

**VISVESVARAYA TECHNOLOGICAL UNIVERSITY**

**"Jnana Sangama" Belagavi – 590018**



***Mini Project Report on***

**“MULTIFUNCTIONAL ROBOT FOR SPECIALLY ABLED”**

***Submitted in partial fulfillment of the requirements for the award of degree***

**BACHELOR OF ENGINEERING  
IN  
ELECTRONICS & COMMUNICATION ENGINEERING**

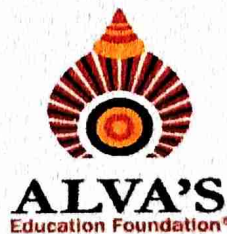
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**DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING**

**ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY**

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# ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY

(A Unit of Alva's Education Foundation® , Moodbidri)

"Shobhavana ", Mijar, Moodbidri - 574 225, D.K.

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

## CERTIFICATE

This is to certify that the following students,

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has submitted Project synopsis on "MULTIFUNCTIONAL ROBOT FOR SPECIALLY ABLED" for VI Semester B.E. in Electronics & Communication Engineering during the academic year 2023-24. The mini project report has been approved as it satisfies the academic requirements in respect of Project work prescribed for the Bachelor of Engineering Degree.

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# ABSTRACT

The development of a multifunctional robotic device designed to aid disabled individuals, which can be seamlessly transformed into a chair or a bed and can lift the individual, represents a significant advancement in assistive technology. By employing a versatile mechanical structure and user-friendly controls, the device can transition smoothly between its various configurations, providing support for sitting, reclining, lying down, and moving around. The innovative design aims to reduce the physical strain on caregivers and improve the quality of life for users by offering a practical, all-in-one solution for everyday activities and rest. Additionally, the device incorporates safety features such as secure locking mechanisms and adjustable speed settings to ensure the user's comfort and security. It also includes customizable options, allowing users to adjust the device's height and position according to their specific needs. Overall, this multifunctional robotic device is designed to empower individuals with disabilities by enhancing their independence and mobility.