

**MUFFAKHAM JAH COLLEGE OF ENGINEERING AND TECHNOLOGY**  
**MECHANICAL ENGINEERING DEPARTMENT**  
Project Reports 2020-21 (Mechanical A & B)

*Criteria - 1,3,3*  
Projects

Here with we are submitting the following Project Reports of Mechanical Engineering Students of 2020-21 for College Central Library. Kindly Acknowledge the same.

S. NO.	BATCH	ROLL NO.	No. of Students	TITLE	GUIDE	NO. OF COPIES
1	Batch - 01	1604-17-736-008,009,036,044	4	Design Analysis and Optimization of Peripheral Disc Brake System	Mrs. Syeda Romana	1
2	Batch - 02	1604-17-736-038,002,001,023	4	Hybrid Power Generation By Solar Tracking and Vertical Axis Wind Turbine	Mrs. N.B.V Lakshmi Kumari	1
3	Batch - 03	1604-17-736-032,043,046,059	4	Experimental Analysis of Water Purification System	Mrs. N.B.V Lakshmi Kumari and Mr. G. Surender Reddy	1
4	Batch - 04	1604-17-736-051,307,308,312	4	Design and Structural Analysis of Flange Coupling using Different Materials	Mr. Md. Abdul Raheem Junaidi	1
5	Batch - 05	1604-17-736-026,027,030,040	4	Optimization of Wind Pump Blades using Ansys	Dr. Mohd. Mohinoddin	1
6	Batch - 06	1604-17-736-016,025,035,050	4	Design and Analysis of Fuel Briquetting Press	Mrs. N.B.V Lakshmi Kumari	1
7	Batch - 07	1604-17-736-006,014,019,021	4	Synthesis of Magnetic Nano Particles using Arc Discharge Method	Mr. Md. Abdul Raheem Junaidi	1
8	Batch - 08	1604-17-736-049,055,066,116	4	Dual Axis Solar Tracker with an Integrated water Pump	Mr. Mohd. Minhajuddin Saif	1
9	Batch - 09	1604-17-736-005,011,022,045	4	design and Analysis of Vertical Axis Wind Turbine Blade	Mr. Irfan Ali	1
10	Batch - 10	1604-17-736-017,018,305	3	Optimization of Weld Parameters in Friction Stir Welding	Mr. V. Anand Kumar	1
11	Batch - 11	1604-17-736-301,302,310,311	4	Design Analysis and Optimization of Connecting Rod	Dr. G. Sailaja	1
12	Batch - 12	1604-17-736-303,304,309	3	Design and Fabrication of Electromagnetic Braking System	Mr. Moahmmed Yahiya	1
13	Batch - 13	1604-17-736-010,007,037,15-310	4	Design and CFD Analysis of Turbine Blade (Three NACA Profiles at Six Angles of Attack)	Mr. S. Irfan Sadaq	1
14	Batch - 14	1604-17-736-012,020	2	Design and Analysis of Human Prosthetic Arm	Mr. M.A. Mujeeb Iqbal	1
15	Batch - 15	1604-17-736-031,012	2	Optimization of cutting parameters for Machining Improvement of a Hard Metal	Mr. Syed Adil	1
16	Batch - 16	1604-17-736-031,034,064,073	4	Edge Preparation of Friction Welded Joint	Dr. Sirajuddin Elyas Khany	1

*Submitted 17/03/2021*  
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17	Batch - 17	1604-15-736-050	1	Design of Heat Exchanger used in Solvent Extraction Plant of Rice Bran Oil	Dr. Mohammad Sadak Ali Khan	1
18	Batch - 18	1604-17-736-070	1	Topology Optimization and Analysis of Aircraft Engine Bracket	Mr. Syed Adil	1
19	Batch - 19	1604-17-736-061,092,106,119	4	Design and Analysis of Aluminium Metal Matrix Composite	Mrs. Syeda Romana	1
20	Batch - 20	1604-17-736-113,115,117	3	Design and Analysis of Plastic Shredder Machine	Mr. V. Suvarna Kumar	1
21	Batch - 21	1604-17-736-100,101,102	3	Optimization of Cutting parameters in Turning Operation of Aluminum Alloy	Dr. G. Prasanna Kumar	1
22	Batch - 22	1604-17-736-065,098,089,057	4	Experimental Study and Analysis for Improvement in Machining Performance	Dr. D. Srinivas Rao	1
23	Batch - 23	1604-17-736-063, 075, 16-090,16-104	4	Thermal Analysis of Internal Combustion Engine Fins	Mr. Mohd. Abdul Samad	1
24	Batch - 24	1604-17-736-067,074,090,091	4	design and Fabrication of a Two-Wheeler Powered by Electricity	Mr. Mohd. Abdul Samad	1
25	Batch - 25	1604-17-736-082,084,085,306	4	Performance Evaluation of Vertical Axis Wind Turbine Rotor	Mr. Mohd. Hasham Ali	1
26	Batch - 26	1604-17-736-313,314,320,322	4	Analysis of Integrated Photogrammetry in Pattern and Mould Production	Dr. Mohd. Viqar Mohiuddin	1
27	Batch - 27	1604-17-736-107,109,112, 15-096	4	Fabrication of Setup for Magnetic Arc Welding Process	Dr. Mohd. Viqar Mohiuddin	1
28	Batch - 28	1604-17-736-068,071,076,077	4	Experimental Study on Strength Characteristics of Hybrid Composites	Mr. Ahmed Abdul Muneem	1
29	Batch - 29	1604-17-736-072,094,095,323	4	Design and Analysis of Shell and Helical Tubeheat Exchanger	Mrs. Naseema	1
30	Batch - 30	1604-17-736-315,316,317,103	4	Design & Drafting of Air Conditioning System for MJCET Mosque	Mrs. S. Shahar Banu	1
31	Batch - 31	1604-17-736-318,319,321,324	4	Design & Analysis of Drill Press	Mrs. S. Shahar Banu	1
32	Batch - 32	1604-17-736-083,086,088,096	4	Design and Analysis of Turbocharger	Mr. K.Md. Mazharuddin	1
33	Batch - 33	1604-16-736-083,085,092,099	4	Fabrication of Pneumatic Braking System using Ultrasonic Arduino Sensor	Dr. D. Srinivas Rao	1

Library Incharge, MED

*M. Srinivas Rao*  
17/03/2024  
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**MUFFAKHAM JAH COLLEGE OF ENGINEERING AND TECHNOLOGY**  
**MECHANICAL ENGINEERING DEPARTMENT**  
**Project Reports 2020-21 (Production)**

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S. NO.	BATCH	ROLL NO.	No. of Students	TITLE	GUIDE	NO. OF COPIES
1	P - 01	1604-17-738-001,032	2	Automation of Bio-Diesel Pilot Plant using continuous Flow Process	Dr. Ishrat M.M., & Dr. Satyanarayana M.G.V.	1
2	P - 02	1604-17-738-003,004,007,016	4	Desing of Solar Operated Pesticide Sprayer	Mr. V. Dharam Singh	1
3	P - 03	1604-17-738-310,311,312,16-039	4	Design and Analysis of Impeller	Dr. Syed Khader Basha	1
4	P - 04	1604-17-738-015,035,038,039	4	Case Study on Magnetic Gears	Mr. Irfan Ali	1
5	P - 05	1604-17-738-046,047,301,304	4	Study of Dual Mode Engine /Hybrid	Mr. V. Suvarna Kumar	1
6	P - 06	1604-17-738-014,021,037,043	4	A case study on Automated Guided Vehicle (AGV's)	Dr. Mohammad Sadak Ali Khan	1
7	P - 07	1604-17-738-302,303,309	3	design and Analysis of Double Acting Hacksaw Machine using Scotch Yoke Mechanism	Dr. G. Sailaja	1
8	P - 08	1604-17-738-305,306,307,308	4	Case Study of Intelligent Braking System	Mr. K. MD. Mazharuddin	1
9	P - 09	1604-17-738-009,028,045	3	Analysis of Friction Stir Welding using Ansys	Mr. Md. Yahiya	1
10	P - 10	1604-17-738-022,026,030,044	4	Fabrication of Vertical Axis Wind Turbine	Mr. S. Irfan Sadaq	1
11	P - 11	1604-17-738-032,045,049,15-022	4	Experimental Study on Strength Characteristics of Glass - Carbon Fibre Reinforced Hybrid Composites	Mr. Mohd. Hasham Ali	1

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*M. J. S. 19/03/2021*

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**MUFFAKHAM JAH**  
**COLLEGE OF ENGINEERING & TECHNOLOGY**


(Estd. by Sultan-UI-Uloom Education Society In 1980)  
(Affiliated to Osmania University, Hyderabad)  
(Approved by the AICTE & Accredited by NBA)

**Certificate**

This is to certify that the project work entitled "Optimization of Cutting Parameters in Turning Operation of Aluminum Alloy" is submitted by Mohammed Ibrahim Khan (1604-17-736-100), Mohammed Zain Ul Abedeen (1604-17-736-101), & Syed Shoaib (1604-17-736-102), has been carried out under my supervision in partial fulfillment of the requirements for the Degree of Bachelor of Engineering in Mechanical Engineering at Muffakham Jah college of Engineering & Technology, Hyderabad, and this work has not been submitted elsewhere before for any other academic degree.

  
Internal Guide  
Dr. G. Prasanna Kumar  
Assistant Professor, MED.

Associate Professor  
**MECHANICAL ENGG DEPT**  
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# MUFFAKHAM JAH COLLEGE OF ENGINEERING & TECHNOLOGY

(Established by Sultan-UI-Uloom Education Society in 1980)  
(Affiliated to Osmania University, Hyderabad)  
(Approved By The AICTE & Accredited By NBA)

## CERTIFICATE

This is to certify that the project work entitled "DESIGN AND ANALYSIS OF SHELL AND HELICAL TUBE HEAT EXCHANGER" submitted by MD. Abdul Momin Umair (1604-17-736-072), Mohammed Riyaz (1604-17-736-094), Mohammed Sharjeeluddin Haqqani (1604-17-736-095), , Mirza Sameer Baig (1604-17-736-323), respectively in partial fulfilment of the requirements for the award of the Degree of **Bachelor of Engineering**, is a bonafide record of the work carried out by them under our guidance and supervision during the year 2020-2021. The results embodied in this report have not been submitted to any University or Institute for the award of any Degree or Diploma.

*Naseema*

Internal guide Assistant Professor  
MECHANICAL ENGG DEPT  
NASEEMA Muffakham Jah College of  
Engineering & Technology  
Assistant Professor  
Road No.3, Banjara Hills,  
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MED, MJCET

*Dr. Mohd. Viqar Mohiuddin*  
Head of Department

DR. MOHD. VIQUAR MOHIUDDIN  
Professor and Associate Head  
B.E., M.S., Ph.D  
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*Mohd. Sameer Baig*  
19/03/2021  
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## DEPARTMENT OF MECHANICAL ENGINEERING

### CERTIFICATE

This is to certify that the project work titled "OPTIMIZATION OF CUTTING PARAMETERS FOR MACHINING IMPROVEMENT OF A HARD METAL" is carried out by

**ALI BIN ABUBAKAR**  
**SYED ABRAR ALI**

1604-14-736-031  
1604-14-736-012

during the academic year of 2020-2021 in partial fulfillment of the requirement for the award of **Bachelor of Engineering in Mechanical Engineering** from **Osmania University, Hyderabad** is a record of bonafide work carried out by them under my supervision. The matter embodied in this project has not been submitted to any other university or institution for the award of any degree or diploma.

#### PROJECT GUIDE

*Adil*  
**Mr. Syed Adil**

Assistant Professor

Mechanical Engineering Department

Muffakham Jah College of Engineering & Technology

Road No.3, Banjara Hills,

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#### HEAD OF THE DEPARTMENT

*for*  
**Dr. Syed Ferhatullah Hussaini**  
Professor  
Mechanical Engineering Department  
Muffakham Jah College of Engineering & Technology  
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HYDERABAD-500 034. T. S.

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*[Signature]*  
19/03/2021

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