Question Paper

Exam Date & Time: 23-Apr-2024 (02:00 PM - 05:00 PM)

MANIPAL ACADEMY OF HIGHER EDUCATION

Manipal School of Information Sciences (MSIS), Manipal
Second Semester Master of Engineering - ME (Cloud Computing) Degree Examination - April / May 2024

Cloud Networks [CDC 5201]

Marks: 100   **Duration: 180 mins.**

Tuesday, April 23, 2024

Answer all the questions.

1)	Explain the following OSI layers. (5 +5 Marks) CO1, L3 a. Presentation Layer b. Transport Layer	(10)
2)	Illustrate with a diagram the 3 actions performed by a network switch. (10 Marks) CO1, L3	(10)
3)	Answer the following: (4+6 marks) CO1, L3 A) Explain class A IP address. B) What subnets do the following hosts belong to? a) 192.168.22.135/25 b) 192.168.99.91/27 c) 192.169.108.55/28	(10)
4)	Explain the working of DHCP with a diagram. (8+2 Marks) CO1, L3	(10)
5)	Explain top-level domain (TLD). Mention the different types of TLDs. (5+5 Marks) CO2, L4	(10)
6)	Explain 5 things to know when choosing a data center location. (10 Marks) CO2, L4	(10)
7)	Explain the concept of RAID. Discuss the following RAID types with advantage and disadvantage of each RAID type. (2+8 Marks)CO2, L4 a. RAID 6 b. RAID 10	(10)
8)	a. Provide comprehensive comparison between SAN vs NAS. CO2, L4 (7 Marks) b. Choose which layer of SAN do the following components belong to: (3 Marks) - Cabling and network devices - Servers - HDD and Tape drives	(10)
9)	Explain how CDN update their site cache. Summarize the benefits of CDNs. (6+4 Marks) CO3, L4	(10)
10)	Explain the following (2+4+4 Marks) CO3, L4: a. What is Application Delivery Controller? b. Why do organizations use ADC's? c. How does an application delivery controller work?	(10)

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