Course Information

- **Faculty Name:** Mrs. P.Sandhya Krishna
- **Course Name:** Artificial Intelligence
- **Class:** III B.Tech I Semester
- **Academic Year:** 2023-2024
- **Activity Name:** Blended Learning
- **Topic :**Rule-Based System and Knowledge Representation

Objective of the Activity:

The objective of the Blended Learning activity was to provide students with a hybrid learning experience that integrates traditional classroom teaching with online resources. This approach aimed to help students understand Rule-Based Systems and Knowledge Representation in Artificial Intelligence (AI). By combining instructor-led sessions, online tutorials, and interactive group tasks, students developed a comprehensive understanding of how rules govern decision-making and how knowledge is stored and retrieved in AI systems.

Pre-Class Preparation

Instructor Preparation:

- Prepared lecture slides covering the fundamentals of Rule-Based Systems and Knowledge Representation.
- Selected online resources, such as video tutorials, articles, and quizzes, available on platforms like YouTube and Coursera, to supplement classroom learning.
- Designed an online quiz to test pre-class understanding of the basic concepts.

Student Preparation:

- Students were provided with a reading list and online videos to watch before the class.
- They were asked to attempt an online quiz to self-assess their understanding of the topic.

In-Class Blended Learning Implementation

Traditional Classroom Session:

- Conducted a 30-minute lecture covering the basics of Rule-Based Systems, including if-then rules, inference engines, and forward/backward chaining.
- Explained the concept of Knowledge Representation, highlighting semantic networks, frames, and production rules.

Interactive Online Session:

- Students accessed an online platform where they explored additional materials, including video demonstrations of Rule-Based Systems in AI applications.

Group Task in Class:

- Divided students into groups and assigned each group a real-world scenario to design a Rule-Based System.
- Groups were tasked to create a knowledge base and apply rules for decision-making
- Each group presented their system, showing how they represented knowledge and applied rules for reasoning.

Group Discussion and Refinement:

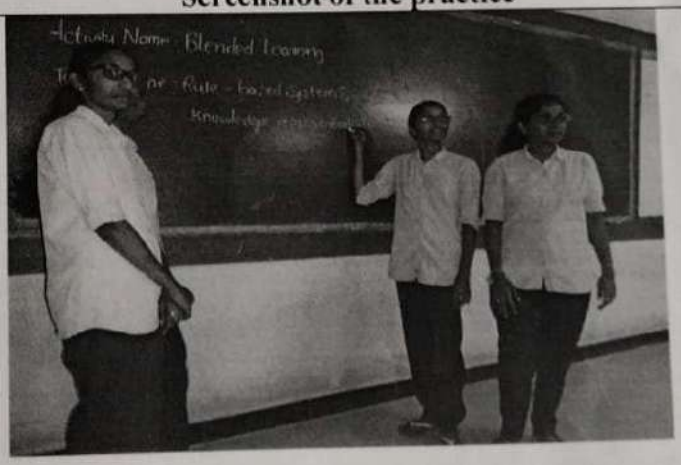
- Groups discussed their solutions, received peer feedback, and refined their designs.
- Key points were summarized on the board to consolidate learning.

Assessment Criteria:

- Understanding of Concepts-10 M
- Creativity in Design-10 M
- Application to Real-World Problems-10 M

Instructor Feedback: The Blended Learning approach was highly effective, as students demonstrated improved conceptual understanding and engagement. The group tasks helped them apply theoretical knowledge to practical problems. The class average score ranged from 19-21 out of 30, reflecting strong performance.

Images / Screenshot of the practice

Blended Learning Activity	Screenshot of the practice
Activity on Blended Learning Activity by Batch 3	
Activity on Blended Learning Activity by Batch 11	

Benefits of practice: As an instructor, I found that the Blended Learning activity:

- Improved Learning Outcomes: Students gained a clearer understanding of Rule-Based Systems and Knowledge Representation by engaging with both theoretical and practical components.
- Enhanced Engagement: The blend of online and in-class activities maintained interest and allowed students to learn at their own pace.
- Real-World Application: By designing their own systems, students connected AI principles to practical use cases.
- Collaborative Skills: Group tasks fostered teamwork and collaborative problem-solving skills.

Signature of Faculty Member

Head of the Department

ASSESSMENT FORM

Batch No	Roll Number	Student Name	Understanding of Concepts (10 M)	Creativity in Design (10 M)	Application to Real-World Problems (10 M)	Total (30 M)
1	21NN1A1226	Gunda Priyanaka	7	6	8	21
	21NN1A1254	Shaik Sofiya	8	7	8	23
	21NN1A1240	Myneni Kavya Sri	8	7	6	21
	21NN1A1259	Vunnam Ramya Sri	6	7	7	20
	21NN1A1261	Yalagapati Jyothirmai	6	5	6	17
2	21NN1A1225	Gunda Akshitha	7	8	7	22
	21NN1A1256	Uppu Bhavani	6	7	8	21
	21NN1A1234	Kolli Bhagya Sri	8	9	7	24
	21NN1A1262	Yalagapati Katyayani	6	7	6	19
	21NN1A1253	Shaik Shahanaz Banu	7	6	7	20
3	21NN1A1237	Kota Sai Rama Devi	7	8	6	21
	21NN1A1203	Avvaru Eekshitha Maina	8	8	7	23
	21NN1A1236	Kondeboyena Anitha	8	6	7	21
	21NN1A1222	Goli Hema	8	7	7	22
4	21NN1A1241	Nagalla Naga Venkata Siva Sai Navya	8	8	8	24
	21NN1A1249	Rayankula Sri Bhavana	7	5	6	18
	21NN1A1233	Kolla Naveena	8	7	8	23
	21NN1A1201	Adusumalli Bindu Priya	8	9	8	25
5	21NN1A1218	Dirisala Jahnavi	7	7	6	20
	21NN1A1251	Saranam Sowmya	7	8	7	22
	21NN1A1209	Challa Padmareddy	8	8	7	23
	21NN1A1232	Kandula Bhagya Lakshmi	5	5	6	16
6	21NN1A1208	Chadalavada Pranati Sai	6	6	7	19
	21NN1A1243	Nerella Sushma	6	7	7	20
	21NN1A1213	Chirumamilla Bhargavi	7	8	6	21
	21NN1A1245	Pakanati Sindhu	8	9	7	24
7	21NN1A1235	Konakananchi Prathyusha	6	5	7	18
	21NN1A1214	Dandigala Deepthi	8	7	8	23
	21NN1A1221	Ganduri Harshitha	6	7	7	20
	21NN1A1252	Shaik Nikhath	7	8	6	21

8	21NN1A1238	Kothamasu Venkata Naga Komali	6	7	7	20
	21NN1A1212	Chinthala Teja Sri	8	9	8	25
	21NN1A1227	Gundumi Ramya Sri	6	5	7	18
	21NN1A1215	Dasari Kedareswari	8	6	7	21
9	21NN1A1231	Kancheti Jyoshnavi	8	7	7	22
	21NN1A1220	Emani Keerthi	7	7	6	20
	21NN1A1258	Vemulapalli Supriya	7	8	9	24
	21NN1A1230	Kambala Prathibha	8	8	7	23
10	21NN1A1211	Chilamakuri Asritha Venkata Naga Sai	7	7	8	22
	21NN1A1239	Munagala Tanmayi Vardhini	5	6	6	17
	21NN1A1260	Vuthakolu Tulasi	6	7	8	21
	21NN1A1228	Jadda Vyshnavi	6	7	7	20
11	21NN1A1205	Barnana Triveni	9	8	7	24
	21NN1A1207	Bondili Nagasri	8	7	7	22
	21NN1A1210	Chatarajupalli Dharani	6	7	8	21
	21NN1A1219	Ejandla Sri Harshitha	7	6	5	18
12	21NN1A1242	Nandipati Vijaya Lakshmi	7	6	7	20
	21NN1A1244	Nettem Harika	8	7	7	22
	21NN1A1223	Gude Srilakshmi Sowjanya	9	8	8	25
	21NN1A1257	Vallambotla Deepthi	6	6	5	17
13	21NN1A1224	Gudipudi Rushitha	5	6	7	18
	21NN1A1217	Devireddy Anusha	7	6	8	21
	21NN1A1255	Tadiboina Varshini	7	7	6	20
	21NN1A1202	Avanthi Naidu Konkala	7	8	7	22
14	21NN1A1216	Dasari Shalini	8	7	8	23
	21NN1A1247	Rachamadugu Chandrika	6	5	5	16
	21NN1A1246	Podili Divya Sri	7	6	6	19
	21NN1A1229	Kajjayam Asritha Srija	7	7	8	22
15	21NN1A1248	Ravi Sowjanya	8	7	6	21
	21NN1A1250	Redlam Jyothika	6	7	7	20
	21NN1A1206	Bodepudi Sai Swetha	7	8	9	24
	21NN1A1204	Bandi Sravitha	6	7	6	19

Signature of Faculty Member