

SEMESTER EXAMINATION-2021	
CLASS – MCA-V SEM... SUBJECT - COMPUTER SCIENCE	
MCA-E508 Cloud Computing Concepts	
Time: 3 hour	Max. Marks: 70 Min. Pass: 40%
Note: Question Paper is divided into two sections: A and B . Attempt both the sections as per given instructions.	
SECTION-A (SHORT ANSWER TYPE QUESTIONS)	
Instructions: Answer any five questions in about 150 words each. Each question carries six marks.	(5 X 6 = 30 Marks)
Question-1: Define cloud computing? Explain its characteristics and benefits.	
Question-2: What are the advantages and disadvantages of Cloud Computing?	
Question-3: What is a cloud ecosystem? How a cloud ecosystem works. What are the elements of cloud ecosystem model?	
Question-4: How securities policies are implemented on cloud computing.	
Question-5: Explain energy efficiency in cloud computing.	
Question-6: What and how many types of development models are used in the cloud.	
Question-7: Write short note on Hypervisor?	
Question-8: What are the differences between multicore CPUs and GPUs in terms of architecture and usage?	
Question-9: What is "EUCALYPTUS" in the context of cloud computing.	
Question-10: Differentiate between Full- virtualization and Para-virtualization.	
SECTION-B (LONG ANSWER TYPE QUESTIONS)	
Instructions: Answer any FOUR questions in detail. Each question carries 10 marks.	(4 X 10 = 40 Marks)
Question-11: An increasing number of organizations in industry and business sectors adopt cloud systems. Answer the following questions regarding cloud computing: a. List and describe the main characteristics of cloud computing systems. b. Discuss key enabling technologies in cloud computing systems. c. Discuss different ways for cloud service providers to maximize their revenues	
Question-12: With the help of neat diagram, explain the Cloud Computing reference model.	
Question-13: Differentiate between Cluster Computing and Grid Computing?	
Question-14: Explain Map reduce programming methodology. How it helps in	

implementing complex problems using Cloud Computing?

Question-15: Explain the following:

- a) Data Security in Cloud
- b) Privacy Management in Cloud

Question-16: Write short notes on”

- a. Cloud Sim
- b. Google App Engine

Question-17: Characterize the following three cloud computing models:

- a. What is an IaaS (Infrastructure-as-a-Service) cloud? Give one example system.
- b. What is a PaaS (Platform-as-a-Service) cloud? Give one example system.
- c. What is a SaaS (Software-as-a-Service) cloud? Give one example system

Question-18: Answer the following questions:

- a. What is service management in cloud computing?
- b. What is the purpose of cloud service management?
- c. What is a characteristic of cloud service management?
- d. What is on demand service and how is it provided in cloud computing?
- e. How on demand service is provided in cloud computing?