## G.S. Mandal's

## Maharashtra Institute of Technology, Chatrapati Sambhaji Nagar

- 1. Event Date: 8<sup>th</sup>Feb 2025
- 2. Event: Workshop on "LLM's and DeepSeek R1".
- 3. Speaker at the Event: Prof.B.N.Kshirsagar, MIT Chh.Sambhajinagar.

## **Objectives:**

- To introduce students to the architecture, features, and applications of DeepSeek R1, an emerging open-source Large Language Model (LLM).
- To enhance students' understanding of how DeepSeek R1 can be utilized in natural language processing and generative AI tasks.

## **Outcome:**

- Students gained awareness of DeepSeek R1 and its key capabilities in LLM-based applications.
- Participants understood how to use DeepSeek R1 for real-world scenarios involving text generation, summarization, and code completion.

The online workshop on "LLMs and DeepSeek R1" was held on 8th February 2025, and witnessed the enthusiastic participation of over 114 students and faculty members from the Artificial Intelligence and Data Science and Computer Science and Design departments, especially those in their Second and Third Years.

The session was led by **Prof. B.N. Kshirsagar**, a well-known academician from **MIT Chh. Sambhajinagar**, who delivered an insightful and engaging session focused on **DeepSeek R1**, a prominent open-source Large Language Model (LLM).

Prof. Kshirsagar began the session with an introduction to Large Language Models (LLMs), setting the stage for a deeper understanding of DeepSeek R1. He highlighted its architecture, capabilities, and unique features, distinguishing it from other open-source and proprietary models. Special attention was given to how DeepSeek R1 leverages advanced tokenization strategies, multilingual understanding, and efficient training techniques to perform complex language-based tasks.

He also explored the **practical applications** of DeepSeek R1, demonstrating its use in tasks like **text generation**, **summarization**, **code completion**, and **natural language understanding**. Throughout the session, **real-world case studies and hands-on coding examples** were shared to show how students could experiment with and integrate DeepSeek R1 into AI workflows.

The session concluded with a dynamic **Q&A session**, where participants clarified their doubts and gained deeper insights into the workings and real-time usage of DeepSeek R1. Prof. Kshirsagar's expertise and practical demonstrations offered valuable knowledge,

sparking curiosity and enthusiasm among students and faculty alike about open-source LLMs and their potential.



Speaker: Prof. B.N Kshirsagar , MIT Chh.Sambhajinagar.