Question Paper

MANIPAL ACADEMY OF HIGHER EDUCATION

Manipal School of Information Sciences (MSIS), Manipal

Second Semester Master of Engineering - ME (Cloud Computing) Degree Examination (Makeup Exam) - June 2024

Cloud Networks [CDC 5201]

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

Monday, 03 June 2024

Answer all the questions.

1)	Explain the following OSI layers. (5 +5 Marks) CO1, L3 a. Network Layer b. Data link 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 B IP address. B) What subnets do the following hosts belong to? a) 192.168.22.181/26 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 authoritative name server and 2 types of authoritative name server. Differentiate between authoritative DNS server and recursive DNS server. (2+4+4 Marks) CO2, L4	(10)
6)	Differentiate between the following types of Data Center Redundancy. (5+5 Marks) CO2, L4 a. N vs N+1 b. 2N vs 2N+1	(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)	Explain what is Fibre Channel and also compare Fibre Channel Switch vs Ethernet Switch. (3+ 7 Marks) CO2, L4	(10)
9)	Explain PoP and why are they so crucial to a CDN. Discuss the role of CDN in data security. (5+5 Marks) CO3, L4.	(10)
10)	Explain Application Delivery Controller (ADC) and why do organizations use it. Explain the working of an application delivery controller. (2+4+4 Marks) CO3, L4	(10)

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