Avinashilingam Institute for Home Science and Higher Education for Women

Deemed to be University Estd. u/s 3 of UGC Act 1956 , Category A by MHRD [now MoE]
Re-accredited with A++ Grade by NAAC. CGPA 3.65/4, Category I by UGC
Coimbatore – 641 043, Tamil Nadu, India

School of Engineering

(Established in 1996 and Approved by AICTE)

Department of Computer Science and Engineering
Centre for Machine Learning and Intelligence (CMLI)
Avinashilingam Centre for International Education (ACIE)

Organizes a Seminar on

"Industrial Applications of AI and Opportunities for Higher Studies in Waseda University, Japan"

Presidential Address

Dr. S. Sivakumari
Professor & Dean
School of Engineering

Keynote Address

Dr. Shigeru Fujimura
Dean,
Graduate School of Information,
Production and Systems (IPS)
Waseda University, Japan

Special Address

Dr.Thiru Jeevanandam
Chief Technology Officer (Retd.),
Global Power System Center
Yokogawa Electric, Japan

🗓 12.03.2026 📍 Conference Hall 🕑 2.30pm to 4.30pm

INSTITUTION'S INNOVATION COUNCIL (Ministry of HRD Initiative)

nirf

ACCREDITED WITH GRADE A++ NAAC

सत्यमेव जयते
Ministry of Education
Government of India

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School of Engineering
(Approved by AICTE)

Department of Computer Science and Engineering

Report on "Industrial Applications of AI and Opportunities for Higher Studies in, Waseda University, Japan

Date:12.03.2026
Participants: III(CSE and AI&DS)
No. of. Beneficiaries: 112

RESOURCE PERSON 1:Dr.Shigeru Fujimura
Dean,
Graduate School of Information,
Production and Systems (IPS)
Waseda University, Japan.

RESOURCE PERSON 2: Dr.ThiruJeveenandam
Chief Technology Officer (Retd)
Global Power System Center
Yokogawa Electric, Japan.

The Department of Computer Science and Engineering, School of Engineering, Avinashilingam Institute for Home Science and Higher Education for Women, in association with the Centre for Machine Learning and Intelligence (CMLI) and Avinashilingam Centre for International Education (ACIE) organized an insightful and thought provoking seminar on **"Industrial Applications of AI and Opportunities for Higher Studies in Waseda University, Japan."**

The seminar aimed to provide students with insights into the latest advancements in Artificial Intelligence and its practical applications in industries. The session also created awareness among students about international higher education opportunities, particularly at Waseda University, Japan**.**

Key Objectives:

- To create awareness about recent advancements in AI technologies such as machine learning, deep learning, and intelligent systems.
- To highlight how AI is used in industries for quality control, defect detection, predictive maintenance, and production optimization**.**
- To introduce students to global research trends and innovations in Artificial Intelligence and industrial automation.

- To inform students about opportunities for higher studies in Japan, particularly at Waseda University.

The seminar featured two informative sessions delivered by Dr. Shigeru Fujimura, an expert in Artificial Intelligence and industrial systems, and Dr. Thiru Jeevanandam, Chief Technology Officer of the Global Power System Centre, Yokogawa, Japan. The resource persons shared real-world case studies from Japanese industries, explaining how AI is used to improve product quality, reduce production errors, and enhance operational efficiency. Students gained insights into the importance of interdisciplinary knowledge, combining computer science, data analytics, and industrial engineering to develop intelligent systems.

The sessions emphasized the role of research and innovation in solving complex industrial challenges using AI-based techniques. The seminar also highlighted the importance of international collaboration between universities and industries, which helps in advancing research and technological development. Students were introduced to advanced research areas such as deep learning, predictive analytics, intelligent manufacturing systems, and data-driven decision-making.

Dr.S.Sivakumari, Dean of the School of Engineering delivering the Presidential Address

Dr.P.Amudha, Professor and Head of Dept. (CSE), delivering the welcome address.

Industrial Applications of Artificial Intelligence

In the first session, Dr. Shigeru Fujimura discussed the growing importance of Artificial Intelligence in modern industries, particularly in manufacturing systems. He explained how AI technologies are transforming industrial operations by improving efficiency, accuracy, and productivity.

The speaker briefly introduced the history of Artificial Intelligence, highlighting the three major phases of AI development:

- **First AI Boom:** Development of perceptrons and early neural networks.
- **Second AI Boom:** Introduction of expert systems and improved neural network training using back propagation.
- **Third AI Boom:** Advancements in deep learning, machine learning, and large language models.

Dr. Fujimura explained how Deep Learning techniques are used to build intelligent models capable of solving complex problems. Neural networks and activation functions such as sigmoid functions help machines learn patterns from large datasets.

Dr. Shigeru Fujimura, Dean, Waseda University is delivering the keynote address

The session also highlighted several industrial applications of AI, including:

Defect Detection and Quality Control:

AI-based machine vision systems are used in manufacturing industries to detect defects in products during the production process. These systems analyse images and identify irregularities automatically, ensuring high product quality.

Equipment Abnormality Detection:

The speaker explained how AI models analyze machine data to identify unusual patterns that may indicate equipment failure. Techniques such as Generative Adversarial Networks (GANs) can generate synthetic fault data to train machine learning models and improve the accuracy of fault detection systems.

Demand Forecasting and Production Scheduling:

AI algorithms are used to analyze historical data and predict future demand. Based on these predictions, industries can optimize production schedules and efficiently allocate resources. The first session provided students with a clear understanding of how AI technologies are applied in real-world industrial environments to improve productivity and decision-making.

Students enthusiastically participating in the interaction session,

Opportunities for Higher Studies in Japan – Waseda University

The second session focused on higher education opportunities in Japan, particularly at Waseda University, one of the leading universities in the world.

Dr. Fujimura introduced the Graduate School of Information, Production and Systems (IPS) at Waseda University and explained the research areas available for international students. The programs offered by the institute focus on advanced technologies such as:

- Artificial Intelligence
- Machine Learning
- Data Science
- Robotics
- Intelligent Systems

Dr. Thiru Jeevanandam, Chief Technology Officer (Retd),Global Power System Center is delivering the special address

He explained that Waseda University encourages international collaboration and research, attracting students from different countries. The university also works closely with industries to provide students with opportunities to work on real-world technological challenges.

The speaker highlighted that the programs are designed to provide strong technical knowledge and research experience, preparing students for global careers in technology and innovation.He also encouraged students to explore international academic opportunities and develop advanced skills in emerging technologies such as Artificial Intelligence.

Key Takeaways

• Students gained a clear understanding of how Artificial Intelligence is applied in industrial systems.

• The session provided insights into AI technologies such as deep learning and machine learning.

• Participants learned about the use of AI in defect detection, predictive maintenance, and demand forecasting.

• Students became aware of international higher education opportunities, particularly at Waseda University in Japan.

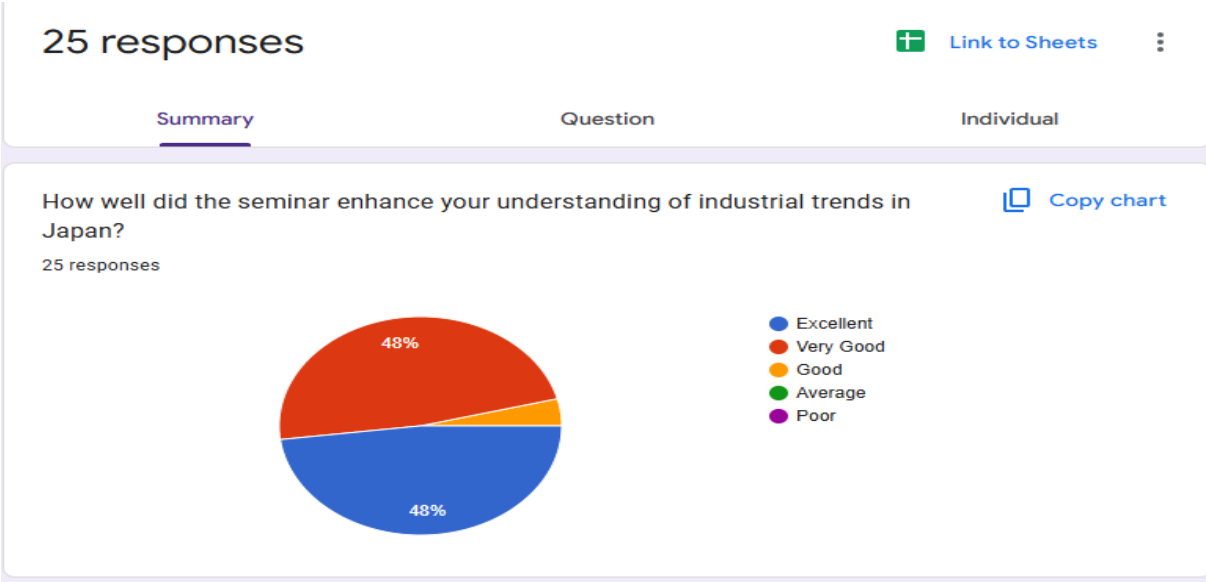
Conclusion

The seminar on “Industrial Applications of AI and Opportunities for Higher Studies in Waseda University, Japan” was highly informative and beneficial for the students. The sessions provided valuable insights into the practical applications of Artificial Intelligence in industrial environments and emphasized the importance of global academic collaboration.

The program helped students understand the growing significance of Artificial Intelligence in modern technological advancements and motivated them to explore higher studies and research opportunities in international institutions.

Overall, the seminar broadened the students’ knowledge of AI applications and inspired them to consider global learning opportunities in the field of Artificial Intelligence. The event concluded with a Vote of Thanks delivered by Dr. D. Sumitha, Associate Professor and Member of ACIE, who expressed gratitude to the resource persons, organizers, and participants for making the seminar a successful and enriching event.

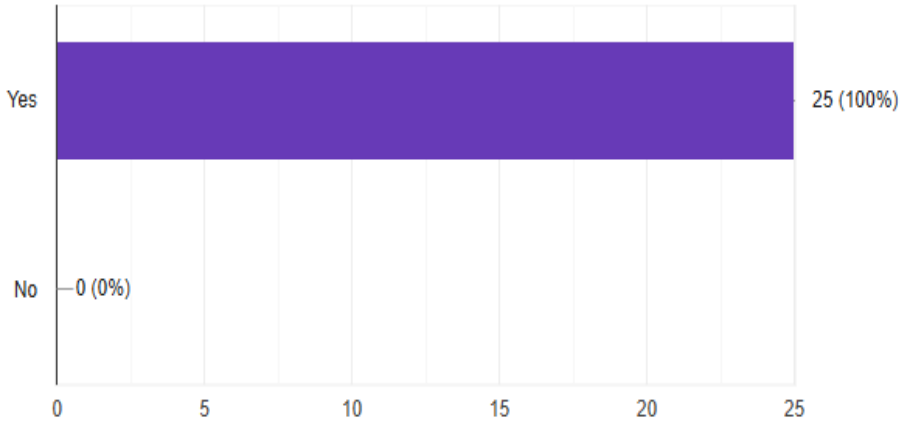
Feedback



Did the seminar enhance your understanding of industrial trends in Japan?

Copy chart

25 responses



Did the seminar was effective in creating awareness about international education opportunities?

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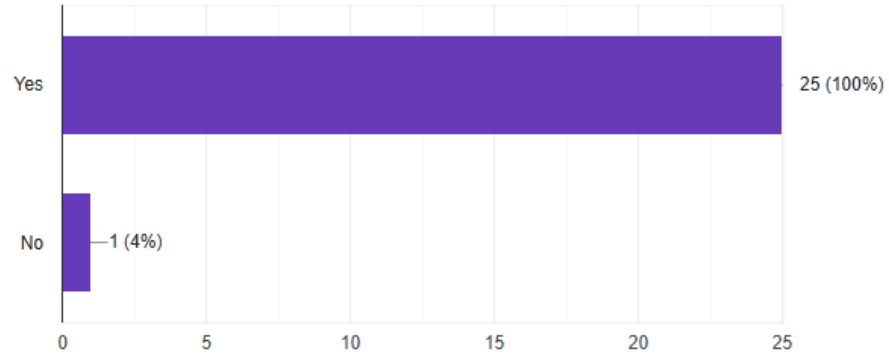
25 responses



How useful was the seminar in helping you understand global career prospects?

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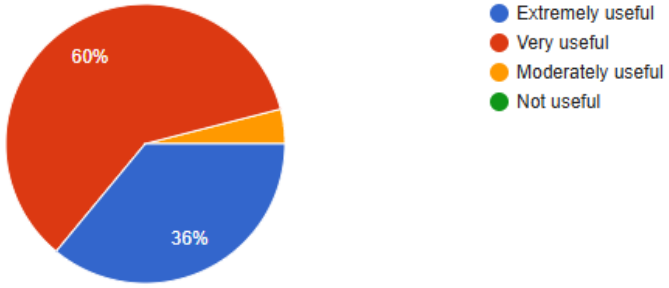
25 responses



How relevant was the seminar content to your field of study?

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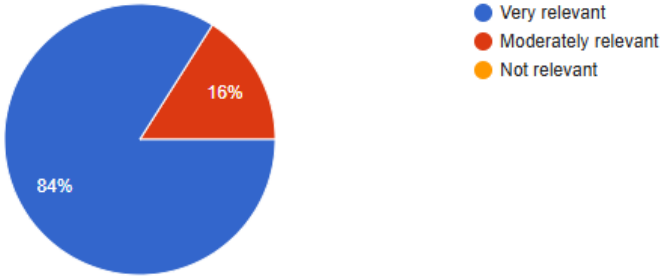
25 responses



Did the seminar help you understand global career prospects?

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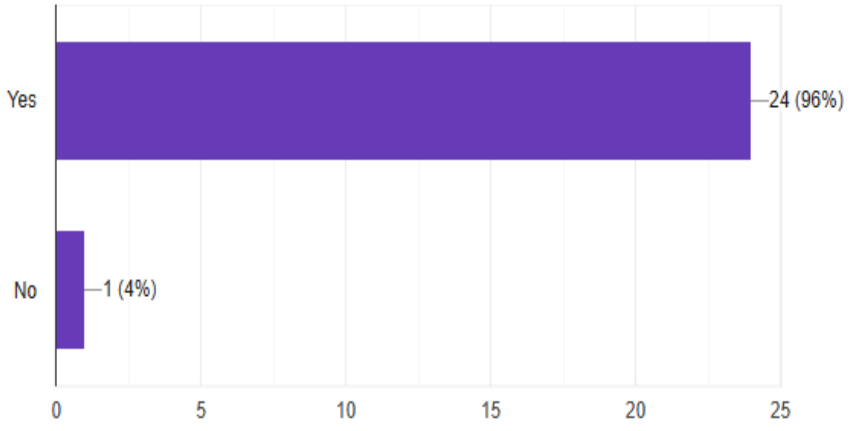
25 responses



How relevant was the seminar content to your academic discipline?

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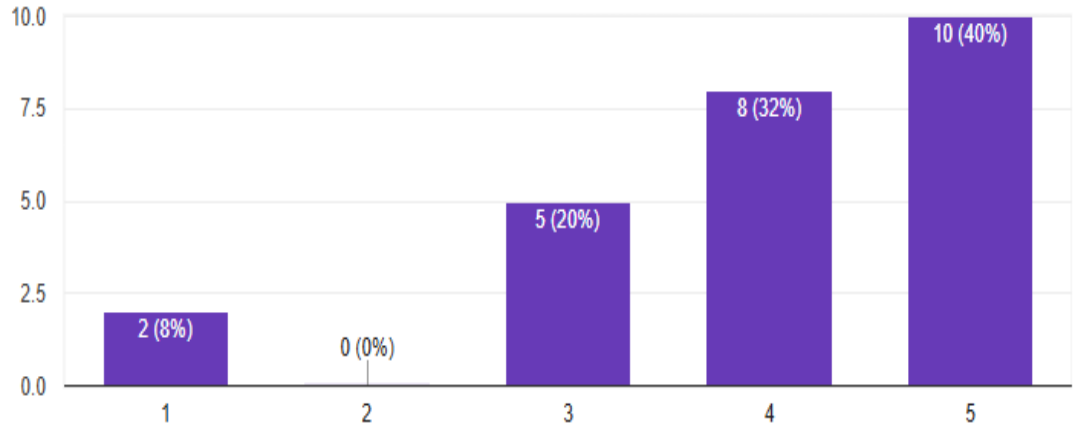
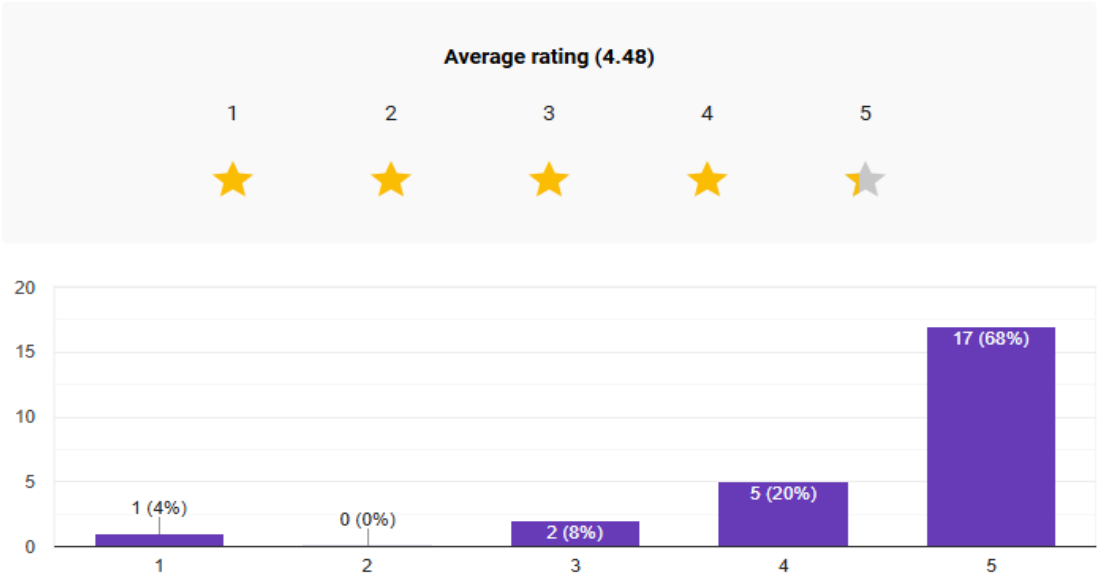
25 responses



How beneficial was the seminar in enhancing your knowledge about global education opportunities?

Copy chart

25 responses



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SCHOOL OF ENGINEERING

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Industrial Applications of AI and Opportunities for Higher Studies in Waseda University, Japan

Date: 12.03.2026

III CSE

S.No	Roll No.	Name	Signature
1.	23UEO001	AbiramiShankari S	
2.	23UEO002	Aiswarya K	ABSENT
3.	23UEO003	Akshaya A	
4.	23UEO004	Akshayaa V R	
5.	23UEO005	Amisha S	
6.	23UEO006	Ashmitha M	
7.	23UEO007	Asmitha J M	
8.	23UEO008	Asvitha A	
9.	23UEO009	Dhanyashri K	ABSENT
10.	23UEO010	Dharshana R	
11.	23UEO011	Divya K	
12.	23UEO013	HamnaFathima D	
13.	23UEO014	HariniAtchaya S S	
14.	23UEO015	Harini K K	
15.	23UEO016	Harini S	
16.	23UEO017	Hindu S	
17.	23UEO018	I Jebisha Pearl	
18.	23UEO019	Jayasree S	
19.	23UEO020	JerlinGoldrina J	
20.	23UEO021	JoshnaDaniely V	
21.	23UEO022	Jusvanthika M	
22.	23UEO023	Kavinila S	
23.	23UEO024	Kavya S J	ABSENT
24.	23UEO025	Keerthika B	

25.	23UEO026	Krithika C	Krithika C
26.	23UEO027	KungumaNavadharani S	ABSENT
27.	23UEO028	Lakshitha A	Lakshitha A
28.	23UEO029	LakshithaSai	Lakshitha Sai
29.	23UEO030	Merlin R	Merlin
30.	23UEO031	Milon Sarah A	Milon Sarah A.
31.	23UEO032	Nakshathirasri S R	Nakshathirasri
32.	23UEO033	Narthanashree N	Narthanashree N.
33.	23UEO034	Nivya V	Nivya V
34.	23UEO036	Pradeepaa B R	Pradeepaa BR
35.	23UEO037	Pradeepa J	J. Pradeepa.
36.	23UEO038	Preethi P	Preethi
37.	23UEO039	Priyadarshini S S	Priyadarshini S. S.
38.	23UEO040	P Vedha Shree	Vedhashree
39.	23UEO041	Rathisha K	Rathisha K
40.	23UEO042	Samvitha T	Samy. T
41.	23UEO043	Samyuktha S K	Samyuktha SK
42.	23UEO044	Sangavi G	Sangavi G
43.	23UEO045	SaruVarsini V M	SaruVarsini VM
44.	23UEO046	Shalini A	Shalini. A
45.	23UEO047	Sharmila V	ABSENT
46.	23UEO048	Shazia S	Shazia
47.	23UEO049	Shivathmika S	Shivathmika. S
48.	23UEO050	ShreHarini A K	ABSENT
49.	23UEO051	Shriya V	V. Shriya
50.	23UEO052	Sivani D	ABSENT
51.	23UEO053	Sivaranjani M	M. Sivaranjini
52.	23UEO054	Sonika P	ABSENT
53.	23UEO055	Srivarsha P	Srivarsha
54.	23UEO056	Sri Vibaashini V G	Sri Vibaashini VG
55.	23UEO057	Swetha M	Swetha. M
56.	23UEO058	Tharsini K	Tharsini K
57.	23UEO059	Thenmozhi M	Thenmozhi
58.	23UEO060	Varshini S	Varshini

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Date: 12.03.2026

III AI & DS

S.No	Roll No.	Name	Signature
1.	23UEA001	Aishwarya A	
2.	23UEA002	A J Sparsha	
3.	23UEA003	Amrithavarshini S	
4.	23UEA004	Anitta Joju N	
5.	23UEA005	Anushree A	
6.	23UEA006	Anusri S	
7.	23UEA007	P A Athmika	
8.	23UEA008	Bala Sowndarya B	
9.	23UEA009	C Vani Shri	
10.	23UEA010	Deeksha P	
11.	23UEA011	Divyadharshini S	Absent
12.	23UEA012	Durgasri R	Absent
13.	23UEA013	Geetha J	
14.	23UEA014	Harini K	
15.	23UEA015	Harini N	
16.	23UEA016	Harini R	
17.	23UEA017	Jananitharmi B	
18.	23UEA018	Jasna I	
19.	23UEA019	Kanigavarshini R S	
20.	23UEA020	Kanishkaa K	
21.	23UEA021	Karunya V	
22.	23UEA022	Kaviyavarshini S	
23.	23UEA023	Keerthana B	
24.	23UEA024	Keerthika S V	
25.	23UEA025	Kowsalya V	
26.	23UEA026	K S Sreeviddya	
27.	23UEA027	L Neanthara	
28.	23UEA028	Mano Shruthi S	
29.	23UEA029	Meiazhagi M	
30.	23UEA030	Miruthula Sri S	
31.	23UEA031	Narmatha K	
32.	23UEA032	Nevetha S K	
33.	23UEA033	Pratigsaa S	

34.	23UEA035	Rashmi Risha J	— Absent —
35.	23UEA036	Rengeelaa Sri V	Rengeelaa Sri. V
36.	23UEA037	Ridha N	Ab
37.	23UEA038	Ridhya R	Ridhika NC
38.	23UEA039	Rithika N C	Safrina S
39.	23UEA041	Safrina S	Sakthika R.
40.	23UEA042	Sakthika R	
41.	23UEA043	Sandhya D	
42.	23UEA044	Sanju Sri J	
43.	23UEA045	Sathy J	
44.	23UEA046	Serlin A	
45.	23UEA047	Sreya P	— Absent —
46.	23UEA048	Sridharshini V	
47.	23UEA049	Srinidhi G	
48.	23UEA050	Srivarshini V	
49.	23UEA051	Swethaa K	
50.	23UEA052	Thivesha M S	— Absent —
51.	23UEA053	Vaishnavi K S	
52.	23UEA054	Vedha Shree J	
53.	23UEA055	Vedhiga V B	
54.	23UEA056	Vinusithaa I