Course Code: 22UPCSC1E32 /22UPCSC2E32

Solution Architecture Lab

Credits: 4

Course Objectives:

- To get familiar with AWS cloud services
- To design secure, scalable, and well structured cloud solutions
- To create EC2 instance and configure options
- To connect EC2 with Linux instance
- To connect VPN server to securely access instances
- 1. Managing Virtual Private Cloud
- 2. Creating and Configuring Internet Gateways
- 3. Configuring Routing Tables
- 4. Working with Amazon Elastic Cloud Compute (EC2)
- 5. Connecting EC2 Linux instance using PuTTY, Gitbash and Console
- 6. Recovering and connecting EC2 instance if the SSH key is lost
- 7. Creating and Configuring Elastic Load Balancer
- 8. Scheduling Auto Snapshot of volumes
- 9. Configuring Centralized Log Management using Cloud Watch Log
- 10. Connecting OpenVPN server

Course Outcomes

On the successful completion of the course, students will be able to

CO1:	Understand AWS cloud services and manage the cloud data	
CO2:	Develop secure, scalable, and well structured cloud solutions	K1- K6
CO3:	Implement EC2 instance and configure the instance	
CO4:	Connect EC2 with Linux instance and perform operations	
CO5:	To connect VPN server to access instances with more security	

K1- Remember, K2- Understand, K3- Apply, K4- Analyze, K5-Evaluate, K6- Create Mapping with Programme Outcomes

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	S	S	S	S	S	S	S	S	S	М	S	S
CO2	S	S	S	S	S	S	S	S	S	S	М	S
CO3	S	М	S	S	S	S	М	S	S	S	S	S
CO4	S	S	S	М	S	S	S	S	S	S	М	S
CO5	S	S	S	S	М	S	S	S	S	М	М	S

S- Strong; M-Medium; L-Low