#### LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING





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hodcse@lbrce.ac.in, cseoffice@lbrce.ac.in, Phone: 08659-222 933, Fax: 08659-222931

#### **DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING**

## Three week training program on "Amazon Cloud Practitioner certification"

**Event Type** : Workshop

**Date** : 23<sup>rd</sup> June – 12<sup>th</sup> July 2025

**Venue** : SRK Hall, 2<sup>nd</sup> Floor Admin Block

Resource Person(s) : Ms.Siri Chakkala

Mr.Surya

Mr.Sundar Rajini

Name of the Convener : Dr.S.Nagarjuna Reddy, Professor & HoD, Department of CSE

Name of the Co-Convener : Dr.D.Veeraiah, professor, Dept. of CSE

Name of the Co-ordinators(s) : Mrs.G.V. Rajya Lakshmi, Sr. Asst.Prof, Dept of CSE

Mr. N.V.Naik, Sr.Asst.Prof, Dept of CSE Ms. P. Sarala, Sr.Asst.Prof, Dept of CSE Mr.O.Venkata siva, Asst.Prof, Dept of CSE Mrs.B.Swathi, Sr.Asst.Prof, Dept of CSE

Mrs.M.Gayatri, Asst.Prof

Mr.P.Narasimha Rao, Asst. Prof

**Targeted Audience** : B.Tech V Sem CSE Students

**Total No. of Students** : 252 Students

Objective of the Event : The primary objective of the Three-week Training Program on Amazon Cloud Practitioner Certification is to equip participants with fundamental knowledge of cloud computing concepts, AWS core services, pricing models, security practices, and architectural principles. The training aims to prepare learners for the AWS Certified Cloud Practitioner examination, enabling them to gain a globally recognized credential. Additionally, the program focuses on enhancing participants' understanding of cloud adoption strategies, cost optimization, and industry best practices, thereby strengthening their technical foundation for advanced cloud learning and real-world applications

#### **Learning Objective of the event:**

#### 1. Understand Cloud Fundamentals

o Gain knowledge of basic cloud computing concepts, benefits, and deployment models.

#### 2. Explore AWS Core Services

o Learn about key AWS services in computing, storage, networking, and databases.

#### 3. Familiarize with Security and Compliance

o Understand AWS shared responsibility model, security features, and compliance resources.

#### 4. Learn AWS Pricing and Billing

o Analyze AWS pricing models, cost management, and billing practices.

#### 5. Apply Cloud Best Practices

o Recognize AWS architectural principles and operational best practices for cloud adoption.

#### 6. Prepare for Certification

 Develop the required knowledge and confidence to attempt the AWS Certified Cloud Practitioner Exam successfully.

#### 7. Enhance Career Readiness

 Build foundational cloud skills that support further specialization in AWS and improve employability in cloud-based roles.

#### **Description of the event**:

#### Day1: 23-06-2025

- Workshop was inaugurated on 23/06/2025 by Dr S.Nagarjuna Reddy, HOD CSE, , Convener(s) of the workshop, along with Ms.Siri Chakkala &Mr.Surya &Mr.Sundar Rajini Resource Persons.
- Coordinators of the Workshop, Mrs. G. V. Rajya Lakshmi, Ms. P. Sarala and Mr.N.V.Naik, Mr.O.V.Siva welcomed all the dignitaries and delegates. In his welcome speech, he highlighted the importance and objectives of organizing this Workshop. The convener of the Workshop, Dr.S.Nagarjuna Reddy started the speech by thanking LBRCE Management and congratulating all the participants who registered for this workshop. Then they thanked the Resource Person Ms.Siri Chakkala &Mr.Surya &Mr.Sundar Rajini and his Team, for accepting our request irrespective of his busy schedule. They added the importance of AWS workshop. They encouraged all the students to utilize this opportunity, which will help them in identifying/doing projects in Data Science.
  - Amazon Web Services (AWS) is a leading cloud computing platform by Amazon.
  - Provides **on-demand IT resources** like compute, storage, networking, and databases.
  - Offers pay-as-you-go pricing with scalability and flexibility.
  - Global infrastructure with **Regions and Availability Zones**.
  - Core services include EC2 (compute), S3 (storage), RDS (databases), and VPC (networking).
  - Ensures **security**, **compliance**, **and reliability** for businesses of all sizes.



#### Day2: 24-06-2025

- Resource Person Ms.Siri Chakkala explained about the cloud Essentials.
- Cloud computing is the delivery of computing services—such as servers, storage, databases, networking, software, analytics, and intelligence—over the internet ("the cloud") instead of relying on local servers or personal devices.
- IaaS (Infrastructure as a Service): Provides virtualized computing resources like servers and storage (e.g., AWS EC2).
- PaaS (Platform as a Service): Offers development platforms and tools for building applications (e.g., AWS Elastic Beanstalk).
- SaaS (Software as a Service): Delivers software applications over the internet (e.g., Amazon WorkMail).
- **Public Cloud:** Services offered over the internet to multiple customers.
- Private Cloud: Dedicated cloud infrastructure for a single organization.
- **Hybrid Cloud:** Combination of public and private cloud for flexibility.



#### Day3: 25-06-2025

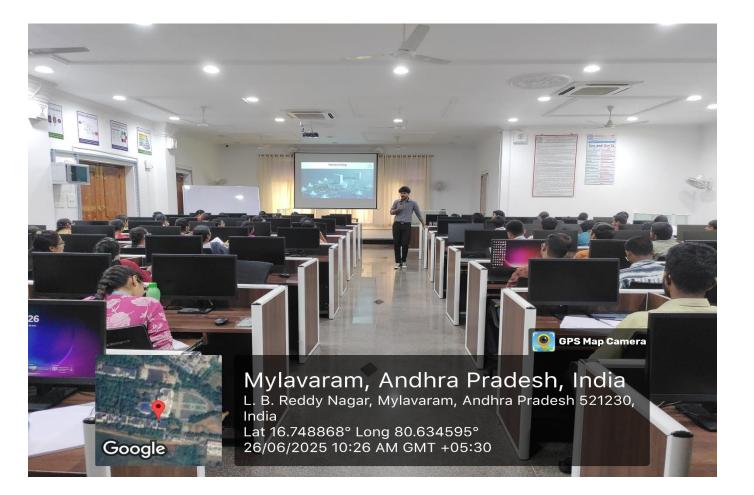
- Resource Person **Mr.Surya** covered interacting with Cloud and storage files.
- Resource Persons team handled hands-on sessions on Compute as a Service and Pricing and support.
- A browser-based graphical user interface (GUI).
- Easy to use for beginners.
- Example: Logging into **AWS Management Console** to create EC2 instances, S3 buckets, etc.
- Stores files as **objects** (data + metadata + unique ID).
- Best for images, videos, documents, backups, big data.
- Virtually unlimited storage capacity.
- Highly durable (99.99999999 durability).
- Accessible anywhere over the internet.





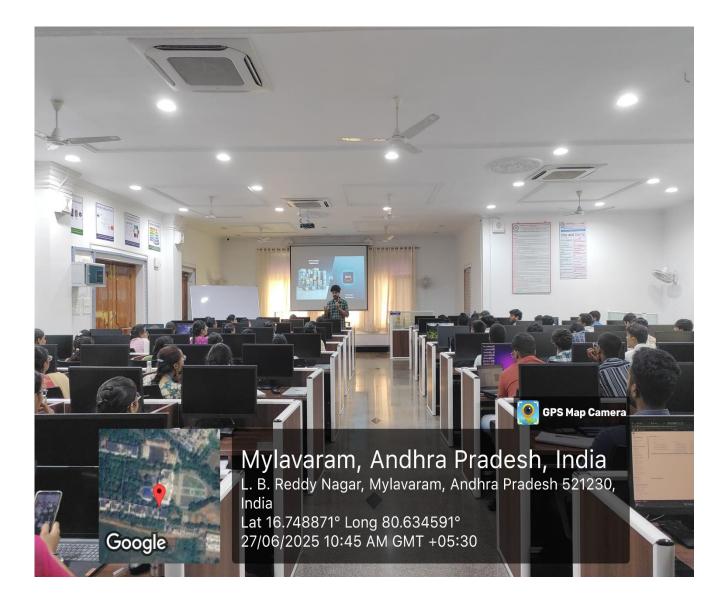
#### Day 4: 26-06-2025

- Resource Person **Mr.Surya** covered Networking concepts.
- Virtual Private Cloud (VPC): Private network inside AWS to launch and manage resources securely.
- **Subnets:** Divide VPC into smaller networks **Public** (internet-facing) and **Private** (internal only).
- Internet Gateway (IGW): Connects VPC to the internet for public access.
- NAT Gateway / NAT Instance: Allows private subnet resources to access the internet without being exposed.
- **Route Tables:** Define the rules for directing network traffic within VPC.
- Security Groups: Instance-level virtual firewalls controlling inbound and outbound traffic.
- Network ACLs (NACLs): Subnet-level firewalls for additional security.
- Elastic Load Balancer (ELB): Distributes incoming traffic across multiple instances for high availability.
- Amazon Route 53: DNS service to route users to applications with health checks and low latency.
- **VPC Peering:** Connects two VPCs for secure private communication.
- VPN Connection: Secure tunnel between on-premises data centers and AWS cloud.



#### Day 5: 27-06-2025

- Resource Person Mr.Surya explained various AWS Cloud data bases and Security Concepts.
- Amazon RDS Managed relational database (MySQL, PostgreSQL, Oracle, SQL Server, MariaDB).
- Amazon Aurora High-performance relational DB, MySQL/PostgreSQL compatible.
- Amazon DynamoDB Fully managed NoSQL database, key-value & document model.
- Amazon Redshift Data warehouse for large-scale analytics.
- Amazon ElastiCache In-memory caching (Redis, Memcached) for fast performance.
- Amazon Neptune Graph database for connected data (social networks, fraud detection).
- Amazon DocumentDB Managed document database, MongoDB-compatible.
- Shared Responsibility Model AWS secures infrastructure; customer secures data & access.
- IAM (Identity and Access Management) Manage users, groups, roles, and permissions.
- Security Groups Instance-level firewall (controls inbound/outbound traffic).
- NACLs (Network ACLs) Subnet-level firewall for extra protection.
- **AWS KMS** Encryption key management service.
- AWS Shield Protects against DDoS attacks.



Day 6: 28-06-2025

- Resource Person Mr.Surya explain on Monitoring and shared responsibility models.
- Amazon CloudWatch Monitors metrics, logs, and sets alarms for AWS resources.
- **AWS CloudTrail** Records API calls and user activities for auditing.
- **AWS Config** Tracks resource configurations and compliance.
- AWS Trusted Advisor Gives best-practice checks for cost, security, and performance.
- Benefits Ensures availability, detects failures, improves security, and controls cost.
- Protects physical data centers, hardware, networking, and global infrastructure.
- Manages data, applications, access controls, configurations, and encryption.



#### Impact Analysis

- Strengthened understanding of cloud computing concepts and AWS services.
- Improved readiness for the AWS Certified Cloud Practitioner exam.
- Enhanced hands-on technical skills through practical sessions and labs.
- Boosted career opportunities with a globally recognized certification.
- Helped participants contribute to organizational cloud adoption and migration.
- Promoted cost optimization, scalability, and security awareness in cloud use.
- Encouraged innovation and productivity with cloud-native solutions.
- Built a pipeline of cloud-ready professionals for future projects

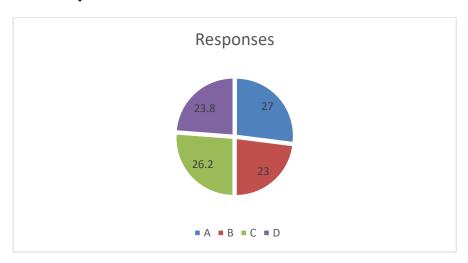
#### Feedback & Suggestions:

- The training provided a **clear understanding of cloud fundamentals and AWS services**.
- Hands-on sessions and labs were **highly useful** for gaining practical exposure.
- The program structure was **well-paced** and easy to follow.
- Trainers were **knowledgeable and supportive**, clarifying doubts effectively.
- The training improved **confidence in attempting the AWS certification exam**.

- Include more real-time project demonstrations for deeper learning.
- Provide mock tests and quizzes to help with exam preparation.
- Extend lab access after sessions for self-practice.
- Add advanced AWS service topics (e.g., AI/ML, Serverless, Containers) for interested learners.

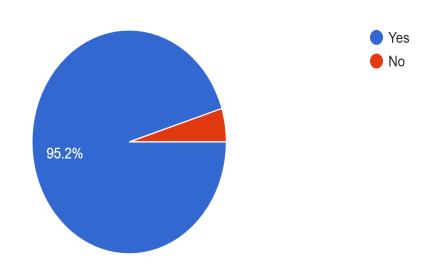
### FEEDBACK RESPONSES FROM ALL THE PARTICIPANTS:

All Sections - 252responses

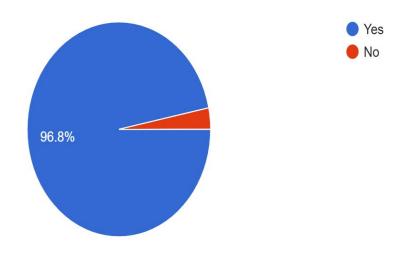


# Did the workshop meet your learning outcomes?

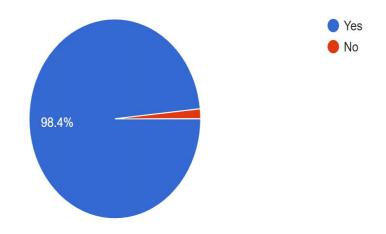
248 responses



Did you feel engaged and actively involved in the workshop activities and discussions? <sup>248</sup> responses

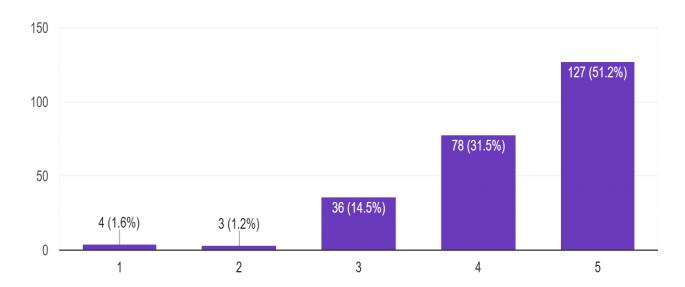


Did the workshop's hands-on sessions help you engage and learn new things? 248 responses



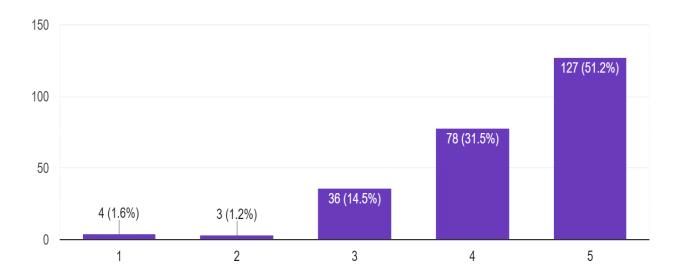
# Overall feedback on the workshop

248 responses



## Overall feedback on the workshop

248 responses



#### **SUGESSTIONS:**

- Provide **mock tests and practice quizzes** to boost exam preparation.
- Extend hands-on lab access for more self-practice after sessions.
- Include real-world case studies and project demonstrations.

• Offer study guides, cheat sheets, and recorded sessions for revision.

#### **OUTCOME OF THE EVENT:**

- Gained fundamental knowledge of cloud computing and AWS global infrastructure.
- Understood core AWS services (compute, storage, networking, databases, and security).
- Learned about AWS pricing, billing, and cost management models.
- Acquired hands-on skills in managing AWS resources through console and CLI.
- Improved awareness of security, compliance, and shared responsibility model.
- Prepared participants for the AWS Certified Cloud Practitioner exam.
- Enhanced career opportunities in cloud-related roles.
- Built a foundation for advanced AWS certifications and cloud projects.

#### PRESS REPORT:

# యల్. బి. ఆర్.సి. ఈ లో "అమెజాస్ వెబ్



**බුలవరం, (කෘහුන හරගාහකි):** స్థానిక లకీరెడ్డి బాలిరెడ్డి ఇంజినీరింగ్ కళాశాలలో కంప్యూటర్ సైన్స్ అండ్ ఇంజినీరింగ్ విభాగం మరియు ఆర్టిఫిషియల్ ఇంటెలిజెన్స్ అండ్ దేటా సైన్స్ విభాగం వారి సంయుక్త ఆధ్వర్యంలో 23-06-2025 నుండి 12-07-2025 "అమేజాన్ వెబ్ సర్వీసెస్"పై మూదు వారాల శిక్షణా కార్యక్రమాన్ని నిర్వహిస్తున్నారు. ఈ శిక్షణ కార్యక్రమం విద్యార్థు లకు క్లౌడ్ కంప్యూటింగ్లో ప్రాజెక్ట్ ఆధారిత అభ్యాసం ద్వారా నైపుణ్యాలను అభివృద్ధి చేయదానికి ఉద్దేశించబదింది. ఇందులో ఇందర్టీ భాగస్వామి అయిన Smart Bridge సంస్థతో సహకా రంగా శిక్షణ ఇవ్వబదుతోంది. ఈ కార్యక్రమానికి (శీ.సిహెచ్ యుక్తేష్, డైరెక్టర్ అండ్ అకాదమిక్ ఇనిషియేటివ్, Smart ఈ అవకాశాన్ని సద్వినియోగం చేసుకుని AWS సాంకేతిక Bridge వారు రిసోర్స్ పర్సన్గా వ్యవహరించారు ఈ సందర్భంగా



ఆయన మాట్లాడుతూ, ఆధునిక టెక్నాలజీ రంగంలో క్లౌడ్ కంఫ్యూ టింగ్ యొక్కపాధాన్యతను తెలియజేస్తూ, విద్యార్థులు అంతర్వాతీ య స్రామాణాలు కలిగిన నైపుణ్యాలను పొందాల్సిన అవసరాన్ని వివరించారు. ఈ శిక్షణా శిబిరానికి దా. ఎస్. నాగార్జున రెడ్డి, CSE HOD మరియు దా.పి.భగత్, AI&DS HOD కన్వీనర్నుగా వ్యవహరిస్తున్నారు. అలాగే దా.డి.వీరయ్య, CSE విభాగానికి చెందిన బ్రాఫెసర్గా సహకార కన్వీనర్ బాధ్యతలు నిర్వహి స్తున్నారు. ఈ కార్యక్రమానికి CSE మరియు AI&DS విభాగా లకు చెందిన అధ్యాపకుల చురుకైన సమన్వయంతో, ఈ శిక్షణా కార్యకమం విజయవంతంగా నిర్వహించబడుతోంది. విద్యార్థులు పరిజ్ఞానంతో తమ నైపుడ్యాలను మెరుగుపరచుకోనున్నారు.