A.S.D.GOVT. DEGREE COLLEGE FOR WOMEN (A)

(Re-Accredited with 'B' Grade by NAAC)

(Affiliated to Adikavi Nannaya University)

Jagannaickpur, Kakinada.

DEPARTMENT OF COMPUTER SCIENCE

INVITED LECTURE

2024-2025

A.S.D.GOVT. DEGREE COLLEGE FOR WOMEN (A)

JAGANNAICKPUR, KAKINADA

DEPARTMENT OF COMPUTER SCIENCE

2024- 2025

INVITED LECTURE

By

Mrs.G.Satya Suneetha, **M.Tech.**
Lecturer in Computer Applications,
GDC Kovvur.

Date : 02-12-2024

Topic : Internet of Things -Applications of Sensors in Everyday

Conducted by

N.NAGA SUBRAHMANYESWARI, LECTURER IN COMPUTER SCIENCE

K.SURYA LAKSHMI, LECTURER IN COMPUTER SCIENCE

A.JAYA LAKSHMI, LECTURER IN COMPUTER SCIENCE

P.S.V.D BALLABAMBA, LECTURER IN COMPUTER APPLICATIONS

V.RAMA TULASI, LECTURER IN COMPUTER APPLICATIONS

A.S.D.GOVT. DEGREE COLLEGE FOR WOMEN (A), KAKINADA

DEPARTMENT OF COMPUTER SCIENCE

Activity Register 2024-2025

Date	02/12/2024
Conducted through (DRC/JKC/ELF/NCC/NSS/ Departments etc.)	Department of Computer Science
Nature of Activity (Seminar/Workshop/Extn. Lecture etc.,)	Invited Lecture
Title of the Activity	***Internet of Things -Applications of Sensors in Everyday***
Name of the Department/Committee	Computer Science
Details of Resource Persons (Name , Designation etc.,)	**Mrs.G.Satya Suneetha** Lecturer in Computer Applications, Government Degree College, Kovvur.
No.of students participated	60
Brief Report on the activity	To enable the students to learn about the Internet of Things
Name of the Lecturers who Planned & conducted the activity	N.Naga Subrahmanyeswari, Lecturer in Computer Science K.Surya Lakshmi, Lecturer in Computer Science A.Jaya Lakshmi, Lecturer in Computer Science P.S.V.D Ballabamba, Lecturer in Computer Applications V.Rama Tulasi, Lecturer in Computer Applications
Signature of the Dept.In-Charge/ Convener of the Committee	N.N.S.Eswari I/C HARGE DEPT OF COMPUTER SCIENCE A.S.D.GOVT DEGREE COLLEGE (W) (AUTONOMOUS) KAKINADA
Signature of the Principal	PRINCIPAL A.S.D.GOVT.DEGREE COLLEGE (W) AUTONOMOUS KAKINADA
Remarks	

(* Brief Report of the activity has to be submitted along with evidences(Correspondence , Photographs, Paper Clippings, and Student Feedback etc).A separate record has to be prepared for each Academic year. The College Activity Register shall be with the Principal. All activities have to be recorded and the serial no of the activity has to be mentioned on the report of the activity.)

PERMISSION LETTER

Kakinada,
Date: 29-11-2024.

To,
Dr. V.Anantha Lakshmi,
Principal,
A.S.D. Govt. Degree College for Women (A),
Kakinada.

From,
N.Naga Subrahmanyeswari,
Incharge - Department of Computer Science & Computer Applications,
A.S.D. Govt. Degree College for Women (A),
Kakinada.

Sub: Request to organize Invited Lecture on "**Internet of Things -Applications of Sensors in Everyday**" for I B.SC.(CS) and I B.Com.(CA) on 02-12-2024 -Reg.

Respected Madam,

The Department of Computer Science wishes to organize an Invited Lecture on "Internet of Things" for I B.SC.(CS) and I B.Com.(CA) on 02-12- 2024, and the Resource Person is Mrs.G.Satya Suneetha, Lecturer in Computer Applications, Government Degree College, Kovvur. This activity shall enhance the knowledge of the Internet of Things – Applications of Sensors in Everyday". Kindly do the needful.

Thanking you, Madam.

Yours faithfully,

N.N.S.Eswari
INCHARGE
DEPT OF COMPUTER SCIENCE
ASD GOVT DEGREE COLLEGE (W) (AUTONOMOUS)
KAKINADA

A.S.D.GOVERNMENT DEGREE COLLEGE FOR WOMEN (A)

Affiliated to Adikavi Nannaya University

Jagannaickpur, Kakinada.

DEPARTMENT OF COMPUTER SCIENCE

CIRCULAR

Date: 29-11-2024

The Department of Computer Science wishes to organize an Invited Lecture on "Internet of Things – Applications of Sensors in Everyday" on 02-12-2024 in Seminar Hall for I B.SC.(CS) and I B.Com.(CA) students to acquire basic knowledge about the Internet of Things and enhance their skills.

N.N.S. Eswari
INCHARGE
DEPT OF COMPUTER SCIENCE
ASDGOVT DEGREE COLLEGE(WAUTONOMOUS)
KAKINADA

In-Charge of the Department

PRINCIPAL
A.S.D.GOVT.DEGREE COLLEGE (W)
AUTONOMOUS
KAKINADA

Principal

A.S.D.GOVT.DEGREE COLLEGE FOR WOMEN (A), KAKINADA

DEPARTMENT OF COMPUTER SCIENCE

INVITED LECTURE

NAME OF THE GUEST : **Mrs.G.Satya Suneetha**
Lecturer in Computer Applications,
Kovvur.

TOPIC : **Internet of Things – Applications of Sensors in Everyday**

DATE : 02-12-2024

VENUE : **Seminar Hall**

N.N.S.Eswari
INCHARGE
DEPT OF COMPUTER SCIENCE
ASD GOVT DEGREE COLLEGE (W) (AUTONOMOUS)
KAKINADA

IN-CHARGE OF THE DEPARTMENT

A.S.D.GOVT.DEGREE COLLEGE FOR WOMEN (A) KAKINADA

DEPARTMENT OF COMPUTER SCIENCE

INVITATION

The Department of Computer Science wishes to arrange A Invited Lecture
on
02-12-2024 at 02.00 P.M. in Seminar Hall

Topic: Internet of Things -Applications of Sensors in Everyday

BY

Mrs.G.Satya Suneetha, M.Tech.
Lecturer in Computer Applications
Government Degree College, Kovvur.

N.N.S. Eswari
INCHARGE
DEPT. OF COMPUTER SCIENCE
KAKINADA

In-Charge of the Department

PRINCIPAL
A.S.D.GOVT.DEGREE COLLEGE (W)
AUTONOMOUS
KAKINADA

Principal

Curriculum Vitae

Name & Designation	G. SATYA SUNEETHA Lecturer in Computer Applications.
Educational Qualifications	M.Tech(Ph.D) Qualified APSET
Area of Expertise	Data Mining and BIG Data
Teaching Experience	17 Years
Research Experience	3 Years
Present Post & Responsibilities held	• Convener of Examinations • Member of BOS • Member-IQAC • Member-NIRF/APSCHE • Convener- Stock Verification Committee-Dept. of Chemistry
Professional Training Programs attended	• Completed a 4-Week Orientation Programme for Faculty in Universities/Colleges/Institutes of Higher Education from 4th June 2020 to 1st July 2020 with A+ grade organized by Teaching Learning Centre, Ramanujan College, University of Delhi. • Completed ARPIT Refresher Course on "Big Data Analytics for Smart Grid Applications" on 16-02-2020. • Completed 3 weeks CISCO CCNA Remote Educator Training Program from 28-12-2020 to 16-1-2021.
Publications in Journals	International – 9
Paper Presentations in Seminars &Conferences	International – 4
Workshops attended	20
Membership in Professional Organisations	Associate Member of Institute of Engineers
MOOCS Enrolled / Completed	• Secured First position and Elite with Gold in the subject "Introduction to Operating Systems" conducted by NPTEL in Jul-Sep 2017. • Completed **MOOCs** on "Computer Vision Basics" offered by COURSERA on 4th October 2020. • Completed **MOOCs** on "Fundamentals of Digital Marketing" offered by Google Digital Garage on 6/11/2020
Email-id	satyasuneetha10@gmail.com

A.S.D.GOVT. DEGREE COLLEGE FOR WOMEN(A)

DEPARTMENT OF COMPUTER SCIENCE

INVITED LECTURE

A Invited Lecture is conducted for the Students of I B . S c . (C S) I B.Com.(C.A.)

Name of the Guest **:** **G.Satya Suneetha** **M.Tech.**
Lecturer in Computer Applications
GDC, Kovvur.

TOPIC	VENUE	DATE	TIME	MODE OF DELIVERY
Internet of Things – Applications of Sensors in Everyday	Seminar Hall	02-12-2024	02:00 PM TO 04:00 PM	Online

Signatures of the Lecturers Attended:

1. N.N.S. Eswari
2. K.S.Lakshmi
3.
4. A. Jaya Lakshmi
5. V. RamaTulasi

PRINCIPAL
A.S.D.GOVT.DEGREE COLLEGE (W)
AUTONOMOUS
KAKINADA

Signature of the Principal

A.S.D.GOVT. DEGREE COLLEGE FOR WOMEN(A)

KAKINADA

DEPARTMENT OF COMPUTER SCIENCE

INVITED LECTURE

TOPIC: Internet of Things -Applications of Sensors in Everyday

DATE: 02-12-2024 **VENUE: Seminar Hall** **TIME: 02:00PM to 4:00PM**

S.NO.	REGD.NO.	NAME OF THE STUDENT	CLASS	SIGNATURE OF THE STUDENT
1.	2474001	DAMALANKA LAKSHMI	I B.Sc.(CS)	D. lakshmi
2.	2474002	ISUKAPATLA SANJANA	I B.Sc.(CS)	I. Sanjana
3.	2474003	MOHAMMAD AYESHA BIBI	I B.Sc.(CS)	M. Ayesha BIBI
4.	2474004	SEELA RAMYA	I B.Sc.(CS)	S. Ramya
5.	2474005	SEELAMANTHULA PRANATHI	I B.Sc.(CS)	S. Pranathi
6.	2474006	SHAIK BASHEERAMMA	I B.Sc.(CS)	S. Basheeramma
7.	2474007	SHEIK AJMANISHA	I B.Sc.(CS)	S. Ajmanisha
8.	2474008	VADIKELA GOWRISRI	I B.Sc.(CS)	V. Gowrisri
9.	2474009	DEYYALA DIVYA JYOTHI	I B.Sc.(CS)	D. Divya Jyothi
10.	2474010	HARIKA SABBI	I B.Sc.(CS)	S: Harika
11.	2474011	KARRI MOUNIKA KIRANMAI	I B.Sc.(CS)	K. mounika kiranmai
12.	2474012	OLETI MOUNIKA	I B.Sc.(CS)	O. mounika
13.	2474013	OLETI SINDHU BHAIRAVI	I B.Sc.(CS)	O. SINDU BHAIRAVI
14.	2474014	PABBIREDDY LAKSHMI	I B.Sc.(CS)	P. Lakshmi
15.	2474015	PALEPU VEERA VENI	I B.Sc.(CS)	P. Veera veni
16.	2474016	PEMMADI RAMYA	I B.Sc.(CS)	P. Ramya
17.	2474017	PERURI UMA DEVI	I B.Sc.(CS)	P. UMA Devi
18.	2474018	REKADI DURGABHAVANI	I B.Sc.(CS)	R. Durga bhavani
19.	2474019	RUTTALA KEERTHANA	I B.Sc.(CS)	R. Keerthana
20.	2474020	ANISETTI SATYAVENI	I B.Sc.(CS)	A. SatyaVeni
21.	2474021	BENDAPUDI LAKSHMI SATYA	I B.Sc.(CS)	B. Lakshmi Satya
22.	2474022	BUSI PRASANNA	I B.Sc.(CS)	B. Prasanna
23.	2474023	CHILAKA SPOORTHI	I B.Sc.(CS)	C. Spoorthi
24.	2474024	DEVARAPU SAILAJA	I B.Sc.(CS)	D. Sailaja
25.	2474025	ERELLA MANJU BHARGAVI	I B.Sc.(CS)	E. ManjuBhargavi
26.	2474026	GUDAPATI KAVYA SRI	I B.Sc.(CS)	G. Kavya Sri
27.	2474027	KANNURU LAKSHMI	I B.Sc.(CS)	K. Lakshmi
28.	2474028	KONDAGUNTURI DHANA SAI	I B.Sc.(CS)	K. Dhana Sai
29.	2474029	KOTLA AKHILA	I B.Sc.(CS)	K. Akhila
30.	2474030	KUNJAM NANDINI	I B.Sc.(CS)	K Nandini

S.NO.	REGD.NO.	NAME OF THE STUDENT	CLASS	SIGNATURE OF THE STUDENT
31.	2461028	DADALA GLORI	I B.Com.(CA)	D. Glori
32.	2461029	DANDUPROLU PAVANI	I B.Com.(CA)	D. Pavani
33.	2461030	DEGALA KRISHNAVENI	I B.Com.(CA)	D. krishnaveni
34.	2461010	BODDU PADMAJA	I B.Com.(CA)	B. Padmaja
35.	2461011	BODDU SANDHYA DEVI	I B.Com.(CA)	B. Sandhya devi
36.	2461012	CHATLA AKHILA	I B.Com.(CA)	Ch Akhila
37.	2461013	LANKADI GANGOTHRI	I B.Com.(CA)	L. Gangothri
38.	2461014	LANKADI NAVYA	I B.Com.(CA)	L. Navya.
39.	2461015	MALLADI DHANA KALYANI	I B.Com.(CA)	M. Dhanakalyani
40.	2461016	MATHA HEMALATHA	I B.Com.(CA)	M. Hemalatha
41.	2461017	MEDAPATI LAKSHMI	I B.Com.(CA)	M. Lakshmi
42.	2461018	VAIDADI GOWRI	I B.Com.(CA)	V. Gowri
43.	2461019	YARABALA DEVI MOULIKA	I B.Com.(CA)	Y. Devi Moulika
44.	2461020	BOMMIDI VINDHU	I B.Com.(CA)	B. Vindhu
45.	2461021	BONDU SANKEERTHANA	I B.Com.(CA)	B. Sankeerthana
46.	2461022	BORRA ARUNADEVI	I B.Com.(CA)	B. Aruna Devi
47.	2461023	CHEEDIPALLI DEVI	I B.Com.(CA)	Ch Devi
48.	2461024	CHEKKA PRAVALLIKA	I B.Com.(CA)	Ch Pravallika
49.	2461025	CHICHADI LAVANYA	I B.Com.(CA)	Ch lavanya
50.	2461026	CHINDADA SRILATHA	I B.Com.(CA)	Ch Srilatha
51.	2461027	CHOLLANGI ANUSHA	I B.Com.(CA)	Ch Anusha
52.	2461003	BANGARU PURNA	I B.Com.(CA)	B. Purna
53.	2461004	DALE PADMA SAI	I B.Com.(CA)	D. Padma Sri
54.	2461005	MANYALA ANJANA	I B.Com.(CA)	M. Anjana
55.	2461006	MOHAMMAD SALMA	I B.Com.(CA)	M. Salma
56.	2461007	PALEPU DURGA BHAVANI	I B.Com.(CA)	P. Durga Bhavani
57.	2461008	SHAIK BASHEERAMMA	I B.Com.(CA)	SK. Basheeramma
58.	2461042	KARAM HEMADURGA	I B.Com.(CA)	K. Hemadurga
59.	2461043	KARRI SANTHASRI	I B.Com.(CA)	K. Santhasri
60.	2461044	KONDRU SRAVANI	I B.Com.(CA)	K. Sravani

REPORT OF THE ACTIVITY

Mrs.G.Satya Suneetha Lecturer in Computer Applications. Government Degree College, Kovvur has delivered a Invited Lecture on "Internet of Things – Applications of Sensors in Everyday" to the students of I B.Sc. (CS) and I B.Com. (C.A) on 02-12-2024 from 2 P.M to 4 P.M. Students attended the Invited Lecture in Seminar Hall. She expressed her views to provide insights into the rapidly growing field of IoT.

She began the session by explaining the basic concepts of IoT, highlighting how interconnected devices communicate and exchange data via the internet. Some of the insights of her lecture are as follows:

Introduction to Internet of Things

The Internet of Things (IoT) refers to the network of interconnected devices, sensors, and actuators that can collect and exchange data, enabling intelligent automation and decision-making. IoT is transforming how we interact with our environment and each other.

This topic will cover all the Sensor devices such as *light, heat , motion, moisture , pressure or any other environmental phenomenon*

Fundamental Components of IoT:

1. Devices/Things (Sensors and Actuators):

- **Sensors:** Devices that collect data from the environment, such as temperature, humidity, motion, or light.
- **Actuators:** Devices that perform actions based on the data received, like opening a valve, adjusting a thermostat, or turning on a light.

2. Connectivity:

- IoT devices connect to networks (Wi-Fi, Bluetooth, Zigbee, LoRaWAN, 5G, etc.) to transmit the collected data to other devices or cloud services.
- The type of connectivity depends on factors like range, power consumption, and data requirements.

3. Data Processing:

- After data is collected, it is processed either locally (edge computing) or in the cloud.
- Processing includes analyzing, filtering, or aggregating the data to extract actionable insights.

4. Cloud Computing:

- The cloud provides storage, processing power, and analytics capabilities for the vast amount of data generated by IoT devices.
- Cloud platforms also enable remote monitoring, control, and management of IoT systems.

Benefits of Sensors:

IoT sensors offer numerous benefits across various industries by enabling real-time data collection, analysis, and automation. Here are the key benefits of IoT sensors:

1. Real-Time Monitoring

- IoT sensors provide instant data about environmental conditions, equipment status, or user behavior, enabling quick responses to changes or anomalies.
- Example: Monitoring heart rate and oxygen levels in healthcare or tracking temperature in a cold storage facility.

2. Enhanced Efficiency

- By providing precise data, IoT sensors help optimize processes, reduce waste, and improve resource allocation.
- Example: Smart irrigation systems use soil moisture sensors to water plants only when needed, saving water and energy.

3. Predictive Maintenance

- IoT sensors can detect early signs of wear and tear in machinery, allowing for maintenance before a breakdown occurs, minimizing downtime and repair costs.
- Example: Sensors in manufacturing equipment alert technicians when components are nearing failure.

4. Cost Savings

- Automation and data-driven insights reduce operational costs by minimizing human intervention and energy consumption.
- Example: Smart thermostats adjust heating or cooling based on occupancy, saving energy.

Different types of Sensors and Its applications:

1. Temperature Sensors

- **Purpose:** Measure temperature changes in the environment or a device.
- **Applications:**
  - Smart thermostats (e.g., Nest)
  - Cold chain monitoring in food and pharmaceuticals
  - Industrial equipment temperature monitoring

2. Proximity Sensors

- **Purpose:** Detect the presence or absence of an object within a range.
- **Applications:**
  - Parking assistance systems in vehicles
  - Object detection in automated assembly lines
  - Smart touchless faucets or doors

3. Pressure Sensors

- **Purpose:** Monitor pressure levels in gases or liquids.
- **Applications:**
  - Industrial pipelines and HVAC systems
  - Tire pressure monitoring in vehicles
  - Weather monitoring systems

4. Humidity Sensors

- **Purpose:** Measure the amount of moisture or humidity in the air.
- **Applications:**
  - Agriculture (soil and crop monitoring)
  - Smart home air conditioning systems
  - Storage monitoring in warehouses

5. Light Sensors

- **Purpose:** Detect ambient light levels.
- **Applications:**
  - Smart lighting systems (auto-adjust brightness)
  - Mobile device screen brightness adjustment
  - Security systems with night vision

6. Motion Sensors

- **Purpose:** Detect motion or movement in an area.
- **Applications:**
  - Security systems and surveillance cameras
  - Automated lighting in smart homes
  - Fitness devices (track steps and movements)

7. Gas Sensors

- **Purpose:** Detect gases such as CO2, CO, methane, or toxic gases.
- **Applications:**
  - Industrial safety (leakage detection)
  - Air quality monitoring in smart cities
  - Fire detection systems

8. Accelerometers

- **Purpose:** Measure acceleration forces to detect movement or tilt.
- **Applications:**
  - Fitness trackers (step counting)
  - Smartphone screen orientation
  - Vehicle collision detection systems

9. Gyroscope Sensors

- **Purpose:** Measure angular velocity and orientation.
- **Applications:**
  - Gaming controllers (e.g., VR headsets)
  - Navigation systems in drones
  - Smartphone motion control

10. RFID Sensors

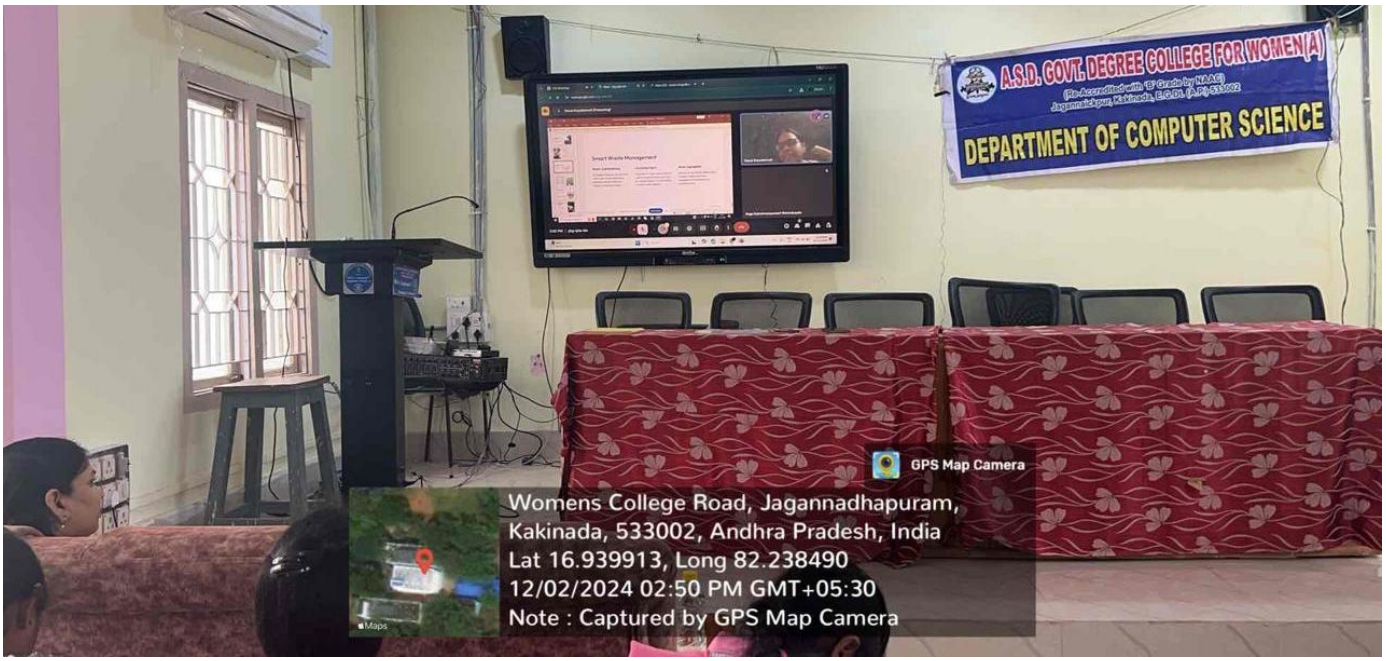
- **Purpose:** Identify and track objects using radio waves.
- **Applications:**
  - Inventory management in warehouses
  - Contactless payment systems
  - Animal tracking in wildlife conservation

11. Sound Sensors (Microphones)

- **Purpose:** Detect sound waves or noise levels.
- **Applications:**
  - Voice-activated smart assistants (e.g., Alexa, Google Home)
  - Environmental noise monitoring
  - Smart surveillance systems

12. Optical Sensors

- **Purpose:** Detect light, color, or other optical properties.
- **Applications:**
  - Barcode scanners in retail
  - Medical imaging devices
  - Optical sorting in manufacturing



Resource Person **Mrs.G.Satya Suneetha** sharing her insights on "Internet of Things – Applications of Sensors in Everyday"

Students enthusiastically listening to the Invited Lecture in Seminar Hall

A.S.D.GOVERNMENT DEGREE COLLEGE FOR WOMEN (A)

Affiliated to Adikavi Nannaya University
Jagannaickpur, Kakinada.

DEPARTMENT OF COMPUTER SCIENCE

FEEDBACK ON THE INVITED LECTURE

Name of the Participant: D. Glori
Class : I. B. Com (CA)

1. How satisfied are you with the overall quality of the lecture?

   A. Very Satisfied
   B. Satisfied
   C. Neutral
   D. Unsatisfied

2. Did the lecture enhance your knowledge on the topic?

   A. Strongly Agree
   B. Agree
   C. Neutral
   D. Disagree

3. How relevant was the content of the lecture to your curriculum needs?

   A. Extremely Relevant
   B. Very Relevant
   C. Moderately Relevant
   D. Slightly Relevant

4. Do you feel the lecture provided practical insights that you can apply?

   A. Strongly Agree
   B. Agree
   C. Neutral
   D. Disagree

5. Any additional comments or suggestions?

   _____

D. Glori
Signature of the Participant

A.S.D.GOVERNMENT DEGREE COLLEGE FOR WOMEN (A)

Affiliated to Adikavi Nannaya University

Jagannaickpur, Kakinada.

DEPARTMENT OF COMPUTER SCIENCE

FEEDBACK ON THE INVITED LECTURE

Name of the Participant: S. Ramya

Class : II. B.Sc (CS)

1. How satisfied are you with the overall quality of the lecture?

   A. Very Satisfied
   B. Satisfied
   C. Neutral ✓
   D. Unsatisfied

2. Did the lecture enhance your knowledge on the topic?

   A. Strongly Agree
   B. Agree ✓
   C. Neutral
   D. Disagree

3. How relevant was the content of the lecture to your curriculum needs?

   A. Extremely Relevant ✓
   B. Very Relevant
   C. Moderately Relevant
   D. Slightly Relevant

4. Do you feel the lecture provided practical insights that you can apply?

   A. Strongly Agree
   B. Agree
   C. Neutral ✓
   D. Disagree

5. Any additional comments or suggestions?

   _____

S. Ramya

Signature of the Participant