

Roll No.																			
----------	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--



Department of Research & Development
Mid - Term Examinations - SEPTEMBER 2024

Odd Semester: Ph.D. Course Work	Date: 27 /09/2024
Course Code: CSE911	Time: 10:00am – 11:30am
Course Name: Advanced Distributed Edge Systems	Max Marks: 50
Department: PSCS	Weightage: 25%

Instructions:

- (i) Read all questions carefully and answer accordingly.
- (ii) Do not write anything on the question paper other than roll number.

Part A

Answer ALL the Questions. Each question carries 5 marks.		4Qx5M=20M
1	Describe about the Multi-Access Edge Computing (MEC) with examples.	5 Marks
2	Mention about the Edge AI Models and Frameworks.	5 Marks
3	Discuss in detail about the Network Function Virtualization (NFV) in Edge Systems with examples.	5 Marks
4	Discuss the concept of Edge-to-Cloud Communication.	5 Marks

Part B

Answer ALL Questions. Each question carries 15 marks.		2QX15M=30M
5	How has the implementation of advanced architectures in edge computing revolutionized real-time traffic management systems in smart cities? Specifically, what role do edge devices and V2X communication play in reducing latency and improving decision-making at critical intersections? What challenges arise when integrating legacy systems with new edge infrastructure, and how are issues like data privacy and security addressed in such architectures to ensure safe and reliable operations?	15 Marks
6	A large financial institution faced an increase in advanced cyber threats, including phishing attacks, insider threats, and sophisticated ransomware targeting sensitive customer data. The organization needed to enhance its security posture to prevent potential data breaches and financial losses.	15 Marks