



**DEPARTMENT OF MECHANICAL ENGINEERING  
BHARATH INSTITUTE OF HIGHER EDUCATION AND RESEARCH  
DECEMBER 2019**

**BONAFIDE CERTIFICATE**

This to certify that this project entitled “DESIGN, MODELING AND MATERIAL OPTIMIZATION OF ENGINE PISTON FOR 150CC MOTOR CYCLE” is the bona-fide work of “CHINTALA RAMESH(U16ME513), NARESH KUMAR P(U16ME514), ANTONY NAVIN J(U16ME515), KARTHIKEYAN(U16ME516)” who carried out the project work under our supervision.

27.12.2019

Date of project work viva voice examination on \_\_\_\_\_

**Mr.S. Nakkeeran**

ASSISTANT PROFESSOR  
PROJECT GUIDE

**Dr. K. Balasubramaniyan**

PROFESSOR AND HEAD  
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**INTERNAL EXAMINER**

**EXTERNAL EXAMINER**