][CO1] [12M]
8. a) Explain Fault-Tolerant cluster configurations? [L5][CO1] [6M]
b) Briefly explain Clusters for massive parallelism? [L2][CO2] [6M]
9. a) Write about checkpoint and recovery techniques? [L1][CO1] [5M]
b) Describe the high availability through redundancy? [L4][CO1] [5M]
10. a) Explain in detail about cluster job and resource management? [L2][CO1] [4M]
b) What is hypervisor? List out some examples? [L1][CO1] [4M]
c) Write about IoT and cyber-physical systems? [L2][CO1] [4M]

UNIT –II
FOUNDATIONS

1. a) Explain in detail about Cloud infrastructure management? [L2][CO2] [4M]
b) Tell about integration methodologies? [L1][CO2] [4M]
c) What is KVM? Explain in detail? [L1][CO2] [4M]
2. What are the layers and types of cloud computing? Explain in detail. [L5][CO2] [12M]
3. a) Identify the seven step model of migration into a cloud? [L3][CO2] [8M]
b) What are the SaaS integration products and platforms? [L1][CO2] [4M]
4. a) Examine in detail the issues for enterprise applications on the cloud? [L4][CO2] [7M]
b) Summarize the Transition challenges and risks? [L2][CO2] [5M]
5. a) Discuss the desired features of Cloud? [L5][CO2] [7M]
b) How does cloud computing provides on demand functionality? [L1][CO2] [5M]
6. a) Give a brief note on the following: Evolution of SaaS? [L2][CO2] [6M]
b) Challenges of SaaS [L2][CO2] [6M]
7. a) What are best approaches to migrating into cloud? [L1][CO2] [4M]
b) Explain about Business-to-Business integration (B2Bi) services? [L4][CO2] [8M]
8. a) Explain in detail about different SaaS integration services? [L4][CO2] [6M]
b) Explain the issues for enterprise applications on the cloud? [L4][CO2] [6M]
9. Discuss about The Cloud supply management with architecture diagram. [L6][CO2] [12M]
10. a) Explain Cloud sensor framework technology with architecture diagram? [L4][CO2] [6M]
b) Explain enterprise cloud technology and market evolution? [L2][CO2] [6M]

UNIT –III**INFRASTRUCTURE AS A SERVICE (IAAS) &
PLATFORM AND SOFTWARE AS A SERVICE (PAAS / SAAS)**

1. a) State and explain Virtual machines provision and manageability? [L4][CO3] [7M]
b) Define migration and Explain about migrations services? [L2][CO3] [5M]
2. a) What is IaaS? Mention any two IaaS service providers? [L1][CO3] [4M]
b) Explain about distributed management of virtual infrastructures? [L4][CO3] [8M]
3. a) Explain briefly about RVWS design? [L5][CO3] [7M]
b) Outline the concept of Cluster as service. [L2][CO3] [5M]
4. a) Discuss Secure distributed data storage in detail. [L6][CO3] [6M]
b) What are technologies used in secured data storage? Explain in detail. [L2][CO3] [6M]
5. a) Define Aneka and Explain about Aneka platform? [L4][CO3] [7M]
b) What is the resource provisioning of Aneka Cloud with diagram? [L2][CO3] [5M]
6. a) Explain the Comet Cloud architecture? [L2][CO3] [4M]
b) What is autonomic cloud engine? [L1][CO3] [4M]
c) Distinguish between cloud bursting and cloud bridging? [L4][CO3] [4M]
7. a) What is dynamic ICT service? Explain. [L4][CO3] [7M]
b) Explain about importance of Quality and security in clouds? [L2][CO3] [5M]
8. a) Discuss about workflow management systems and its architecture? [L6][CO3] [6M]
b) Explain classification of scientific applications in cloud? [L4][CO3] [6M]
9. a) Describe the importance of Map Reduce programming model? [L3][CO3] [6M]
b) Give impacts of Map Reduce and explain. [L2][CO3] [6M]
10. Discuss in detail about how T-System provides services. [L6][CO3] [6M]

UNIT –IV**MONITORING, MANAGEMENT AND APPLICATIONS**

1. Explain the architecture of federated cloud computing environment in detail. [L4][CO4] [12M]
2. List and explain the different phases in the SLA management. [L2][CO4] [12M]
3. a) What are the types of SLA? Explain. [L2][CO4] [6M]
b) Discuss life cycle of SLA. [L5][CO4] [6M]
4. Outline the performance prediction for HPC on clouds? [L2][CO4] [12M]
5. Justify the following terms related to building content delivery networks using clouds: [L5][CO4] [12M]
a) Cloud Front
b) Nirvanix Storage Delivery Network
c) Rack Space Cloud Files
d) Azure Storage Service
6. Discuss briefly about cloud best practices? [L6][CO4] [12M]
7. Explain in detail about MetaCDN? [L2][CO4] [12M]
8. Determine the concepts of cloud mashups in detail. [L5][CO4] [12M]
9. a) Write about realizing resource mashups? [L2][CO4] [6M]
b) Explain performance of the MetaCDN overlay? [L2][CO4] [6M]
10. Discuss briefly about GrepTheWeb? [L6][CO4] [12M]

UNIT –V**MOBILE CLOUD COMPUTING**

1. Elaborate the Architecture of mobile cloud computing? [L6][CO5] [12M]
2. Explain about Benefits of mobile cloud computing? [L2][CO5] [12M]
3. Analyze the challenges of mobile cloud computing in detail. [L4][CO5] [12M]
4. a) Compare mobile computing and cloud computing? [L2][CO5] [4M]
b) Write about data access in mobile cloud computing. [L2][CO5] [4M]
c) Describe about personal data storage on mobile cloud? [L2][CO5] [4M]
5. Explain about the types of issues in mobile computing. [L5][CO5] [12M]
6. a) Discuss about security for mobile user with privacy. [L4][CO5] [8M]
b) Explain about general security in mobile cloud computing? [L2][CO5] [4M]
7. a) List out the applications of mobile cloud computing? [L2][CO5] [8M]
b) What is data portability and data interoperability? [L1][CO5] [4M]
8. a) List out the motivation behind the usage of Mobile Cloud Computing? [L2][CO5] [6M]
b) Identify the approaches in mobile augmentation. [L3][CO5] [6M]
9. a) Write about incentives in MCC? [L2][CO5] [4M]
b) What is energy efficiency and business model in MCC? [L1][CO5] [4M]
c) Write about Cloudlet deployment in MCC? [L2][CO5] [4M]
10. a) Explain in brief about fault tolerance and cost benefit analysis? [L2][CO5] [4M]
b) List out the supporting performance at service level and cloud API? [L2][CO5] [4M]
c) What is hardware approaches and software approaches in MCC? [L1][CO5] [4M]

Prepared by:

1. **Dr. P. SANTHOSH KUMAR**
Associate Professor/CSE
2. **Mr. G. SARAVANA GOKUL**
Assistant Professor/CSE