



Department of Pure & Applied Physics  
Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G.) India

*(A central University Established by the Central Universities Act 2009 No. 25 of  
2009)*

---

**CERTIFICATE**

This is to certify that **DHARMESH DARSHAN** has carried out the project on the topic "**DIODE-TRANSISTOR LOGIC**" in the Department of Pure And Applied Physics, GURU GHASIDAS VISHWAVIDYALAYA, BILASPUR under my supervision. She has worked diligently, meticulously and methodically and collected the literature very sincerely and carefully. During this project work She has learnt few of analytical technique of communication & modulation. To the best of our knowledge the work presented in this project is original and has not been submitted anywhere. I recommended the project report to be forwarded to the respective examiners for evaluation. I wish her all success in her life & career.

**SUBMITTED BY:**

**DHARMESH DARSHAN**

B.sc. electronics VI sem.  
Department of Pure & Applied  
Physics GGV, BILASPUR(CG)

**SUPERVISED BY:**

**DR. DINESH UTHRA**

**ASSISTANT PROFESSOR**  
Department of Pure & Applied  
Physics GGV, BILASPUR, (C.G)