CLASS: M. TECH. & PRE-PHD.   SEMESTER : 1st
BRANCH: CSE   SESSION : MO/2022

SUBJECT: IT508 CLOUD COMPUTING

TIME: 03 Hours   FULL MARKS: 50

INSTRUCTIONS:
1. **The question paper contains 5 questions each of 10 marks and total 50 marks.**
2. **Attempt all questions.**
3. **The missing data, if any, may be assumed suitably.**
4. **Tables/Data handbook/Graph paper etc., if applicable, will be supplied to the candidates**

Q.1(a)	Explain the significance of dynamic provisioning in cloud computing service delivery model.	CO1	BL4	[2]
Q.1(b)	Give a brief discussion on the evolution of cloud computing. Mention the important characteristics of the cloud computing service model.	CO1	BL2	[3]
Q.1(c)	Explain, using an appropriate illustration, how cloud-based software development differs from traditional software development.	CO1	BL3, BL4	[5]
Q.2(a)	Define parallel computing and give a discussion on the various types of parallel computing systems.	CO1	BL1, BL4	[2]
Q.2(b)	Outline the salient differences between distributed and parallel computing. Summarize the different programming approaches to accomplish parallelism.	CO1	BL2	[3]
Q.2(c)	Enlist the characteristics of a distributed system. With a suitable illustration describe the layered perspective of a distributed system components	CO1	BL1 BL3	[5]
Q.3(a)	Discuss what motivated the inception of virtualization technology in the process of cloud service delivery.	CO2	BL2	[2]
Q.3(b)	Demonstrate a visual representation of the virtualization reference model. Mention the characteristics of a virtualized environment.	CO2	BL2	[3]
Q.3(c)	Give a comprehensive comparison of various hardware virtualization techniques.	CO2	BL5	[5]
Q.4(a)	Summarize the essential features of Infrastructure-as-a-service (IaaS) with respect to cloud computing reference model.	CO2, CO3	BL2	[2]
Q.4(b)	Illustrate the various components of Platform-as-a-Service (PaaS) using its service reference model.	CO2, CO3	BL3	[3]
Q.4(c)	Express an insight of how cloud computing shortens application development cycles and decreases initial investment costs.	CO2, CO3	BL2	[5]
Q.5(a)	Outline an example of a business use case that makes cloud computing worthwhile.	CO4	BL2	[2]
Q.5(b)	Discuss the basic components of Google AppEngine. Mention the essential services supported by AppEngine	CO4	BL2	[3]
Q.5(c)	Describe in detail the primary offerings of Amazon Web Services.	CO4	BL2	[5]

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