



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

**BONAFIDE CERTIFICATE**

This to certify that this project entitled “EXPERIMENTAL INVESTIGATION OF THE DISCHARGE VALVE DYNAMICS IN A RECIPROCATING COMPRESSOR FOR TRANS-CRITICAL CO<sub>2</sub> REFRIGERATION CYCLE.” is the bona-fide work of “RANJITH VIGNESHWAR(U16ME572), MOGHAL SAJEED BAIG(U16ME601), SHAIK MAHAMMED HANEEF(U16ME602), SHAIK(U16ME603)” who carried out the project work under our supervision.

27.12.2019

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

**Mr. V.P. Durai Raj**

ASSISTANT PROFESSOR  
PROJECT GUIDE

**Dr. K. Balasubramanian**

PROFESSOR AND HEAD  
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**INTERNAL EXAMINER**

**EXTERNAL EXAMINER**