

# Yeshwantrao Chavan College of Engineering

(An Autonomous Institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

Hingna Road, Wanadongri, Nagpur - 441 110

NAAC Accredited with 'A' Grade Ph.: 07104-242919, 242623, 242588

Website: www.ycce.edu E-mail: principal@ycce.edu

#### Summary of 3.2.1

Grants received from Government and non-governmental agencies for research projects, endowments, Chairs in the institution during the last five years (INR in Lakhs)

Year	2020-21	2019-20	2018-19	2017-18	2016-17
INR in Lakhs	31.32	34.99	73.75	45.38	33.83

#### **Supporting Documents**

- 1. E copies of sanction letters of Government and non-Governmental agencies
- 2. First page of research base project reports

Principal

Yeshwantrao Chavan College of Engineering Wanadongri Hingna Road,

NAGPUR - 441110

# Index-3.2.1

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# E copies of Sanction Letters of Government and Non-Governmental Agencies

#### FILE NO. EEQ/2018/000540

#### SCIENCE & ENGINEERING RESEARCH BOARD(SERB)

(a statutory body of the Department of Science & Technology, government of India)

5 & 5A, Lower Ground Floor Vasant Square Mall Plot No. A, Community Centre Sector-B, Pocket-5, Vasant Kunj New Delhi-110070

Dated: 26-Feb-2019

#### ORDER

Subject: Financial Sanction of the research project titled "Energy and Communication Efficient Protocol of Mobile Ad-Hoc Network using Cross-Layer Approach" under the guidance of Dr. Manish Devendra Chawhan, Electronics And Telecommunication, Yeshwantrao Chavan College of Engineering, Hingna road wanadongri, Nagpur, Maharashtra-441110 - Release of 1st grant.

Sanction of Science and Engineering Research Board (SERB) is hereby accorded to the above mentioned project at a total cost of Rs. 4266000/- (Rs. Forty Two Lakh Sixty Six Thousand Only) with break-up of Rs. 2365000/- under Capital (Non-recurring) head and Rs.1901000/- under General (Recurring) head for a duration of 36 months. The items of expenditure for which the total allocation of Rs. 4266000/- has been approved are given below:

S. No	Head	Total (in Rs.)
A	Non-recurring	
1	Equipment -> High End Computer Processor -> IOT & Sensor Network Training System -> Standard Research Version Software -> Advanced Network Systems Lab for multiple network protocols, layers & topologies	2365000
A'	Total (Non-Recurring)	2365000
В	Recurring Items	
1	Recurring - I : (Manpower) Recurring - II : ( Consumables, Travel, Contingencies) Recurring - III : Scientific Social Responsibility	1164000 330000 20000
2 0	Recurring - IV : (Overhead Charges)	387000
B'	Total (Recurring)	1901000
С	Total cost of the project (A' + B')	4266000

- 2. Sanction of the SERB is also accorded to the payment of Rs. 2365000/- (Rupees Twenty Three Lakh Sixty Five Thousand only) under 'Grants for creation of capital assets' and Rs. 635000/- (Rupees Six Lakh Thirty Five Thousand only) under 'Grants-in-aid General' to Dr Uday.P.Waghe, Principal, YCCE, NAgpur, Yeshwantrao Chavan College Of Engineering, Hingna Road Wanadongri being the first installment of the grant for the year 2018-2019 for implementation of the said research project.
- 3. The expenditure involved is debitable to Fund for Science & Engineering Research (FSER)
  This release is being made under Empowerment and Equity Opportunities for Excellence in Science. (Task force Committee) (SC)
- 4. The Sanction has been issued to Yeshwantrao Chavan College Of Engineering, Hingna Road Wanadongri with the approval of the competent authority under delegated powers on 25 February, 2019 and vide Diary No. SERB/F/11552/2018-2019 dated 25 February, 2019
- 5. Sanction of the grant is subject to the conditions as detailed in Terms & Conditions available at website ( www.serb.gov.in).
- 6. Overhead expenses are meant for the host Institute towards the cost for providing infrastructural facilities and general administrative support etc. including benefits to the staff employed in the project.
- 7. While providing operational flexibility among various subheads under head Recurring-II, it should be ensured that not more than Rs. 1.5 lakh each should be spent for travel and contingency.
- 8. Budget sanctioned under SSR is meant only for activites enlisted under SSR norms and under no circumstances it can be reappropriated.
- 9. As per rule 211 of GFR, the accounts of project shall be open to inspection by sanctioning authority/audit whenever the institute is called upon to do so.
- 10. The sanctioned equipment would be procured rage 6f313 and its disposal of the same would be done with prior approval of SERB.

11. The release amount of Rs. 3000000/- (Rupees Thirty Lakh only) will be drawn by the Under Secretary of the SERB and will be disbursed by means of RTGS transaction as per their Bank details given below:

Account Name	Yeshwantrao Chavan College of Engineering
Account Number	1472002100003909
Bank Name & Branch	Punjab National Bank Khamla BranchKhamla Branch,Opp Gulmohar Hall,Khamla, Nagpur-440025.
IFSC/RTGS Code	PUNB0147200
Email id of A/C Holder	principal@ycce.edu
Email id of PI	mchawan1001@gmail.com

- 12 The institute will furnish to the SERB, New Delhi, separate Utilization certificate(UCs) financial year wise to the SERB for Recurring (Grants-in-aid General) & Non-Recurring (Grants for creation of capital assets) and an audited statement of accounts pertaining to the grant immediately after the end of each financial year.
- 13. The institute will maintain separate audited accounts for the project. A part or whole of the grant must be kept in an interest earning bank account which is to be reported to SERB. The interest thus earned will be treated as credit to the institute to be adjusted towards further installment of the grant.
- 14. The project File no. EEQ/2018/000540 may also be mentioned in all research communications arising from the above project with due acknowledgement of SERB.
- 15. The manpower sanctioned in the project, if any is co-terminus with the duration of the project and SERB will have no liability to meet the fellowship and salary of supporting staff if any. beyond the duration of the project
- 16. As this is the first grant being released for the project, no previous U/C is required.
- 17. The institute may refund any unspent balance to SERB by means of a Demand Draft favoring "FUND FOR SCIENCE AND ENGINEERING RESEARCH" payable at New Delhi.
- 18. The organization/institute/university should ensure that the technical support/financial assistance provided to them by the Science & Engineering Research Board, a statutory body of the Department of Science & Technology (DST), Government of India should invariably be highlighted/ acknowledged in their media releases as well as in bold letters in the opening paragraphs of their Annual Report.

19. In addition, the investigator/host institute must also acknowledge the support provided to them in all publications, patents and any other output emanating out of the project/program funded by the Science & Engineering Research Board, a statutory body of Department of Science & Technology (DST), Government of India.

(Dr. Pramod Kumar Prasad) Scientist C pk.prasad@serb.gov.in

To, Under Secretary SERB, New Delhi

Conv forwarded for information and necessary action to: -

opy for	valued for information and necessary action to.
1.	The Principal Director of Audit, A.G.C.R.Building, IIIrd Floor I.P. Estate, Delhi-110002
2.	Sanction Folder, SERB , New Delhi.
3.	File Copy
4.	Dr. Manish Devendra Chawhan Electronics And Telecommunication Yeshwantrao Chavan College of Engineering, Hingna road wanadongri, Nagpur, Maharashtra-441110 Email: mchawan1001@gmail.com Mobile: 919822719411 (Start date of the project may be intimated by name to the undersigned. For guidance, terms & Conditions etc. Please visit www.serb.gov.in.)
5.	Dr Uday.P.Waghe, Principal, YCCE, NAgpur, Yeshwantrao Chavan College Of Engineering, Hingna Road Wanadongri (Receipt of Grant may be intimated by name to the undersigned)

(Dr. Pramod Kumar Prasad) Scientist C

pk.prasad@serb.gov.in



Dated: 4 January 2019

F.No9-1/2/RIFD/MODROB/Policy-1/2017-18

#### All India Council for Technical Education

(A Statutory body under Ministry of HRD, Govt. of India)
Nelson Mandela Marg, Vasant Runj, New Delhi-110070 Website: <a href="www.aicte-india.org">www.aicte-india.org</a>



MODROBS - Sanction Letter

To

The Drawing and Disbursing Officer, All India Council for Technical Education, Nelson Mandela Marg, Vasant Kunj, New Delhi - 110070

Sub: Release of a sum of Rs. Eleven Lakh Twenty Thousand/- being the Grant-in-Aid under Modernization and Removal of Obsolescence Scheme (MODROB) for the year 2017-18 payable during the current financial year 2018-19-reg.

Sir

This is to convey the sanction of the Council for payment of Rs. 1120000/-(Rupees Eleven Lakh Twenty Thousand Only) as1st installment / final payment out of the total approved grant-in-aid of Rs. 1400000 for completion of MODROB on Modernisation of Switch Gear & Protection Laboratoryin YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING NAGPUR Pin No - 441110 Maharashtra, under the Scheme Modernization and Removal of Obsolescence Scheme (MODROB).

- The amount of the Grant shall be drawn by the Drawing and Disbursing Officer, All India Council for Technical Education on the Grant-in-Aid bill and shall be disbursed to and credited to the Registrar/ Director/Principal of the Institute through RTGS.
- This Grant-in-Aid is being released in conformity with the terms & conditions as well as norms of the scheme as already communicated, and also being communicated in this letter.
- The sanctioned amount is debitable to the Major Head 601.4(a) Gen, of the Scheme of Modernization and Removal of Obsolescence Scheme (MODROB) and is valid for payment during the financial year 2018-19.

#### The instructions/guidelines to be followed by University/Institution

#### I. Release of funds and maintenance of accounts

a. The Principal of the institute and the Coordinator of the project are requested to verify the correctness of the under mentioned bank account/ RTGS details submitted by them along with the Proposal, in which the grant is being released:

Institute PAN No.	Bank Name	Bank Branch Name	Bank Branch Address	Account Holder Name	Account Type	Account Number	IFSC Code
AAATN09 14E	PUNJAB NATIONAL BANK	Khamla Branch	Opp, Gulmohar Hall, Khamla, Nagpur-440025	Principal, Yeshwantra o Chavan College of Engineering	Current Áccount	14720021 00003909	PUNB0 147200

In case of any omission the same should be reported to AICTE immediately.

- b. The Institute shall strictly follow the provisions laid down in the scheme document and sanction order No. F. No. 
  9-15'(/RIFD/MODROB/Policy-1/2017-18 dated \_\_\_\_\_\_issued by this office. All correspondences related to the project must contain this number along with year of sanction of the project; failing which correspondence will not be entertained.
- c. Funds covered by this grant shall be kept separately and would not be mixed up with other funds.
- d. The University/College/Institute shall maintain proper accounts of the expenditure out of the grants, which shall be utilized only on approved items of expenditure. (list enclosed).
- e. Any change in the equipments recommended/sanctioned shall not be acceptable in any circumstances.

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- f. Any expenditure above the sanctioned amount of grant is to be incurred from Institute's own funds
- g. The institute/University shall not charge any overheads on this project and will provide all the administrative support for completion of the project.
- h. The accounts of the institute will be open for test check by the Council or Controller & Auditor General of India or any other officer designated by them.

#### II. Disbursement of funds to institutions

- a. The date of release of the grant by AICTE shall be taken as the date of commencement of the project. The Principal / Director / Registrar shall intimate about the receipt of the grant to AICTE. Any expenditure incurred prior to the issuance of the approval letter will not be allowed to be adjusted in the grant and if the Institution / University do not take the project work within one month of the receipt of the grant, the approval shall ipso facto lapse.
- b. After receipt of the grant from AICTE, the Institute shall send a confirmation to AICTE within 2 months of receipt of grant that the sanctioned project has been started/is in progress.
- c. 100% grant of the sanctioned amount will be released to Government/Govt. Aided institutions. Utilization Certificate (UC) and other requisite documents are to be submitted within one month of the completion of the project.
- d. To self financed/Pvt. Institutions 80% of the sanctioned amount will be released as first installment followed by 20% as reimbursement after receipt of UC and other requisite documents as spécified in terms & Conditions of MODROB Scheme.

#### III. Submission of documents by university/institution

- a. The following mandatory relevant documents are required to be submitted by the university/institution within one month of the completion of the program :-
  - The Annual Progress Report (APR) in the prescribed format along with Statement of Expenditure and Audited Utilization Certificate shall be submitted to AICTE not later than one month after completion.
  - (ii) The Utilization Certificate (UC) supported by Audited Statement of Expenditure to the effect that the grant has been utilized for the purpose for which it has been sanctioned shall be furnished to the AICTE immediately after completion of the project. It should contain the head-wise break up of expenditure made from the grant-in-aid provided by the Council. In case of self-financing/private institutions, Statement of actual Expenditure & Utilization Certificate are required to be audited & signed and sealed by a Chartered Accountant endorsing the membership number and complete postal address.
  - (iii) Project Completion Report (PCR) in the prescribed format along with the copies of invoice/bills for the equipments purchased and copy of stock entry register where entry of the equipments have made duly verified. Audited Statement of Expenditure indicating expenditure incurred in the total duration of the project in the prescribed format and GFR-19 shall be submitted to the Council. Photocopies of formats are enclosed
- A complete Status Report of the project indicating the activities undertaking, number of students benefited, laboratory works photographs of students, together with their views is to be submitted.
- c. The balance amount of the grant will be reimbursed to the university/institution only on submission of the above documents. On receipt of these documents, the total amount of balance of financial assistance, admissible as per the norms, shall be worked out and grant-in-aid shall be released, as second installment, in favour of the beneficiary institution.
- d. The university/institution is expected to submit the above said mandatory documents viz. Utilization certificate, Expenditure Statement and completion certificate etc. within one month of completion of MODROB project. However, delay of further 2 months may be condoned by AICTE in special circumstances as explained by the institute. Delay in submission of documents after three months of the completion of the MODROB Project shall invite a penalty of 10% of the total sanctioned amount of the MODROB Project, to be deducted from the balance amount of 2nd installment. The entire amount of grant already released, along with interest accrued thereon shall be refunded to AICTE if mandatory documents are not submitted by the institute beyond one year.
- Program Evaluation Committee (PEC) is required to be constituted at Institutional level. The constitution of the PEC shall be as under:
  - (i) Principal/Director/Registrar of the Institution (Chairperson)
  - (ii) Coordinator of the project (Member Secretary),
  - (iii) Two HODs and one subject expert (Members).

The members of the said PEC shall not be below the rank of Associate Professor. The minutes of the meetings are to be submitted to the Council at end of the project along with other mandatory documents.

#### IV. General Instructions

- a. The amount of interest accrued on the grant should be treated as part of the grant to be utilized for that particular project. However, the interest amount accrued along with grant disbursed should not exceed the total grant sanctioned for the project. The Institute receiving the grant should reflect the same in the audited statement of accounts/ utilization certificate and may either refund the interest amount to AICTE or AICTE shall adjust the same in the next installment of grant before its release.
- b. The duration of the project is for two years from the date of release of grant. It may be ensured that the project is completed within the stipulated time. If the project is not completed in time no further extension will be granted in any case and institute has to refund the entire amount to AICTE. The request for reimbursement of 20% of remaining amount in case of private institution shall be made with UC and other related documents in such a way that the entire project is completed in the prescribed period of two years.
- c. If project is not started within six months of the issuance of this Offer Letter, the released amount, along with interest accrued thereon, has to be returned to AICTE, by way of a demand draft in favour of Member Secretary, AICTE, New Delhi.
- d. Any unavoidable circumstantial change in the project with respect to name of Project Coordinator for the MODROB project would mandatorily require prior approval of the Council. All such requests should be addressed to AICTE, in advance, recording the specific reasons for proposed changes, failing which the offer for the grant already issued would be treated as automatically withdrawn and the financial assistance released in favour of the beneficiary institution shall be refunded immediately to the Council. Kindly mention the File No.9-131/RIFD/MODROB/Policy-1/2017-18 in your future correspondence.
- e. The grantee shall maintain an audited record of assets acquired wholly or substantially out of the Grant-in-Aid and a register of assets shall be maintained by the Institute in the prescribed form i.e. GFR-19.
- f. The University / Institute receiving grant under MODROB is expected to put up a plaque at the main entrance of the Lab/Department, which has been modernized using the grant. All the equipment procured through the project should be super scribed with AICTE project file number.
- g. The assets acquired wholly or substantially out of All India Council for Technical Education's grant shall not be disposed or encumbered or utilized for the purpose other than those for which the Grant was given without proper sanction of the All India Council for Technical Education and should at any time the institution cease to function, such assets shall revert to the All India Council for Technical Education.
- h. Gol GFR rules should be followed during utilization of grant. URL address http://doe.gov.in/orders-circular/GFR.

#### V. List of Equipments approved:

S.No.	Name of Equipment
1.	Feeder protection Setup (Feeder Protection Relay: Make - Alstom: MICOM P14x Directional/Non- directional Relay Time interval meter Power Analyzer with RS- 485 Communication port)
2.	Generator protection Setup (% Differential Relay . Over Current + Earth Fault Relay . Over/under voltage relay . Negative Sequence Relay . Over/under frequency relay . Temperature relay . Time interval meter Power Analyzer with RS-485 Communication

Yours sincerely,

(Dileep N. Malkhede)

Advisor-I (RIFD)

Copy forwarded for information and necessary action to: -

Name and Address of the Coordinator
 Dr. RAVINDRA MOHARIL
 YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING
 WANADONGRI.

1-3567374334

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Dated: 4 January 2019

F.No.9-17/RIFD/MODROB/Policy-1/2017-18

#### All India Council for Technical Education

(A Statutory body under Ministry of HRD, Govt. of India)
Nelson Mandela Marg, Vasan Kunj, New Delhi-110070 Website: www.aicte-india.org



MODROBS - Sanction Letter

To

The Drawing and Disbursing Officer, All Ind Council for Technical Education, Nelson Mandela Marg, Vasant Kunj, New Delhi - 110070

Sub: Release of a sum of Rs. Seven Lakh Sixty Thousand/- being the Grant-in-Aid under Modernization and Removal of Obsolescence Scheme (MODROB) for the year 2017-18 payable during the current financial year 2018-19-reg.

Sir.

This is to convey the sanction of the Council for payment of Rs. 760000/-(Rupees Seven Lakh Sixty Thousand Only) as1st installment / final payment out of the total approved grant-in-aid of Rs. 950000 for completion of MODROB on Modernisation & Removal of Obsolescence of Microcontroller Labin YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING NAGPUR Pin No - 441110 Maharashtra, under the Scheme Modernization and Removal of Obsolescence Scheme (MODROB)

- The amount of the Grant shall be drawn by the Drawing and Disbursing Officer, All India Council for Technical Education on the Grant-in-Aid bill and shall be disbursed to and credited to the Registrar/ Director/Principal of the Institute through RTGS.
- This Grant-in-Aid is being released in conformity with the terms & conditions as well as norms of the scheme as already communicated, and also being communicated in this letter.
- The sanctioned amount is debitable to the Major Head 601.4(a) Gen. of the Scheme of Modernization and Removal of Obsolescence Scheme (MODROB) and is valid for payment during the financial year 2018-19.

#### The instructions/guidelines to be followed by University/Institution

#### Release of funds and maintenance of accounts

a. The Principal of the institute and the Coordinator of the project are requested to verify the correctness of the under mentioned bank account/ RTGS details submitted by them along with the Proposal, in which the grant is being released:

Institute PAN No.	Bank Name	Bank Branch Name	Bank Branch Address	Account Holder Name	Account Type	Account Number	IFSC Code
AAATN09 14E	PUNJAB NATIONAL BANK	Khamla Branch	Opp, Gulmohar Hall, Khamla, Nagpur-440025	Principal, Yeshwantra o Chavan College of Engineering	Current Account	14720021 00003909	PUNB0 147200

In case of any omission the same should be reported to AICTE immediately.

- b. The Institute shall strictly follow the provisions laid down in the scheme document and sanction order No. F. No. 9-15 / RIFD/MODROB/Policy-1/2017-18 dated \_\_\_\_\_\_ issued by this office. All correspondences related to the project must contain this number along with year of sanction of the project; failing which correspondence will not be entertained.
- c. Funds covered by this grant shall be kept separately and would not be mixed up with other funds.
- d. The University/College/Institute shall maintain proper accounts of the expenditure out of the grants, which shall be utilized only on approved items of expenditure. (list enclosed).
- e. Any change in the equipments recommended/sanctioned shall not be acceptable in any circumstances.

Page.1

ated: 4 January 2019

F.Nd-117-RIFDIMODROB/Policy-1/2017-18

- f. Any expenditure above the sanctioned amount of grant is to be incurred from Institute's own funds.
- g. The institute/University shall not charge any overheads on this project and will provide all the administrative support for completion of the project.
- h. The accounts of the institute will be open for test check by the Council or Controller & Auditor General of India or any other officer designated by them.

#### II. Disbursement of funds to institutions

- a. The date of release of the grant by AICTE shall be taken as the date of commencement of the project. The Principal / Director / Registrar shall intimate about the receipt of the grant to AICTE. Any expenditure incurred prior to the issuance of the approval letter will not be allowed to be adjusted in the grant and if the Institution / University do not take the project work within one month of the receipt of the grant, the approval shall ipso facto lapse.
- b. After receipt of the grant from AICTE, the Institute shall send a confirmation to AICTE within 2 months of receipt of grant that the sanctioned project has been started/is in progress.
- c. 100% grant of the sanctioned amount will be released to Government/Govt. Aided institutions. Utilization Certificate (UC) and other requisite documents are to be submitted within one month of the completion of the project.
- d. To self financed/Pvt. Institutions 80% of the sanctioned amount will be released as first installment followed by 20% as reimbursement after receipt of UC and other requisite documents as specified in terms & Conditions of MODROB Scheme

#### III. Submission of documents by university/institution

- a. The following mandatory relevant documents are required to be submitted by the university/institution within one month of the completion of the program:
  - (i) The Annual Progress Report (APR) in the prescribed format along with Statement of Expenditure and Audited Utilization Certificate shall be submitted to AICTE not later than one month after completion.
  - (iii) The Utilization Certificate (UC) supported by Audited Statement of Expenditure to the effect that the grant has been utilized for the purpose for which it has been sanctioned shall be furnished to the AICTE immediately after completion of the project. It should contain the head-wise break up of expenditure made from the grant-in-aid provided by the Council. In case of self-financing/private institutions, Statement of actual Expenditure & Utilization Certificate are required to be audited & signed and sealed by a Chartered Accountant endorsing the membership number and complete postal address.
  - (iii) Project Completion Report (PCR) in the prescribed format along with the copies of invoice/bills for the equipments purchased and copy of stock entry register where entry of the equipments have made duly verified. Audited Statement of Expenditure indicating expenditure incurred in the total duration of the project in the prescribed format and GFR-19 shall be submitted to the Council. Photocopies of formats are enclosed
- b. A complete Status Report of the project indicating the activities undertaking, number of students benefited, laboratory works photographs of students, together with their views is to be submitted.
- c. The balance amount of the grant will be reimbursed to the university/institution only on submission of the above documents. On receipt of these documents, the total amount of balance of financial assistance, admissible as per the norms, shall be worked out and grant-in-aid shall be released, as second installment, in favour of the beneficiary institution.
- d. The university/institution is expected to submit the above said mandatory documents viz. Utilization certificate, Expenditure Statement and completion certificate etc. within one month of completion of MODROB project. However, delay of further 2 months may condoned by AICTE in special circumstances as explained by the institute. Delay in submission of documents after three months of the completion of the MODROB Project shall invite a penalty of 10% of the total sanctioned amount of the MODROB Project, to be deducted from the balance amount of 2nd installment. The entire amount of grant already released, along with interest accrued thereon shall be refunded to AICTE if mandatory documents are not submitted by the institute beyond one year.
- Program Evaluation Committee (PEC) is required to be constituted at Institutional level. The constitution of the PEC shall be as under:
  - (i) Principal/Director/Registrar of the Institution (Chairperson)
  - (ii) Coordinator of the project (Member Secretary),
  - (iii) Two HODs and one subject expert (Members).

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ated: 4 January 2019

The members of the said PEC shall not be below the rank of Associate Professor. The minutes of the meetings are to be submitted to the Council at end of the project along with other mandatory documents.

#### IV General Instructions

- a. The amount of interest accrued on the grant should be treated as part of the grant to be utilized for that particular project. However, the interest amount accrued along with grant disbursed should not exceed the total grant sanctioned for the project. The Institute receiving the grant should reflect the same in the audited statement of accounts/ utilization certificate and may either refund the interest amount to AICTE or AICTE shall adjust the same in the next installment of grant before its release.
- b. The duration of the project is for two years from the date of release of grant. It may be ensured that the project is completed within the stipulated time. If the project is not completed in time no further extension will be granted in any case and institute has to refund the entire amount to AICTE. The request for reimbursement of 20% of remaining amount in case of private institution shall be made with UC and other related documents in such a way that the entire project is completed in the prescribed period of two years.
- c. If project is not started within six months of the issuance of this Offer Letter, the released amount, along with interest accrued thereon, has to be returned to AICTE, by way of a demand draft in favour of Member Secretary, AICTE, New Delhi
- d. Any unavoidable circumstantial change in the project with respect to name of Project Coordinator for the MODROB project would mandatorily require prior approval of the Council. All such requests should be addressed to AICTE, in advance, recording the specific reasons for proposed changes, failing which the offer for the grant already issued would be treated as automatically withdrawn and the financial assistance released in favour of the beneficiary institution shall be refunded immediately to the Council. Kindly mention the File No. 5-ts-KIFD/MODROB/Policy-1/2017-18 in your future correspondence.
- e. The grantee shall maintain an audited record of assets acquired wholly or substantially out of the Grant-in-Aid and a register of assets shall be maintained by the Institute in the prescribed form i.e. GFR-19.
- f. The University / Institute receiving grant under MODROB is expected to put up a plaque at the main entrance of the Lab/Department, which has been modernized using the grant. All the equipment procured through the project should be super scribed with AICTE project file number.
- g. The assets acquired wholly or substantially out of All India Council for Technical Education's grant shall not be disposed or encumbered or utilized for the purpose other than those for which the Grant was given without proper sanction of the All India Council for Technical Education and should at any time the institution cease to function, such assets shall revert to the All India Council for Technical Education.
- h. Gol GFR rules should be followed during utilization of grant. URL address http://doe.gov.in/orders-circular/GFR.

#### V. List of Equipments approved:

S.No.	Name of Equipment	
1.	Proteus VSM Microcontroller Simulation software	
2.	ARM -9 Development board	- W 1
3.	ARM-7 Development board	
4.	Raspberry Pi 2 Model B 1GB -The Complete Kit	
5.	Raspberry pi zero The Complete Kit	
6.	Raspberry pi sensor kit	
7.	ATMEGA 16/32/64 Development Board	
8.	Arduino Starter Kit	
9.	Keil software	
10.	Universal Programmer	
11.	Rework soldering/ de- soldering System	,

F.No. 9-07RIFD/MODROB/Policy-1/2017-18 Jated: 4 January 2019 Yours sincerely, (Dileep N. Malkhede) Advisor-I (RIFD) Copy forwarded for information and necessary action to: -1. Name and Address of the Coordinator Dr. MILIND MUSHRIF YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING WANADONGRI, HINGNA ROAD, NAGPUR - 441 110 NAGPUR - 441110 2. The Registrar / Director / Principal
Dr. Uday P. Waghe
YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING
WANADONGRI,
HINGNA ROAD,
NAGPUR - 441 110 NAGPUR
- 441110 3. Guard File AQIS Application Id: 1-3565442628 3 金 Page 4 1-3565442628



#### All India Council for Technical Education



(A Statutory body under Ministry of HRD, Govt. of India)
Nelson Mandela Marg, Vasant Kunj, New Delhi-110070 Website: www.aicte-india.org

#### STTP-Sanction Letter

To

The Drawing and Disbursing Officer, All India Council for Technical Education, Nelson Mandela Marg, Vasant Kunj, New Delhi – 110070

Sub: Release of a sum of Rs. 150000 I- for conduct of Short Term Training Programme (STTP) during the financial year 2018-19 – reg.

Sir.

0 8

This is to convey the sanction of the Council for payment of Rs. 150000 /-(Rupees One Lakh Fifty Thousand only) for conduct of STTP on Recent trends in Electrical Drives and their Applications to YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING NAGPUR Pin No - 441110 Maharashtra, under the Scheme of Short Term Training Programme.

- The amount of the grant shall be drawn by the Drawing and Disbursing Officer, All India Council for Technical Education on the grant-in-aid bill and shall be disbursed to and credited to the Registrar/ Director/Principal of the institute through RTGS.
- This grant-in-aid is being released in conformity with the terms & conditions as well as norms of the scheme as already communicated, and also being communicated in this letter.
- The sanctioned amount is debitable to the Major Head 601.43(a) Gen. of the Scheme of Short Term Training Programme and is valid for payment during the financial year 2018-19.

#### The instructions/guidelines to be followed by University/Institution

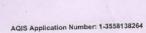
#### Release of funds and maintenance of accounts

a. The Principal of the institute and the Coordinator of the program are requested to verify the correctness of the under mentioned bank account/ RTGS details submitted by them along with the Proposal, in which the grant is being released: -

Institute PAN No.	Bank Name	Bank Branch Name	Bank Branch Address	Account Holder Name	Account Type	Account Number	Code
AAATNO 914E	PUNJAB NATION AL BANK	Khamla Branch	Opp, Gulmohar Hall, Khamla, Nagpur-440025	Principal, Yeshwantr ao Chavan College of Engineerin	Current Account	1472002 1000039 09	PUN B014 7200

In case of any omission the same should be reported to AICTE immediately.: -

- b. The Institute shall strictly follow the provisions laid down in the scheme document and sanction order no. F.No. 34-56/\_\_\_\_\_/RIFD/STTP/Policy-1/2017-18 dated <u>o 4 0 1.2e/9</u> issued by this office.
- Funds covered by this grant shall be kept separately and would not be mixed up with other funds so as to know the amount of interest accrued on the grant.
- d. The University/College/Institute shall maintain proper accounts of the expenditure out of the grants, which shall be utilized only on approved items of expenditure.
- The grant is intended to cover items of expenditure connected with the Short Term Training Programme such as Boarding & Lodging to the participants, TA to outstation participants, Honorarium to Course



Page No: 1

Coordinator, reading material to participants, Honorarium to resource persons, TA/DA to resource persons including two outstations resource persons & working expenses (reprographic services, postage, transport, daily wages, tea/coffee etc.

f. The grant is subject to the adjustment on the basis of Utilization Certificate in the prescribed proforma submitted by the University/College/Institution. Further, the accounts of the institute will be open for test check by the Council or Controller & Auditor General of India or any other officer designated by them.

#### II. Disbursement of funds to University/Institutions

- a. The full amount of the grant sanctioned is being released as advance to the University/Institute.
- b. The amount spent by the institute on the conduct of STTP shall be adjusted on the basis of utilization certificate and detailed expenditure statement submitted by the University/Institution on the prescribed format along with other mandatory documents viz feedback form, copy of proceedings and completion report etc.
- c. The above said amount of grant shall be released on the basis of the Letter of Approval (LOA)issued by AICTE to the institute for the academic year 2018-19.

#### III. Conduct of test and issuance of certificate

A test shall be conducted by Program Evaluation Committee (PEC) at the end of the program and the certificates shall be issued to those participants who have attended the program and have qualified in the test.

#### IV. Submission of documents by University/Institution

- a. The following mandatory relevant documents are required to be submitted by the university/institution within one month of the completion of the program:
  - (i) Original Statement of actual expenditure & Utilization Certificate in the prescribed proforma duly signed by the Head of the institution and countersigned by Registrar/Finance Officer/Govt. Auditor. In case of self-financing/private institutions, Statement of actual Expenditure & Utilization Certificate are required to be audited & signed and sealed by a Chartered Accountant endorsing the membership number and complete postal address. Photocopies of formats are

The university/institution is not required to submit bills/vouchers/invoices etc for the expenditure incurred out of recurring grants. However, such copies of bills/vouchers/invoices shall be digitized by respective institutions receiving grant and uploaded scanned copies of such bills/vouchers/invoices etc on the portal for availability and view at any point of time.

- (ii) Feedback form in the prescribed proforma.
- (iii) Copy of the proceedings and completion report.
- (iv) List of candidates who have successfully completed the program on the basis of the test conducted by Program Evaluation Committee (PEC).
- (v) Report submitted by Program Evaluation Committee (PEC).
- b. The amount of the grant shall be adjusted on submission of utilization certificate & detailed expenditure statement by University/Institution. On receipt of these documents, the total amount of financial assistance, admissible as per the norms, shall be worked out and grant-in-aid adjusted.
- c. The university/institution is expected to submit the above said mandatory documents viz. Utilization Certificate, Expenditure Statement and feedback form etc within one month of conduct of STTP. However, delay of further 2 months may be condoned by AICTE in special circumstances as explained by the institute. Delay in submission of documents after three months of the conduct of STTP shall invite a penalty of 10% of the total sanctioned amount of the STTP, to be recovered from the University/Institute. The entire amount of grant already released, along with interest accrued thereon, shall be refunded to AICTE if mandatory documents are not submitted by the University/Institute beyond one year.

#### V. General instructions

- a. Preferably 10% of the participants may be industry professionals deputed by industry. Further, not more than 20% participants shall be from the host institution/group of institutions.
- b. Interest, accrued on the grant released shall be refunded back to AICTE.
- c. If programme is not conducted in the period of nine months of the issuance of this Sanction Order,

AQIS Application Number: 1-3558138264

Page No: 2

the released amount, along with interest accrued thereon, has to be returned back to AICTE.

- d. The expenditure under the Heads 'Honorarium to Course Coordinator' and 'Honorarium to Resource Persons' shall not exceed 1% & 20% respectively of the total sanctioned grant for the Programme. However, overall expenditure shall not exceed the funds sanctioned for the Programme
- e. Any extra money required to complete the programme must be borne by the institute from their own resources. But the quality of the activities should not be compromised.
- f. The STTP is a residential program of a duration of six days with minimum 40 participants. The approved STTP shall be conducted within nine months from the date of release of funds.
- g. Any unavoidable circumstantial change in the program with respect to name of Project Coordinator, Venue and date for organizing STTP would mandatorily require prior approval of the Council. All such requests should be addressed to AICTE, in advance, recording the specific reasons for proposed changes, failing which the offer for the grant already issued would be treated as automatically withdrawn and the financial assistance released in favour of the beneficiary institution shall be refunded immediately to the Council. Kindly mention the File No. 34-56/\_\_\_\_\_\_/RIFD/STTP/Policy-1/2017-18 in your future correspondence.
- h. Program Evaluation Committee (PEC) is required to be constituted at institutional level. The constitution of the PEC shall be as under:
  - (i) Principal/Director/Registrar of the institution (Chairperson)
  - (ii) Coordinator of the program (Member Secretary),
  - (iii) Two HoDs and one subject expert (members).

The members of the said PEC shall not be below the rank of Associate Professor. A test shall be conducted by Program Evaluation Committee (PEC) at the end of the program and the certificates shall be issued to those participants who have attended the program and have qualified in the test. The minutes of the meetings, along with PEC report, are to be submitted to the Council at end of the program along with other mandatory documents.

- Gol GFR rules (@https://doe.gov.in/order-circular/general-financial-rules2017-0) should be followed during utilization of grant.
- j. This Sanction Order may be treated as Offer Letter for all purposes.

Yours sincerely,

(Dileep N Malkhede) Advisor-I (RIFD)

1 MAR 2013

Copy forwarded for information and necessary action to: -

Name and Address of the Coordinator
 Dr. RAVINDRA MOHARIL
 YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING
 WANADONGRI,
 HINGNA ROAD,
 NAGPUR - 441 110, NAGPUR
 NAGPUR- 441110

The Registrar / Director / Principal Dr. Udaykumar Prakashchandra Waghe YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING WANADONGRI, HINGNA ROAD, NAGPUR - 441 110, NAGPUR , NAGPUR- 441110 '

3. Guard File

Page No: 3

#### FILE NO. SSY/2019/000137 SCIENCE & ENGINEERING RESEARCH BOARD(SERB)

(a statutory body of the Department of Science & Technology, government of India)

5 & 5A, Lower Ground Floor Vasant Square Mall Plot No. A, Community Centre Sector-B, Pocket-5, Vasant Kunj New Delhi-110070

Dated: 29-Mar-2019

ORDER

Subject: Financial assistance for the organizing National Seminar on "WASTE TO ENERGY: A SOLUTION FOR TOMORROW" by Dr. SHANTANU RAMKRISHNA KHANDESHWAR, Yeshwantrao Chavan College Of Engineering, Hingna Road Wanadongri, Nagpur, Maharashtra-441110 being held from 08-Aug-2019 to 09-Aug-2019 (2 days).

Sanction of Science and Engineering Research Board (SERB) is hereby accorded to the above mentioned project at a total cost of Rs. 75000/- (Rs. Seventy Five Thousand Only) to Yeshwantrao Chavan College Of Engineering, Hingna Road Wanadongri, Nagpur, Maharashtra-441110 during the financial year 2018-2019 to meet the expenses related to TA/DA to Young and Senior Indian Scientists, Pre-conference printing and Contingencies in connection with the above event.

2. The amount of Rs. 75000/- (Rs. Seventy Five Thousand Only) will be drawn by Under Secretary, SERB and disbursed by the means of Cheque or Electronic Fund Transfer (NEFT/RTGS) as beneficiary's Bank Details given below.

Account Name	YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING
Account Number	1472002100003909
Bank Name & Branch	PUNJAB NATIONAL BANK PUNJAB NATIONAL BANK, KHAMLA BRANCH, KHAMLA, NAGPUR-440025
IFSC/RTGS Code	PUNB0147200
Email id of A/C Holder	principal@ycce.edu
Email id of PI	khandeshwar333@yahoo.com

to Professor, Yeshwantrao Chavan College Of Engineering, Hingna Road Wanadongri

- 3. The expenditure involved is debitable to Fund for Science & Engineering Research (FSER) This release is being made under Seminar/Symposia. (Internal Committee)
- 4. The Sanction has been issued with the approval of competent authority under delegated powers and vide sanction number to Yeshwantrao Chavan College Of Engineering, Hingna Road Wanadongri with the approval of the competent authority under delegated powers on 28 March, 2019 and vide Diary No. SERB/F/13111/2018-2019 dated 29 March, 2019
- 5. As per Rule 211(1) of GFRs, the accounts of the Grantee Institution shall be open to inspection by the sanctioning authority/audit whenever the institute is called upon to do so.
- 6. It is mandatory that the grantee institution is required to submit to this office, audited Statement of Income-Expenditure, Utilization Certificate (in duplicate as per prescribed format) and brief report of above event (max. 04 pages) within three months after the date of completion.
- 7. The balance amount, if any, may be returned through DD in favor of "Fund for Science & Engineering Research" payable at New Delhi.
- 8. The Organization/Institute/University should ensure that the technical support/financial assistance provided to them by the Science and Engineering Research Board, a statutory body of the Department of Science and Technology (DST), Government of India should invariably be highlighted/acknowledged in their media releases as well as in bold letters in the opening paragraphs of their Annual Report.





# SCIENCE & ENGINEERING RESEARCH BOARD (SERB) (Statutory Body Established Through an Act of Parliament: SERB Act 2008)

5 & 5A, Lower Ground Floor Vasant Square Mall Sector-B, Pocket-5 Vasant Kunj New Delhi - 110 070

### Assistance to Professional Bodies and Seminar Symposia

#### File Number: SSY/2019/000368

Dated: 03-Jun-2019

Subject: Application titled ""Construction Materials and Technology: An approach towards Sustainability.""

#### Dear Prof. Vaishali Nilesh Mendhe,

It is to inform you that your proposal seeking financial assistance under "Assistance to Professional Bodies & Seminar / Symposia Scheme" has been considered and recommended for the same. We are now agreed to provide Rs. 50,000/- as partial grant-in-aid to the recommended application.

Kindly follow the below steps only then you will be able to acknowledge the approval letter:

- 1. Go to www.serbonline.in through your credentials
- 2. Go to MenuàProposal submission à View submitted proposals
- 3. Click on the link under Status column "Proposal Approved, Acknowledgement pending from PI"

Kindly submit the required document/ RTGS within 15 days of the receipt of this letter in order to enable us to process the file for the release of funds. In case, we do not receive the requested document within the provided time, it would be presumed that you are not interested in this offer and it would be stand withdrawn automatically. No further correspondence will be entertained thereafter.

You are requested to submit an affidavit (Bond) on Rs. 100/- non-judicial stamp paper, in original (by speed / registered post), scan copy through online is also required to submit (format link-https://serbonline.in/SERB/AbstractFilePath?FileType=E& FileName=BND\_SSY.pdf&PathKey=DOCUMENT\_TEMPLATE).

Kindly note that no separate communication by post would be sent to you in this regard.

With kind regards,

(Dr. Ramesh Vijayan)

Scientist C

Dh.

Email: seminar.symposia@serb.gov.in

Prof. Vaishali Nilesh Mendhe

CIVID Canned with

Veshwantrao Chavan College Of Engineering , Hingna Road Wanadongri, Nagpur, Maharashtra
Page 15 of 313

# Yeshwantrao Chavan Sanstha's (An Autonomous Institution affiliated and College of Engineering) (An Autonomous Institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University) Hingna Road Washtrasant Tukadoji Maharaj Nagpur University)

Hingna Road, Wanadongri, Nagpur - 441 110 NAAC Accredited with 'A' Grade,

Ph.: 07104-242919, 242623, 242588 Website: www.ycce.edu E-mail: principal@ycce.edu

To Principal Yeshwantrao chavan College of Engineering,

Date - / /2019

Subject: This Application regarding late Submission 18-19 Dear Sir,

The student of final year B.E.(ET), purchased the hardware components for their projects & submitted the bills. Since they were unaware of the procedure, they did not take the gate entry within time. Kindly approve the delayed entries of gate pass & process their bills.

Sr. No.	Name of Project	Name of Guide	Amount	Bill No.& Bill Date	Date	Gate Entry
1	Printing Defect identification Using image Processing.	Dr. M.M. Mushrif	11180	*INV/2018/29530 05/09/2018 *145 28/12/2018 *96 25/01/2019	26/09/2018	No. 447 977 978
2	RADAR Based Security System	Mr. R.P. Deshmukh	6768	*Inv.no.:-89 28/11/2018 *Inv.no.:-69 27/10/2018 *Inv.no.:HYD8-2764087 05/03/2019	30/3/2019 30/03/2019 30/03/2019	1175 1176 1177
3	IOT based smart home	Mr. R.P. Deshmukh	3418	*Inv.No.:-Order no.127312 09/3/2019 *Inv.No.:- Order no.17572 02/03/2019	27/3/2019 27/3/2019	1062
4	Non –contact based Baby Monitoring	Dr.Y.U. Chitriv	4682	*Inv.no.:EC-INV- 20151200010349 1/10/2018	25/03/2019	
5	system Smart Traffic control using Image	Dr.Y.U. Chitriv	6872	*Inv.No.:-EL-ONL-313 13/08/2018 *	31/08/2018	
6	Processing Wireless Equipment Control Using MATLAB	Dr. P. W. Raut	2838	*388 6/02/2019 *389 6/02/2019 *499 14/03/2019	27/03/201 27/03/201 27/03/201	9 1050

Sr. No.		N				
	Project	Name of Guide	Amount			871 974
7	Pesticide Spraying Quadcopter	Mrs. A.D. Belsare	24449	Bill No.& Bill Date	Gate pass Date	Entry
	Using Image Processing		-1149	*Inv.No.:-Order no.56694989 04/11/2018	11/3/2019	
				24/08/2018	11/3/2019	Entry No. 912  919  913  914  915  916  917  918  919  920  9 1040  9 1046  19 1179  19 1182  19 871  19 974  19 995  9 1102
				*Inv.No.:-QNEZ-19041 27/12/2018	11/3/2019	
				*Inv.No.:-QSDE-17033 18/08/2018	11/3/2019	914
				*Inv.No.:Order no.57838235	11/3/2019	915
				26/11/2018 *Inv No.:- 100002692 16/11/2018	11/3/2019	916
				*Inv No. :- 100002685 11/11/2018	11/3/2019	
				*Inv No. :-IN-241 30/09/2018	11/3/2019	
				*Inv No. :- IN.151 4/10/2018	11/3/2019	155
8	Sign	Mr. CO. C.		*Inv No.:-BOM3-443 21/08/2017	11/3/2019	920
	Launguage to speech . Controller	Mr. C.S. Gode	14345	*19 25/03/2019	27/03/2019	1040
9	Multiband	Mr. S.S. Khade	5100	*1 001		
	MIMO Antenna for wireless		3100	*Inv.no.:-081 12/03/2019	27/03/2019	1046
	Application			*Inv.no.:- ENT/INV/1819/340 29/03/2019	30/03/2019	1179
10	Smart Luggage Carrier	Mrs. M.L. Keote	10183	*Inv.no.:-6711 15/03/2019	30/03/2019	1182
11	Coin Based	Mrs. M.L. Keote	2915	*Inv.no.:- *Inv.No.:-SE/305	01/03/2019	
11	Smart Water dispencing Using Image Processing	MIS. M.L. Reote	2913	09/03/2019 *Inv.No.:-SC/NOV/0245 19/11/2018	19/03/2019	
13	Smart seatbelt system using GSM	Mrs. S.S. Chiwande	3341	*Inv.no.:-order no.61644427 14/2/2019	28/3/2019	1102
14	Measure the	B.Y. Masram	1980	*Inv.no.:-372 01/03/2019	11/3/2019	906
	performance of AC Electric motor using			*Inv.no.:-254 02/01/2019	25/3/2019	999
	wireless smart meter	Mrs. A.V.	8565	*Inv.no.:-015 22/01/2019	30/3/2019	1157
15	Handheld Device for Disabled	Chaudhari		22/01/2013		
	Person.					

# Yeshwantrao Chavan College of Engineering (An Autonomous Institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University) NAAC Accredited swith 'A' Grade,

Ph.: 07104-242919, 242623, 242588 Website: www.ycce.edu E-mail: principal@ycce.edu

Sr. No.	Name of	NI							
	Project	Name of Guide	Amount	emes leaves and series and series and series					
16	Automated waste	Mr.A.A.Madankar	The state of the s		Date	Gate Entry No.			
17	segregation system	Madankar	3907	*Inv.no.:-277 20/03/2019		1183			
1/	PLC based bottle filling and capping System	Mr. R.P. Kamdi	13054	*149 3/09/2018	29/03/2019	1103			
	System	/		*463 5/12/2018	29/03/2019	1104			
				*699 25/9/2018 *Inv.No.IN-38	29/03/2019	1105			
				16/11/2018 *Inv.No.IN-90 05/12/2018	29/03/2019 29/03/2019	1107			
10	NA 1 :1 ::			*Inv.No.ZSBH-14475 5/12/2018	29/03/2019	1113			
18	Mobile Health Monitoring System	Mr. Y.S.Kale	6324	*Inv.no.:-494 13/03/2019	25/03/2019	998			
	System			*Inv.no.:-500 10/1/2019	25/03/2019	997			
				*Inv.no.:-253 02/01/2019	25/03/2019				
				*Inv.no.:T/3546/18-19 17/12/2018	25/03/2019	995			
19	Portable Fuel Adulteration	Ms.M.S. Patil	5215	*Inv.no.:-76 24/01/2019	30/03/2019	1193			
	detection			*Inv.no.:-837 20/09/2018	30/03/2019	1194			
				HYD8-2949284 18/09/2018	30/03/2019				
				*Inv.no.:-829 27/12/2018	30/03/2019	1106 1107 1113 998 997 996 995 1193 1194 1195			
20	Dam safety & water manegment	Dr. P.D. Dorge	5277	*Inv.no.:- 32991/2017- 2018/19848/9/9/2018	9/9/2018	1207			
	using IOT	Total Amoun	t 1,44,413/-						

PRINCIPAL

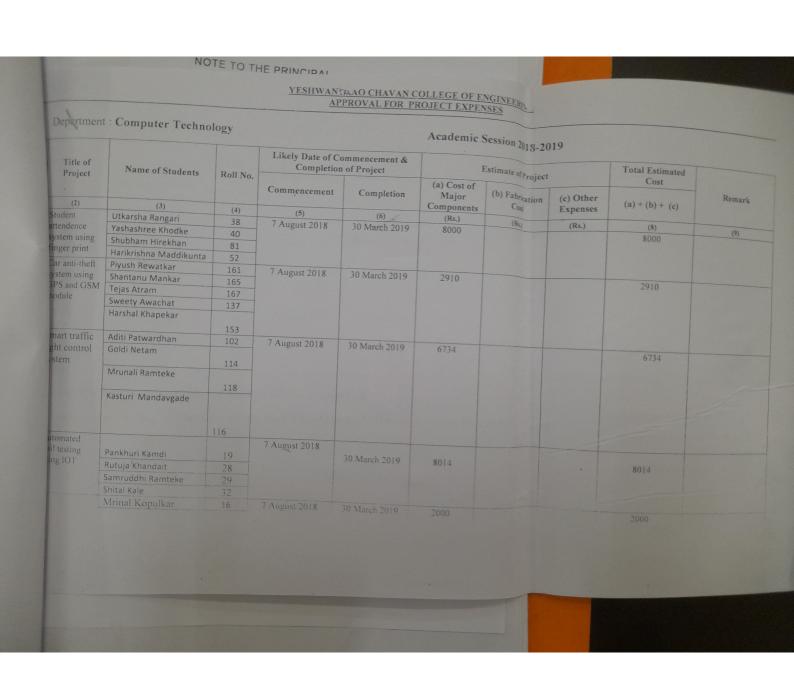
Ycce,nagpur

HOD ET DEPT

Dr. M.S. NARLAWAR

Head of Department Electronics & Tele Communication Engg. YCCE, Nagpur

Page 18 of 313



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rt System	Tanvi Ninawe	51	7 August 2018	30 March 2019	4384	-	
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							Principal

# Yeshwantrao Chavan College of Engineering Hingna Road Wanadongri, NAGPUR-441110

### Jain Sachin

Ledger Account 9730870809

1-Apr-2018 to 2-Nov-2018

		- 1-b1-50 to 10 5-	1V0V-2018		
Date	Particulars	111			
1-4-2018	By Opening Palan	Vch Type	Vch No.	Debit	Page Credi
9.4.2018	To Tirupati Urban Co-Opertive Bank Ltd. Cheque 005990 Cheque 005991 Cheque No. 005990 Your Self issu Ravi B Mishra Rs. 15, 700/- & Chec 005991 Date-09 04 2018 issed for incurred during Guest Lecture.	9-4-2018 9-4-2018 led to Dr	YCCE/BP/ 60 15,700.00 Cr 857.00 Cr	16,557.00	16,557.00
27-4-2018	By Provision for Student Project Expens Towards expenses incurred for str project expenses for Information To Dept. [ROBO Studio] bill no 120 D. 2013. [Hitesh Shende & Shraddha Pimpikari]	udent echnology ato 12 02	YCCE/JV- 40		4,450.00
	By (as per details) FAREWELL EXPENSES TDS - Contractor - 94 C Shree Taj Sakhe Sai Caters & Food being expenses incurred for Farewe Program for final year students of de on 03 04 2018, as per details attach	14,430.0 195.0 Is 9,555.0 ept of IT	0 Cr		4,680 00
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21-9-2018 T	Cash Being advance cash paid to Mr. Sach against visiting professor scheme dt o settlement-05 10 2018	in Jain	YCCE/CP/ 552	10,000.00	
9-10-2018 8)	V (as per details) Visiting Professor TDS - Professional - 94 J 30000 x 10% [ A R N P S 6899 R	41,412.00 3,000.00			38,412.00
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# Yeshwantrao Chavan College of Engineering

(An Autonomous Institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

Hingna Road, Wanadongri, Nagpur - 441 110

Ph.: 07104-237919, 234623, 329249, 329250 Fax: 07104-232376, Website: www.ycce.edu

# Department of Information Technology

DATE:-2/4/18

edit

NOTE TO THE PRINCIPAL

Final Year students of Information Technology Department require the financial assistance to purchase some hardware equipment for completion of their projects. As these equipments are not available in the YCCE store, the projectees need your permission & approval to purchase it. The respective guides of the projects also have recommended the same for approval.

Total amount required is Rs. 2212/-. Details about the Project & equipment are attached with this notesheet.

Shri. Bhushan U. Bawankar Project Co-ordinator Dr. U.H. Gawande HOD, IT

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# Yeshwantrao Chavan College of Engineering, Nagpur

Department of Information Task

#### Yeshwantrao Chavan College of Engineering

Hingna Road Wanadongri, NAGPUR-441110

#### Gawande Ujwalla

CT Deptt Ycce

1-Apr-2018 to 2-Nov-2018

					Page 1
Date	Particulars	Vch Type	Vch No.	Debit	Credit
	By Student Project Expenses Primary Cost Category Information Technology 2,212 Primary Cost Category Information Technology 2,212 Towards expenses incurred for stipproject. "Mood Sensing Misic Play of IT Dept [Prachi Randive, Vigne	JOURNAL_ 00 Dr 2.00 Cr udent er "student	YCCE/ JV- 110		2,212.00
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TIRUPATI URBAN CO-OPERATIVE BANK LID.

South Ambrazari, Nagpur 44001 IFS CODE: HDFC0CTUB02 A/c Payee

VALID FOR THREE MONTHS FROM THE DATE OF ISSUE

Date

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Ujwalla Gawande TUCB- 3056

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Two Thousand Two Hundred Twelve Only

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₹ \*\*2,212.00

Current A/c. No.: 002002100000130

bladnie

GESTY

YESHWANTRAO CHAVAN COLLEGE OF ENGG

please sign above

# Yeshwantrao Chavan College of Engineering

Hingna Road Wanadongri, NAGPUR-441110

#### Shende S. W.

Ledger Account 9765326126

1-Apr-2018 to 2-Nov-2018

Date	Particulars	Vch Type	V. I. N.	Page
3-5-2018	By Student Project Expenses	JOURNAL_	Vch No. YCCE/JV-111	Debit Cred
	Information Technology 2,560.  Primary Cost Category Information Technology 2,560.  Towards expenses incurred for stuproject, "Smart Fan with Temperatu & Direction Sensor "student of IT [Chaitali Kaurase, Snehal Dhokand Vaibhavi Ande & Darshan dengale	.00 Dr .00 Cr udent ur control Dept	100E/JV-111	2,560 0
6-7-2018	To Cash Primary Cost Category	Cash Payment	YCCE/CP/ 339	2,000.00
	1.6	0.00 Dr hailendra 8.07.2018		
31-7-2018	By (as per details) BOS (Autonomy)	JOURNAL_	YCCE/ JV- 585	8,166.00
	Primary Cost Category	1,866.00 Dr		
	Information Technology BOS (Autonomy)	1,866.00 Dr 7,000.00 Dr		
	Primary Cost Category			
	Information Technology TDS - Professional - 94 J	7,000.00 Dr <b>200.00 Cr</b>		
	Primary Cost Category SACHIN SATHE 2000 10% [ PAN-A E H P S 854	200.00 Cr 40 Q		
	TDS - Professional - 94 J Primary Cost Category DESHPANDE U.A	200.00 Cr 200.00 Cr		
	2000 X 10% [ PAN- A B I P D 6 TDS - Professional - 94 J	199 Q <i>J</i> 200.00 Cr		
	Primary Cost Category LIMBE PARIKSHIT	200.00 Cr 7920 R1		
	2000 X 10% [ PAN-A A I P IY ] TDS - Professional - 94 J Primary Cost Category	100.00 Cr		
	TIRUPATI URBAN CO-OPERATIV	E BANK LTD.	Date Date	LID FOR THREE MONTHS FROM THE DATE OF ISSUE
	Shraddhanand Peth Branch, 172, Shradd South Ambrazari, Nagpur 440010. IFS CODE: HDFC0CTUB02	dhanand Peth A/c Payee	दिनांक 💄	22102018
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Pay s	hailendra Shende Tucb-6373			
Rupees &	Two Thousand Five Hundred	d Sixty Only	अदा करें। ₹	**2,560.00
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THE REAL PROPERTY.	la	dangé 65	YESHWAT	NTRAO CHAVAN COLLEGE OF ENGG.
00		7	SPITE STANDARD	Please sign above. V

# Yeshwantrao Chavan College of Engineering

Hingna Road Wanadongri. NAGPUR-441110

# Dharmik R C

Ledger Account 9890388301

1-Apr-2018 to 2-Nov-2018 Date Particulars 8-5-2018 By Student Project Expenses Vch Type Primary Cost Category Vch No. JOURNAL\_ Page Information Technology 2,846.00 Dr. Debit YCCE/JV-112 Primary Cost Category Credit Information Technology 2.845.00 Towards expenses incurred for student 2,846.00 Cr project, "Portable Tracking Device/ System. "student of IT Dept [Abhishek Hadaoo,Amol Wadhone Rakesh Kumar & Swapnil 23-10-2018 To Tirupati Urban Co-Opertive Bank Ltd.,130 Bank Payment Primary Cost Category 006922 YCCE/BP/ 1596 23-10-2018 2,846.00 Information Technology 2,846.00 Cr Ch. no. 006922 dt. 23.10.18 issued towards expenses of student project on Portable

> 2,846.00 2,846.00

TIRUPATI URBAN CO-OPERATIVE BANK LTD. A/c Payee

or Bearer

R.C. Dharmik Tucb- 2221

हैं Hupees रुपये Two Thousand Eight Hundred Forty Six Only

tracking device/system

अदा करें।

\*2,846.00

Current A/c. No.: 002002100000130

YESHWANTRAO CHA LEGE OF ENGG.



#### Nagar Yuwak Shikshan Sanstha's

Yeshwantrao Chavan College of Engineering

(An Autonomous Institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

Hingna Road, Wanadongri, Nagpur - 441 110

Ph.: 07104-237919, 234623, 329249, 329250 Fax: 07104-232376, Website: www.ycce.edu

# DEPARTMENT OF CIVIL ENGINEERING

No : - YCCE/CE//NOTICE/18-19/104

NOTE

Date: 15rd JUNE 2019

To, Principal, Yeshwantrao Chavan College of Engineering Wanadongiri, Nagpur

Subject: - Reimbursement of Project Bill of UG & PG Student 2018-19

Sr.No.	Name of Project	Name of Guide	Name of Student	Amount	
1	To Investigate the Optimization of Pile Foundation System In High Rise Building.	Kurzekar A. S.	Bhushan Itankar	2250.00	
2	Study the various computing methods an developers the rapid method of computing	Khandeshwar S.R.	deshwar S.R. Rasika Rajesh Wasni		
3	Water traatment by Application of Hybid electrocoagulation-	ANSARI KHALID SHAMIM	Shrutika Bhute	8529.00	
4	Study of effect of Various parameters on optima dose-	Ambekar S.V.	Tejaswini Niwal	2980.00	
5	Grey water Tratment by Fixation Process- Gude Nam	ANSARI KHALID SHAMIM	Shrushwat Bhagat, Apruva Bhoyar, Sayali Wankhede, Jatiin Sorte, Pradnys Meshram, Pratik Borade	3032.00	
5	Proformance Analysis of Drawr Compared sand Filter-	Waghmare C S	prajakta Parate	9822.00	
	lab Scale Study on measurement of Grey work using Filteration Process		Hiansu Pathak, Gayatri Burkude, Tanvi Thak, Shumbham, Hote	2670.00	
		Kurzekar A. S.			
	Biogas Digestor	Warade Harshal	Val. : W. i	2537.00	
)		Dootale D.O.	Kalyani Kathane] Sneha Borkar	11800.00	

11	Partiual replacement of ASS by aartificalial sand & goe plymer sand in low grade concrete	Anju Shendre	13241.00
		Total	69782.00

Dr. S.R.KHANDESHWAR Head, CE, YCCE, Nagpur.

PRINCIPAL YCCE, NAGPUR

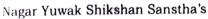
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Yeshwantrao Chavan College of Engineering
An Autonomous Institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University) Hingna Road, Wanadongri, Nagpur - 441 110

# Department of Electrical Engineering

#### Reimbursement of project bill UG/PG student-18-19

Year	Name of Faculty	Purpose of grant	Funds/ Grants received (INR in lakhs)	COST CENTER
2018-19	(S.G. KADWANE)	being provision made towards student project expenses for the session of 18-19 by varius staff of Electrical engg.	0.06502	Electrical Engg
2018-19	(R.N. NAGPURE)	being provision made towards student project expenses for the session of 18-19 by varius staff of Electrical engg.	0.0506	Electrical Engg
2018-19	(S.P. NAGPURE)	being provision made towards student project expenses for the session of 18-19 by varius staff of Electrical engg.	0.08385	Electrical Engg
2018-19	being provision made towards student proje		0.07333	Electrical Engg
2018-19	(P.S. PATIL)	being provision made towards student project expenses for the session of 18-19 by varius staff of Electrical engg.	0.13243	Electrical Engg
2018-19	(S.P. ADHAU)	being provision made towards student project expenses for the session of 18-19 by varius staff of Electrical engg.	0.05418	Electrical Engg
2018-19	(P.M. MESHRAM)	being provision made towards student project expenses for the session of 18-19 by varius staff of Electrical engg.	0.02945	Electrical Engg
2018-19	(A.Y. FADNIS)	being provision made towards student project expenses for the session of 18-19 by varius staff of Electrical engg.	0.12908	Electrical Engg
2018-19	(A.P. MUNSHI)	being provision made towards student project expenses for the session of 18-19 by varius staff of Electrical engg.	0.13254	Electrical Engg
2018-19	being provision made towards student project		0.02128	Electrical Engg
2018-19	(R. M. MOHRIL)	being provision made towards student project expenses for the session of 18-19 by varius staff of Electrical engg.	0.06818	Electrical Engg
2018-19	(S.B. REWATKAR)	being provision made towards student project expenses for the session of 18-19 by varius staff of Electrical engg.	0.0801	Electrical Engg
2018-19	(P.S. SHETE)	being provision made towards student project expenses for the session of 18-19 by varius staff of Electrical engg.	0.08896	Electrical Engg
2018-19	(X.A. POTE)	being provision made towards student project expenses for the session of 18-19 by varius Page 28 of 313 staff of Electrical engg.	0.02814	Electrical Engg



Yeshwantrao Chavan College of Engineering

'An Autonomous Institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University) Hingna Road, Wanadongri, Nagpur - 441 110

2018-19	(S.G. KADWANI )	being provision made towards student project expenses for the session of 18-19 by varius staff of Electrical engg.	0.06986	Electrical Engg
2018-19	(S.P. GAWANDE)	being provision made towards student project expenses for the session of 18-19 by varius staff of Electrical engg.	0.04162	Electrical Engg

(Dr. B. Y. Bagde) HOD, EL, YCCE

Project Courdinatur
U.V. Waghmare

parnipal

#### Estimate of Project Expenses

Annexure "A"
Name of Institution; Yeshwantrao Chavan College of Engineering, Nagpur

I	Department :Electronics	Engineer T	Nau	ne of Institution ; Yes	Annexure "A <u>hwantrao Chavan</u>	n College of Engineerin	g,Nagpur Aca	<sup>denic</sup> Sess	ion :2018-19	
				Likely Date of Co		Estima	te of Project		Total Estimated	Guide Hame
Sr. No.	Title of Project	Name of Students	Roll No.	Commencement	Completion	(a) Cost of Major Components	(b) Fabrication Cost	(c) Other Expenses	(a) + (b) + (c)	Remark
$\neg$				- rab-v rab-v rab-v rab-v_		(Rs.)	(Rs.)	(Rs.)		
- 1	A high speed and energy efficient Full Adder	Pranay Kalbhut	55					1	2,298.70	
1		Akanksh Makawade	1	Jul-18	Apr-19	2,298.72		4.5		Dr. f. f. 20de
	Design	Vedant Dhoble	67	Jul-10	1101.13			18	2,290.70	Da. I. Conc
-		Vaishnavi Dhote	28	System to a s	-			121		
-	0	Nagesh Jankwade	143					75.	, ,	
2	Quadcopter-A Smarter	Sanjay Kamble	68					7		Dr. Y.A. Gaidhami
	Way of Pesticide	Vaishnavi Pathe	142	10-Aug-18	31/3/19	15,143	-	蒙 ×	15,143	Dr. J.A. Galacani
	Spraying	Pratiksh Dange	11					51		
_		Akanksh Wagh	33					4	less 1	
9	1	Minal Gade	29	20-Sep-18				ST		
3	Alert System to prevent	Neha Avghade	12		23-Mar-19	4,538		~	4 630	0 0 0.11. ab 0 //
	animal Vehical Collision	Shryas Partke	52			4,550	• •	151	4,538	Prof. Anihet Gokha
		Rushikesh Joshi	29					4		
	Smart Electricity meter	Kajal Humane	9			5,639	4.3			
4	with load theft	Prachi Nandeshwar	14	5/8/2018	12/3/2019			16		
	Detection	Latika Kokade	32	3/3/2016		5,039		1000	5,639	Mrs. T.G. Panse
	Detection	Kajal Wankhede	31				_ = 5	Po.	~	
		Pranali Kirpade	16					March 1		
5	Multifunctional	Renuka Hole	22	Tul 10	Ann 10	0.110		201		0 1 111 - 10
-	Autonomus Farmingbot	Vaishnavi Turasakar	27	Jul-18	Apr-19	9,440		24	9,440	Hoof M-S. Pawas
		Aditya Matharkar	38					335		Prof. M-S. Pawar
		Purva Madan	20					SHQE		
6	Glass Cleaner	Nikita Pal	30	Jul-18	A 10	C005 70		2007 30		Dr. P. M. Palsodka
٠	Cius Cicalici	Shubham Sonarkar	63	Jui-19	Apr-19	698670	1		698570	Dr. P. M. Jalsedka
		Mohsin Shekh	51	1		100				
		Kaustubh Wakodkar	164			1		IF (b)		
	Survillence Robot for	Nakul Rastogi	144				1	100		
7	surface	Kartik Gopal	141	Jun-19	Mar-19	9,737			9,737	Dr. R.D. Thaliss
	Surface	Vaishali Korde	121	1		,,,,,,	į.	1	7,	my. There i hackeye
		Devyabni Kadu	105	1						,

						,		
8	Design of p	Amit Khawse Tejas Dhomne Harshal Shambharker Chanden Uikey Athrav Parkhi	131 160 137 135	Apr-18	18/3/19	15,983		Mrs. P.P. Zode
9	Microstrip Anteena with DGS at 2.45 G	Mansi Vibhute Pragati Godhane Srvesh Sahastrabudhe	70 30 15 60	20.6.18	30.3.19	3,486	3,486	fort. A.B. Mater
	PG		-		V. 1.	Total	73,251	
1	IOT Based facilly smart phone security ssytem	Kajal Ambedkar	1	18-Jul	April,19	4,632	4;632	Dr. P. K. Dakhole
2	E Shape Patch Anteena Array with DGS	Priyanks Sonkar		18-Jul	April, 19	3520	3520	Prof. A-B. Thate
					Total	8152	8152	

Remarks By Head of the Department - Recommended no of project 09 PG-02

Total Estimated Cost Rs. - 81,403.00

Signature of

Approved / Not Approved



Principal
Yealwarkso Chavan
College of Engineering
Wanadongri Hingna Road,
NAGPUR-441110

### First Page of Research Base Project Reports

#### CERTIFICATE OF APPROVAL

Certified that the project report entitled "Smart Energy Monitoring System for Offices" has been successfully completed by Sunil Prajapat, Mrunali Dhenge, Pranay Chacherkar and Tejas Munghate under the guidance of Mr. Nikhil Mangrulkar (Dept. of Computer Technology) and Mr. Prasad Joshi (Dept. of Electrical Engineering) in recognition to the partial fulfillment for the award of the degree of Bachelor of Engineering in Computer Technology, Yeshwantrao Chavan College of Engineering, Nagpur (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University).

Signature

Mr. Nikhil Mangrulkar

(Guide)

Signature

Signature

Signature

Mr. Prasad J

( Guide)

Mr. N. U. Sambhe

(Co-Ordinator)

Dr. G. M. Dhopavkar

(HOD, C.Tech Dept.)

Signature of External Examiner

Name: C. V. Chauhan

Date of Examination: 6 15/19

#### CERTIFICATE OF APPROVAL

Certified that the project report entitled "MahaDarshan - Maharashtra Tourism Application" has been successfully completed by Snehal Yaglewad, Ashutosh Meghe and Yogesh Malkhede under the guidance of Prof. L. B. Damahe in recognition to the partial fulfillment for the award of the degree of Bachelor of Engineering in Computer Technology, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

Signature

Prof. L. B. Damahe

(Guide)

Signature

Server alkar

(Co-Guide)

Signature

Prof. Nilesh U. Sambhe

(Coordinator)

Signature

and Dr. G. M. Dhopavkar

(HOD, C.Tech. Dept.)

Signature of External Examiner:

Name: Dr. (Mes.) A.V. Deliankar Date of Examination: 06/05/2019

Certified that the project report entitled "Smart Shoppping Trolley" has been successfully completed by Nikita Kamble, Samruddhi Totade, Priyadarshani Ambarwar, Nidhi Batra under the guidance of Prof. Prarthana Deshkar in recognition to the partial fulfillment for the award of the degree of Computer Technology, Yeshwantrao Chavan College of Engineering, Nagpur (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University).

Signature

P.A. 23

Mrs. Prarthana Deshkar

(Guide)

Mr. Nilesh U. sambhe

Signature (Co-ordinator) Dr. G. M. Dhopavkar Signature (HOD, CT Dept.)

ano

Signature of External Examiner

Name:

Parof. Animesh Tayal.

Certified that the project report entitled "IoT BASED SMART ENERGY METER" has been successfully completed by

Kaustubh Dane Latit Munne Akanksha Dhabarde Ankita Dharmadhikari

Mrinali Mankar Nikita Patil Prachi Gourkhede Shradha Suryawanshi Yashoda Manthanwar

under the guidance of

Mr. N. U. Sambhe

Mr. P. S. Shete

In recognition to the partial fulfillment for the award of the degree of Bachelor in Electrical Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University), Nagpur.

Mr. N.U. Sambhe (Guide CT Dept.)

Mr. P.S. Shete (Guide EL Dept.)

Dr. G.M Dhopavkar (HOD CT Dept.)

Dr. B.Y. Bagde (HOD EL Dept.)

Signature of External Examiner
Name:- Am mush Toya
Date of Examination 6 19 19

Certified that the project report entitled "Multidimensional Data analysis to support Decision Making" has been successfully completed by Aarjavi Bhombe, Ksitij Walukar and Yash Thakare under the guidance of Dr. Shailesh D. Kamble in recognition to the partial fulfillment for the award of the degree of Bachelor of Engineering in Computer Technology, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University).

Dr. Shailesh D. Kamble

(Guide)

Signature

Kaustubh Vartak

(Industry-guide)

Mr. Nilesh U. Sambhe

(Coordinator)

Como

Dr. G.M. Dhopavkar

(HOD, C.Tech. Dept.)

Signature of External Examiner:

Name: C. U. Chauhars)
Date of Examination: 6/5/19

Certified that the project report entitled "College Search Portal" has been successfully completed by Ajinkya Ranade, Ravi Dhangar, Saurabh Nandeshwar and Yash G. Thakre under the guidance of Mr. N.U. Sambhe and Mr. Gandhar Patwardhan in recognition to the partial fulfillment for the award of the degree of Bachelor of Engineering in Computer to the partial fulfillment for the award of the degree of Bachelor of Engineering in Computer Technology, Yeshwantrao Chavan College of Engineering, Nagpur (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University).

Signature 30000119

(Guide)

Signature

Mr. Gandhar Patwardhan

(S2P Edutech)

Signature Joan 1

Mr. N. U. Sambhe

(Co-Ordinator)

Signature

Ch

Dr. G. M. Dhopavkar

(HOD, C.Tech Dept.)

Signature of External Examiner

Name: Dr. Neeta Thakre

Date of Examination: 04/05/19

Certified that the project report entitled "DERIVATIONAL MORPHOLOGICAL ANALYZER" has been successfully completed by Ms. Aditi Kale, Mr. Yash Waghmare under the guidance of Dr. Gauri Dhopavkar in recognition to the partial fulfillment for the award of the degree of Computer Technology, Yeshwantrao Chavan College of Engineering, Nagpur (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University).

Gnohofarkar

Signature

(HOD, CT Dept.)

Dr. G. M. Dhopavkar

Dr. Gauri M. Dhopavkar

Gnohofarkar

Signature

(Guide)

Mr. Nilesh U. Sambhe

Signature

(Co-ordinator)

Signature of External Examiner:

Name: S. U-Balvin

Date of Examination: 06/05/19

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of Section Section 1

(Constitution)

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Certified that the project report entitled "Smart Traffic Light Control System" has been successfully completed by ADITI PATWARDHAN, GOLDI NETAM, MRUNALI RAMTEKE, KASTURI MANDAVGADE under the guidance of Ms. SUPRIYA THOMBRE in recognition to the partial fulfillment for the award of the degree of Computer Technology, Yeshwantrao Chavan College of Engineering, Nagpur (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

> Thombre Ms. Supriya S. Thombre (Guide)

Mr. Nilesh U. Sambhe (Coordinator)

(HOD, CT Dept.)

Signature of External Examiner:

Name: (Mes) A V. Delauhar Date of Examination: 06/05/2019

Certified that the project report entitled "Online Venue Booking System" has been successfully completed by Kalyani Ghangare and Prince Adhikary under the guidance of Prof. P. Deshkar in recognition to the partial fulfillment for the award of the degree of Computer Technology, Yeshwantrao Chavan College of Engineering, Nagpur (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

Signature

Prof. P. Deshkar

(Guide)

Signature

Mr. Anup Pardhi

(Industry guide,

IT Networkz, Nagpur)

Signature

Mr. Nilesh U. Sambhe (Co-ordinator)

Gmo

Dr. G. M. Dhopavkar

(HOD, CT Dept.)

Signature of External Examiner

Name: S.U. Balvh

Date of Examination: 06/45/19

Certified that the project report entitled "Orange City Water Utility Dashboard" has been successfully completed by AYUSHI DHAWAN, YASH WAGHADE, YASH DHANDE under the guidance of MRS. SMITA R. KAPSE in recognition to the partial fulfillment for the award of the degree of Computer Technology, Yeshwantrao Chavan College of Engineering, Nagpur (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

Mrs Smita R. Kapse

(Guide)

Mr. Ajit Dharmik

(Director,

6 Simplex Software Solution Pvt.

Ltd)

Mr. Nilesh U. Sambhe

(Co-ordinator)

Dr. G. M. Dhopavkar (HOD, CT Dept.)

Signature of External Examiner

Name: Dy Mes.). A.V. Dehankar Date of Examination: 06/05/2019

Certified that the project report entitled "KIOSK DIGITAL NOTICE BOARD" has been successfully completed by KALYANI PIMPLE, HARSHAL ISHWAR, SHUBHAM WAGH, YASH DONGRE under the guidance of Prof. P. V. Barekar in recognition to the partial fulfilment for the award of the degree of Computer Technology, Yeshwantrao Chavan College of Engineering, Nagpur (An Autonomous Institution Affiliated to Rashtrasani Tukdoji Maharaj Nagpur University)

Prof. P. V. Barekar (Guide)

Mr. Nilesh U. Sambhe Signature (Co-ordinator)

Signature of External Examiner

Date of Examination:

Dr. G. M. Dhopavkar Signature (HOD, CT Dept.)

Certified that the project report entitled "IOT Based Automatic Street light Complaint System" has been successfully completed by Shubhangi Bandhate, Sayali Patle and Asmita Bondgulwar under the guidance of Dr. S. D. Kamble in recognition to the partial fulfillment for the award of the degree of Computer Technology, Yeshwantrao Chavan College of Engineering, Nagpur (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

Dr. S. D. Kamble (Guide)

Mr. Nilesh U. Sambhe (Co-ordinator)

Grichoparker Dr. G. M. Dhopavkar

(HOD, CT Dept.)

Signature of External Examiner Name

Certified that the project report entitled "Peephole: A study and integration of google APIs" has been successfully completed by Adhish Gomashe, Jay Bhoyar, Manish Doble, Rohan Dutta under the guidance of Prof. T. Ravi in recognition to the partial fulfillment for the award of the degree of Computer Technology, Yeshwantrao Chavan College of Engineering, Nagpur (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

Signature

Prof. T. R. Ravi

(Guide)

Signature X

Prof. Nilesh Sambhe

(Co-ordinator)

Dr. G. M. Dhopavkar

(HOD, C.T. Dept)

Signature of External Examiner:

Name: Animesh Tayal

Date of Examination 6)5 |19

Certified that the project report emitled "Monitoring and analysis of environmental parameters using ROT and GRS" has been successfully completed by Akhilesh Inlamikar, Niraj Bihryar, Prancy Girde, Shreyash Wyawathare, Sujay Gire under the guidance of Dr. Knoite Singip and Mr. Ajit Dhannik in recognition to the partial fulfillment for the award of the degree of Computer Technology, Yeshwantrao Chavan College of Engineering, Nagpar (An Autonomous Institution Affiliated to Rushwasan Tuddinji Muharaj Nagpar University)

Dr. Kawita Singh

Eding!

Proff Nilesh/U. Samble Signature (Co-ordinator) Mr. Ajit Dharmik

Gred

Dr. G. M. Dhopavkar Signature (BOD, CT Dept.)

Sommittee of External Examiner:

Name SM MACODE

Certified that the project report entitled "CARDLESS ATM USING OR CODE AND BIOMETRIC VERIFICATION" has been successfully completed by Kshitija Kakde. Mrinal Kopulwar and Shivani Pawar the guidance of Prof. P. V. Barekar in recognition to the partial fulfillment for the award of the degree of Bachelor of Engineering in Computer Technology, Yeshwantrao Chavan College of Engineering (An Autonomous Institution affiliated to Rushtrasant Tuhadoji Mahara) Nagpur University)

Mr. P. V. Barekar (Asst. Professor) (Guide)

Prof. & U. Samble (Coordinator) Mr. Nikhilesh Waoo TCS, Nagpur (Industrial Co-Guide)

Gr. G. M. Dhopavkar (HOD, C. Tech. Dept.)

Signature of External Examiners

Names

Certified that the project report entitled "Student Attendance System using Fingerprint" has been successfully completed by UTKARSHA RANGARI, SHUBHAM HIREKHAN, YASHASHREE KHODKE, HARIKRISHNA MADDIKUNTA under the guidance of Prof. SUPRIYA THOMBRE in recognition to the partial fulfillment for the award of the degree of Computer Technology, Yeshwantrao Chavan College of Engineering,

Nagpur (An Autonomous Institution Affiliated to Rashtrasant Tukdoji MaharaiNagpur University)

Prof. Supriya Thombre

Mr. Chetan Selukar (Co-Guide)

Prof. Nilesh U. Sambhe (Coordinator)

Dr. G. M. Dhopavkar (HOD, CT Dept.)

Signature of External Examiner:

Name: C. U. Chauhan
Date of Examination: 04/05/2019

Certified that the project report entitled "Food Residue" has been successfully completed by Shrutika Maske, Mujna Sherwani and Sana Khan under the guidance of Prof. L. B. Damahe in recognition to the partial fulfillment for the award of the degree of Bachelor of Engineering in Computer Technology, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

Signature

Prof. L. B. Damahe

(Guide)

Signature Mr. Nilesh U. Sambhe

(Coordinator)

Gno Signature

Dr. G. M. Dhopavkar

(HOD, C.Tech. Dept.)

Signature of External Examiner:

Name: Dr. (Mes.). A.V. Dehankar Date of Examination: 06/05/2019

Certified that the project report entitled "MONITORING LOGISTICS THROUGH BLOCKCHAIN" has been successfully completed by Dhvani Kothari, Maitree Gawande, Ninad Deshmukh and Shivani Pande under the guidance of Mr. Nikhil Mangrulkar and co-guided by Ms. Preetee Karmore in recognition to the partial fulfillment for the award of the degree of Bachelor of Engineering in Computer Technology, Yeshwantrao Chavan College of Engineering(An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University).

Mr.NikhilMangrulkar

(Guide)

Mr. NileshU.Sambhe

(Co-ordinator)

Ms. Preetee Karmore (Co-Guide)

Dr. G. M. Dhopavkar

(HOD, C. Tech.Dept.)

Signature of External Examiner:

Name: S. U. Balviz

Date of Examination: 06/05/19

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Certified that the project report entitled "Officebox Support Application" has been successfully completed by Ayushee Narnaware, Rainy Ramteke, Hrishikesh Patil, Piyush Nandurkar under the guidance of Prof. Rakhi Wajgi in recognition to the partial fulfillment for the award of the degree of Computer Technology, Yeshwantrao Chavan College of Engineering, Nagpur (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

Prof. Rakhi Wajgi

(Guide)

Mr. Sagar Kumbhalkar

(Co-Guide)

Mr. Nilesh U. Sambhe

(Co-Ordinator)

Dr. G. M. Dhopavkar

(HOD, CT Dept.)

Signature of External Examiner:

Name: O. O. Date of Examination:

1: 06/05/2019

Certified that the project report entitled "CHILD VACCINATION PLATFORM" been successfully completed by Ms. Purva Natoo, Mr. Parag Khursange, Mr. M. Khopkar, Mr. Rushabh Datir, Mr. Ashish Mirase, Mr. Rajeev Kumar, Mr. Chait Deshpande & Mr. Zeeshan Ansari under the guidance of Dr. Gauri Dhopavka recognition to the partial fulfillment for the award of the degree of Comp Technology, Yeshwantrao Chavan College of Engineering, Nagpur (An Autonom Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

Signature:

Name: Dr. G.M. Dhopavkar

(Guide)

Mr. Nilesh W. Sambhe Signature (Co-ordinator)

Signature of External Examiner Name: C. U. Chaukar

Date of Examination: 6 100110

Signature:

Dr. G. M. Dhopavkar
Signature
(HOD, CT Dept.)

Name: Mr. Bhuwan Ka

(Industry Guide) (Persistent Systems Ltd

Certified that the project report entitled "Smart Irrigation System" has been successfully completed by Madhura Mohod, Neha Geed, Kartik Lokhande and Mehar Singh Khurana under the guidance of Prof. S. D. Kamble in recognition to the partial fulfillment for the award of the degree of Bachelor of Engineering in Computer Technology, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

Prof. S.D. Kamble

(Guide)

Signature

Prof. N.Sambhe

(Coordinator)

Signature

Dr. G.M.Dhopavkar

(HOD, C.Tech. Dept.)

Signature of External Examiner:

Name: C.U. Chauhan

Date of Examination: 415/19

Certified that the project report entitled "IoT Based Smart Crop Field Irrigation Monitoring System using Weather API's "has been successfully completed by ASHRUTI HANSKAR, PAYAL TANGADPALLIWAR, PRIYANKA PIMPALKAR, SHIVANI CHINTAWAR under the guidance of Mr. GANESH K. YENURKAR in recognition to the partial fulfillment for the award of the degree of Computer Technology, Yeshwantrao Chavan College of Engineering, Nagpur (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

Mr. Ganesh K. Yenurkar

Signature (Guide)

Mr.Nilesh U. Sambhe

Signature (Co-ordinator) Dr. G. M. Dhopavkar Signature (HOD, CT Dept.)

Signature of External Examiner

Name

Certified that the project report entitled "Custom ROM Using Google AOSP" has been successfully completed by Saurav Mishra, Pranjal Malkehde, Sarang Umekar and Ankush Vitalkar under the guidance of Mrs. Nilima Jichkar in recognition to the partial fulfillment for the award of the degree of Bachelor of Engineering in Computer Technology, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

Signature

Mrs. Nilima Jichkar

(Project Guide)

Signature

Dr. G. M. Dhopavkar

(HOD, Dept. of CT)

Signature

Mr. Nilesh Sambhe

(Project Co-ordinator)

Signature

Mrs. Shweta Gode

(Project Co-ordinator)

Signature of External Examiner:

Name: Prof. Malode

Date of Examination 04/05/19

Certified that the project report entitled "Real Time Industrial Asset Monitoring" has been successfully completed by Runmai Kalamkar, Devanshi Chawda, Shantanu Vaidya and Pranay Choudhary under the guidance of Dr. G.M. Dhopavkar in recognition to the partial fulfillment for the award of the degree of Bachelor of Engineering in Computer Technology, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rushtrusunt Tukdoji Maharaj Nagpur University).

Gulleparkar

Signature

Dr. G.M. Dhopavkar

(Guide)

Mr. Nijesh U. sambhe Mrs. S.A. Gode Signature (Co-ordinators)

Signature of External Examiner: Name: 04/05/2019

Date of Examination : PROF. MALONE

Signature

Mr. Maitreya Labhe

VSquare Systems Pvt. Ltd

(Industry Guide)

Dr. G.M. Dhopavkar Signature

(HoD, C.Tech Dept.)

Certified that the project report entitled "NOVEL APPROACH FOR AUTOMATED E-CHALLAN GENERATION USING QR CODE AND OCR" has been successfully completed by AISHWARYA DELKAR, ANUJA THAKARE, SAMIKSHA BOLAKHE, SWATI VAIDYA under the guidance of NILIMA JICHKAR in recognition to the partial fulfillment for the award of the degree of Computer Technology, Yeshwantrao Chavan College of Engineering, Nagpur (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

Signature

Nilima Jichkar

(Asst. Professor)

(Guide)

Prof. N. U. Sambhe

(Coordinator)

Signature of External Examiner:

Name:

Date of Examination:

Signature

Anuradha Natoo

Oracle, Pune

(Industrial Co-Guide)

Signature

Dr. G.M. Dhopavkar

(HOD, CT Dept.)

Certified that the project report entitled "Thoughts to Movements - Motor Imagery Based Brain Computer Interface" has been successfully completed by Saurabh Charde, Apurva recognition to the partial fulfillment for the award of the degree of Bachelor of (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

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1/20/04/19

Signature

Mr. A.R. Bhagat Patil

(Guide)

Mr. Nilesh U. Sambhe

Signature

(Co-ordinator)

Dr. G. M. Dhopavkar

Signature

(HOD, CT Dept.)

Signature of External Examiner:

Name: C. U. Chauhan

Certified that the project report entitled "Smart Shoppping Trolley" has been successfully completed by Nikita Kamble, Samruddhi Totade, Priyadarshani Ambarwar, Nidhi Batra under the guidance of Prof. Prarthana Deshkar in recognition to the partial fulfillment for the award of the degree of Computer Technology, Yeshwantrao Chavan College of Engineering, Nagpur (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University).

Signature PA

Mrs. Prarthana Deshkar

(Guide)

Mr. Nilesh U. Sambhe Signature (Co-ordinator) Grid Dr. C. M. Dhann

Dr. G. M. Dhopavkar Signature (HOD, CT Dept.)

Signature of External Examiner

Name:

Certified that the project report entitled "Landmark detection with speech for visually challenged people using OCR" has been successfully completed by Amitkumar Undirwade, Lavanya Rao, Sakshi Girhepunje, Yeshwant Choudhari under the guidance of Dr. Kavita Singh and Mr.Prasanna Deshpande in recognition to the partial fulfillment for the award of the degree of Computer Technology, Yeshwantrao Chavan College of Engineering, Nagpur (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

Dr.Kavita Singh

(Curde)

Mr. Prasanna Deshpande

Prof. Nilesh U. Sambhe

(Co-ordinator)

Dr. G. M. Dhopavkar

(HOD, CT Dept.)

Signature of External Examiner:

Name:

Certified that the project report entitled "VOICE ENABLED APPLICATION FOR PHYSICALLY CHALLENGED INDIVIDUALS" has been successfully completed by Poorva Datar, Prachi Malewar, Yuktee Ramteke under the guidance of Dr. Shailesh Kamble in recognition to the partial fulfillment for the award of the degree of Computer Technology, Yeshwantrao Chavan College of Engineering, Nagpur (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

Dr. Shailesh Kamble (Guide)

Mk Nilesh J. Sambhe (Coordinator)

Dr. G. M. Dhopavkar (HOD, CT Dept.)

Signature of External Examiner Name

Certified that the project report entitled "Face Recognition under Illumination Variation" has been successfully completed by Pooja S. Dubey under the guidance of Dr. Kavita R. Singh in recognition to the partial fulfillment for the award of the degree of Master of Technology in Computer Science and Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliatedto Rashtrasant Tukdoji Maharaj Nagpur University)

Dr. Kavita R. Singh

Guide 13/05/2079

Ms. R. S. Khedgaonkar

**PG** Coordinator

Dr. Gauri Dhopavkar

Gnohoparkan

HOD, CT

Signature of External Examiner

Name: D. M. Goswaminer

Date of Examination: 13 as 2019

Certified that the project report entitled "Sentiment Classification of Movie Reviews by Supervised Machine Learning Approaches" has been successfully completed by Tejaswini Untawale under the guidance of Mrs. Gauri Chaudhary in recognition to the partial fulfillment for the award of the degree of Master of Technology in Computer Science and Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

Signature

Mrs. Gauri Chaudhary (Guide)

Signature

Ms.Roshni S. Khedgaonkar

(Co-ordinator)

Gnotofarkar Signature

Dr.G.M.Dhopavkar

(HOD, CT Dept.)

Signature of External Examiner

Grisid

Name: De P.S. Prasad

Date of Examination: 13.05.2019

Certified that the project report entitled "Image Retrieval using YCbCr color space and Quadtree Segmantation" has been successfully completed by Apurva K. Sahare under the guidance of Mr. L.B. Damahe in recognition to the partial fulfillment for the award of the degree of Master of Technology in Computer Science and Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

B. Damahe

Guide

Ms. R. S. Khedgaonkar

**PG** Coordinator

Dr. Gauri Dhopavkar

HOD, CT

Signature of External Examiner

Name: Dr Jalesh Malek Date of Examination: 13 5 4

Certified that the project report entitled "Privacy Preservation and Public Auditing on Outsourced Cloud Data" has been successfully completed by Sonali D.Khambalkar under the guidance of Dr. S. D. Kamble in recognition to the partial fulfillment for the award of the degree of Master of Technology in Computer Science and Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

Dr. S. D. Kamble

Guide

Ms. Roshani Khedgankar

(PG Coordinator)

Dr. Gauri M. Dhopavkar

(HOD, CT)

Signature of External Examiner

Name: Socheeter Proportion

Date of Examination: 13.05,2019

Certified that the project report entitled "Image Retrieval using YCbCr color space and Quadtree Segmantation" has been successfully completed by Apurva K. Sahare under the guidance of Mr. L.B. Damahe in recognition to the partial fulfillment for the award of the degree of Master of Technology in Computer Science and Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

. B. Damahe

Guide

Ms. R. S. Khedgaonkar

**PG** Coordinator

Dr. Gauri Dhopavkar

Gnichoparker

HOD, CT

Signature of External Examiner

Name: Draw Esta Mark

Date of Examination: 13 5 19

Certified that the project report entitled "Securing Cloud By Enhancing Privacy Preservation And User Based Access Control Mechanism" has been successfully completed by Shubham S. Chourasiya under the guidance of Prof. A.R. Bhagat Patil in recognition to the partial fulfillment for the award of the degree of MTech in CSE, Yeshwantrao Chavan College of Engineering, Nagpur (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

Mr.Arvind R Bhagat Patil

Signature (Guide)

Ms. Roshni S. Khedgaonkar

Signature (Co-ordinator)

Dr. G. M. Dhopavkar

Guohobarkar

Signature

(HOD, CT Dept.)

Signature of External Examiner

Name:

Certified that the project report entitled "EEG Signal Classification Using Neural Network" has been successfully completed by Ashlesha Chakole under the guidance of Mr. Praful V. Barekar in recognition to the partial fulfillment for the award of the degree of Master of Technology in Computer Science and Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

Mr. Praful V Barekar

Guide

Ms. Roshni S. Khedgaonkar Signature

Coordinator

Dr. G. M. Dhopavkar

**Signature** 

Grichofarkar

HOD, CT

Signature of External Examiner

Name: A. M. M. Gowam.

Date of Examination: Bassachuse

Certified that the project report entitled "Prevention and Detection of Cross-Site Scripting Attack" has been successfully completed by Ms. Shubhangi Ninawe under the guidance of Prof. Rakhi Wajgi in recognition to the partial fulfillment for the award of the degree of M. Tah in CSE . Yashwantrao Chavan College of Engineering, Nagpur (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

Signature

Prof. Rakhi Wajgi

(Guide)

Ms. Roshni S. Khedgaonkar

Signature

(Co-ordinator)

Gricheforkar

Dr. G. M. Dhopavkar Signature

(HOD, CT Dept.)

Signature of External Examiner

Name Dr. Geets Porport.

Date of Examination: 13.05, 19

Certified that the project report entitled "Face Recognition using Probabilistic Approach under Plastic Surgery" has been successfully completed by Kalyani Khobragade under the guidance of Ms. R. S. Khedgaonkar in recognition to the partial fulfillment for the award of the degree of Master of Technology in Computer Technology, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

Signature

Ms. R.S. Khedgaonkar

(Guide)

Ms. R.S. Khedgaonkar (Coordinator)

Signature of External Examiner:

Name: DY Jaleh Male

Date of Examination: 13/5/19

Signature

Grichoparkan

Dr. G. M. Dhopavkar (HOD, C.Tech. Dept.)

Certified that the project report entitled "Natural Language Retrieval of Images Based on Descriptive Caption" has been successfully completed by Naina Palandurkar under the guidance of Dr. S. J. Karale in recognition to the partial fulfillment for the award of the degree of Master of Technology in Computer Science and Engineering, Yeshwantrao Chavan College of Engineering, Nagpur (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

Ms. Roshni S. Khedgaonkar

Signature (Co-ordinator) Dr. G. M. Dhopavkar Signature

Gudhafaxar

(HOD, CT Dept.)

Signature of External Examiner

Name Dr. Mrs. A. R. Mahefar Date of Examination: 13.5.2019

Certified that the project report entitled "Face Recognition using Probabilistic Approach under Plastic Surgery" has been successfully completed by Kalyani Khobragade under the guidance of Ms. R. S. Khedgaonkar in recognition to the partial fulfillment for the award of the degree of Master of Technology in Computer Technology, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

Ms. R.S. Khedgaonkar

(Guide)

Ms. R.S. Khedgaonkar (Coordinator)

Dr. G. M. Dhopavkar (HOD, C.Tech. Dept.)

Signature of External Examiner:

Name: Drate to Malle Date of Examination: 13/5/19

Certified that the project report entitled "Natural Language Retrieval of Images Based on Descriptive Caption" has been successfully completed by Naina Palandurkar under the guidance of Dr. S. J. Karale in recognition to the partial fulfillment for the award of the degree of Master of Technology in Computer Science and Engineering, Yeshwantrao Chavan College of Engineering, Nagpur (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

Ms. Roshni S. Khedgaonkar **Signature** (Co-ordinator)

Dr. G. M. Dhopavkar **Signature** (HOD, CT Dept.)

Signature of External Examiner

Name D<sub>1</sub>. M<sub>2</sub>S. A. R. Mahajan

Date of Examination: 13.5.2019

Certified that the project report entitled "Multi-Document Text Summarization Using Neural Network" has been successfully completed by Ms. Shweta V. Mokhale under the guidance of Dr. Gauri M. Dhopavkar in recognition to the partial fulfillment for the award of the degree of MTech in CSE, Yeshwantrao Chavan College of Engineering( An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

Signature Name GNOhofankar

Dr. Gauri M. Dhopavkar (Guide)

Ms. Roshni S. Khedgaonkar **Signature** 

(PG Coordinator)

Dr. Gauri M. Dhopavkar Signature

Gnohobarkar

(HOD, CT Dept.)

Signature of External Examiner

Name: Dr. Mrs. A.R. Mahying Date of Examination: 13.5.2019

Page 76 of 313

Certified that the project report entitled "Securing Cloud By Enhancing Privacy Preservation And User Based Access Control Mechanism" has been successfully completed by Shubham S.Chourasiya under the guidance of Prof. A.R.Bhagat Patil in recognition to the partial fulfillment for the award of the degree of MTechanism. Yeshwantrao Chavan College of Engineering, Nagpur (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

13/05/2019

Mr.Arvind R Bhagat Patil
Signature
(Guide)

Ms. Roshni S. Khedgaonkar

Signature (Co-ordinator)

Dr. G. M. Dhopavkar Signature

Gulloparkar

(HOD, CT Dept.)

Signature of External Examiner

Name:

Certified that the project report entitled "Sentiment Classification of Movie Reviews by Supervised Machine Learning Approaches" has been successfully completed by Tejaswini Untawale under the guidance of Mrs. Gauri Chaudhary in recognition to the partial fulfillment for the award of the degree of Master of Technology in Computer Science and Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

Signature

Mrs. Gauri Chaudhary (Guide)

Signature

Ms.Roshni S. Khedgaonkar

(Co-ordinator)

Signature

Dr.G.M.Dhopavkar

mohoforkar

(HOD, CT Dept.)

Signature of External Examiner

Name: Da. P.S. Peusad Date of Examination: (3/5/19

risid

"COMPARISON BETWEEN Certified that the project report entitled CONVENTIONAL AND ADVANCED WATER TREATMENT TECHNOLOGIES IN WATER TREATEMENT PLANT" has been successfully completed by Pratik S. Patil, Umesh B. Dhembre, Yogesh H. Rathod , Abhishek D. Mokashi, Arshil Abid Hussain Shaikh and Tanmay Y. Baporikar under the guidance of Dr. A. R. Gajbhiye and under the co-guidance of Er. Dhiraj Koche in recognition to the partial fulfillment for the award of the degree of Bachelor of engineering in Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

Date 3 5/2019

Dr.A.R. Gajbhiye

(Guide)

Signature

Dr. S.R. Khandeshwar

(H.O.D) (C.E. Dept)

Signature

Er.Dhiraj Koche

(Co-guide)

Signature of External Examiner:

Name:

Certified that the project report entitled "WATER AUDIT OF WATER DISTRIBUTION NETWORK" has been successfully completed by Apurva Akre, Harshali Parate, Niharika Labhsetwar, Renuka Dashputre, Akhil Bele, Krishna Sharma under the guidance of Dr. R. R. Dighade and Mr. Sudhir Rathod in recognition to the partial fulfillment for the award of the degree of Bachelor of Engineering in Civil Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

Dr. R.R. Dighade Associate professor Guide

Mr. Sudhir Rathod Junior Engineer, NIT, Nagpur

Co-Guide

Dr. S. R. Khandeshwar

HOD.

Civil Engineering Department

Signature of External Examiner

Certified that the project report entitled "EXPERIMENTAL INVESTIGATIONS INTO STRENGTH AND BEHAVIOUR OF COUPLED REBAR AND WELDED REBAR VIS A VIS ORIGINAL REBAR" has been successfully completed by Yogesh Telharkar, Rahul Nikose, Rushikesh Manjare, Mayur Gajarlawar, Adinath Kurme, Nikhil Hamane, under the guidance of Dr. A.V.Patil and Er. P. S. Patankar in recognition to the partial fulfillment for the award of the degree of Bachelor of Engineering in Civil Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

Dr.A.V.Patil (Guide)

Er.P. S. Patankar (Co-guide) Director, Patankar **C**onsultants Pvt. Ltd. Nagpur

Dr. S.R. Khandeshwar

(HOD, CE Dept.)

Signature of External Examiner:

Name: TKAS

Date of Examination: 03/ 1/2019

Certified that the project entitled LABORATORY METHOD FOR DETERMINE BEARING CAPACITY OF SOIL has been successfully completed by Amul Daharwal, Rohit Wagh, Kaustubh Dhurve, Kunal Mullewar, Mangesh Madavi, Amit Gajbhiye, Under The Guidance Of Pro. J. M. Raut in recognition to partial fulfilment for the award of the degree of Bachelor of Technology in Civil Engineering, Yeshwantrao chavan college of Engineering (An Autonomous Institution Affiliated To Rashtrasant Tukdoji Maharaj Nagpur University, Nagpur)

DATE: / /2019

Signature

(R. S. Mahabudhdhe)

Signature

(Pro. J. M. Raut)

Signature

(Dr. Dilip Mase)

Signature

(HOD Dr. S. R. Khandeshwar)

Signature

(Principal Dr. U. P. Waghe)

Signature of External Examiner:-

Name: P. B. Kulkarni

Date of Examination: 06/05/2014

Certified that the project report "DESIGN AND WORKING OF UPPER WARDHA DAM" has been successfully completed by Prajakta chavan, Vaishali Moitra, Neha Vaidya, Prachi Kalamkar, Heena Kadu, Shreya Mahakalkar under the guidance of Dr.A.R.Gajbhiye and Co guide Dr.Madhuri Bhagat, in recognition to the fulfillment for the award of the degree of bachelor of technology in Civil Engineering. Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

Dr.A.R Gajbhiye

(Guide)

Dr.S.R Khandeshwar

(HOD, C.E Dept)

Dr. Madhuri Bhagat

(Co. Guide)

Signature of External Examiner:

Name: Dr. M.S. Bhagal

This is Certified that the project report entitled "A STUDY ON PERFORMANCE EVALUATION OF DOMESTIC PURIFIERS" has been successfully completed by Ashlesha Kale, Parag Kewat, Pratik Maind, Rohit Pardeshi, Sanju Saji and Shubham Katre under the guidance of Prof. S. M. Waghmare in recognition to the partial fulfilment for the award of the degree of Bachelor of Engineering in Civil Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

Signature

Prof. S. M. Waghmare (Project Guide)

Signature

Dr. S. R. Khandeshwar

(HOD, CE DEPT.)

Signature

Dr. U. P. Waghe

(Principal)

Signature of External Examiner:

Certified that the project report entitled "TO STUDY EFFECT OF PARTIAL REPLACEMENT OF CEMENT WITH HYPOSLUDGE" has been successfully completed by Nikhil Dodke, Vaibhav Borkar, Abhijit Meshram, Akshay Bahirwar, Mayur Thaokar under the guidance of Prof. V.N.Mendhe in recognition to the partial fulfilment for the award of the degree of Bachelor of Engineering in Civil Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to RashtrasantTukdojiMaharaj Nagpur University)

Signature

Prof.V.N.Mendhe (Project Guide)

Signature

Dr S.R. Khandeshwar

(HOD)

Signature of External Examiner:

Name: Sander. R. Gaikwas

Signature
Dr. U.P Waghe
(Principal)

ing" has been successfully completed by Aniket Dhoble, Megha Itkapalle, Samradhny Bramhankar, Pragati Gajbhiye, Prajwal Bharadkar, Mohit Kawale under the guidance of Prof. R. S. Deotale, in recognition to the fulfillment for the award of the degree of bachelor of technology in Civil Engineering. Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

Prof. R. S. Deotale

Orde

(Guide)

Dr.S.R Khandeshwar

(HOD, C.E Dept)

Signature of External Examiner:

Name:

Certified that the project report entitled "APPLICATION STUDY OF PRECAST PANEL FOR IMPROVEMENT OF FLEXIBLE PAVEMENT", has been successfully completed by Shivani Mahajan, Akshay More, Shubham Gambhire, Samruddhi Sawarkar, Piyush Kherde under the guidance of Prof. Y.P.Kherde in recognization to the partial fulfillment for the award of the degree of Bachelor of Engineering in Civil Engineering , Yeshwantrao Chavan College of Engineering (An Autonomous Institution affiliated to Rashtrasant Tukdoji Maharaj, Nagpur University).

Signature

Prof. Y.P.Kherde

(Project Guide)

Signature

Dr. S.R.Khandeshwar

(H.O.D of Civil Department)

Signature of External Examinaer

Name Somderp. R. Cheirmd.

Date of Examination

Signature

Dr. U.P. Waghe

(Principal, YCCE)

Certified that the project report entitled "APPLICATION OF GEOGRIDS IN IMPROVEMENT OF FLEXIBLE PAVEMENT" has been successfully completed under the guidance of Prof. Y.P. Kherde in recognition to the partial fulfilment for the award of the degree of Master of Technology in Civil Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University) by the following students:

Shubham Katyarmal

Mrudui Pantawane

Sohan Lal

Signature

Prof. Y. P. Kherde

(Guide)

Signature

Yash Balani

Dr. S.Q. Khandeshwar

(HOD, CE Dept.)

Signature of External Examiner

Name

# Certificate of Approval

Certified that the project report entitled "Design and Development of Paver Block by Using Plastic Waste" has been successfully completed by Monika Kshirsagar, Nidhi Bhalerao, Prachi Chaudhary, Ragini Meshram, Sumedh Lambe, Swapnil Kharat under the guidance of Prof. B.P. Nandurkar in recognition to the partial fulfillment for the award of the degree of bachelor of engineering in Civil Engineering, Yeshwantrao Chavan Collage of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

(Head of C.E. Dept.)

Date of examination:

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Certified that the project report entitled "AN INVESTIGATION OF MUNICIPAL SOLID WASTE MANAGEMENT IN THE NAGPUR CITY" has been successfully completed by Arti Bageshwar, Hema J. Shahare, Jais Jacob, Rupali Bhanarkar, Shailesh Ramteke, Taraksha Dharmik, Trupti Wankhede under the guidance of Dr. S. R. Khandeshwar in recognition to the partial fulfillment for the award of the degree of Bachelor of engineering in Civil Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

Signature

Signature

Dr. S.R. Khandeshwar

(Guide)

Dr. S.R. Khandeshwar

(H.O.D, C.E. Dept.)

Signature of External Examiner:

Name: T.K.Los

Date of Examination: 03/03/019

Certified that the project report entitled "COMPARATIVE STUDY OF CHARATERISTICS OF DAIRY WASTE WATER AND ITS TREATMENT IN DIFFERENT UNITS" has been successfully completed by Taresh Parkhi, Riya Tiwari, Toshik Dhanurkar, Mayuri Gawai, Swapnil Pagrut, Apurva Sukhdeve under the guidance of Dr. S.V AMBEKAR in recognition to the partial fulfillment for the award of the degree of Bachelor of engineering in Civil Engineering. Yeshwantrao Chavan College of Engineering(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

Signature

Dr. S.V Ambekar

(project Guide)

Signature

Dr. S.R. Khandeshwar

(HOD)

Department of Civil Engineering

Signature of External Examiner:

Name:

T.K. ROO

Date of Examination: 03 05 1019

Certified that the project report entitled "FEASIBILITY STUDY ON SMALL SCALE HYDROPOWER GENERATION THROUGH WEIR AND CANAL" has been successfully completed by Apeksha Badwaik, Jaya Sonde, Neha Rathod, Rucha Bhagat, Sharayu Gedam, Swati Vaidya under the guidance of Dr. R.R. Dighade in recognition to the partial fulfilment for the award of the degree of Master of Technology in Civil Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

Dr. R.R. Dighade

Dr.Sarla Adhau

Dr. S. R. Khandeshwar

Dr. U. P. Waghe

(Guide)

(Co-Guide)

(HOD, CE Dept.)

(Principal)

Signature of External Examiner

Name

Ds. M-S. Bhergal-

# YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING, NAGPUR

Department of Civil Engineering



2018-2019

Certificate

This is to certify that the Project titled "Bamboo as Reinforcement in Reinforced Concrete" is submitted towards the partial fulfilment of requirement for the award of Degree of Bachelor of Engineering in Civil Engineering awarded by Rashtrasant Tukdoji Maharaj Nagpur University, Nagpur.

Submitted by:

- 1. Deepansh Ade
- 2. Komal Burele
- 3. Mrunali Suryawanshi

is approved.

- 4. Shantanu Selokar
- 5. Usharani Tijare
- 6. Vaibhavi Donadkar

Dr. U.P. Waghe

Prof. S.V. Ambekar

Principal

Project Guide

Prof.S.R. Khandeshwar

Head of Department

Signature of External Examiner Prof. T.K Rao

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This is Cartified that the project report entitled "COMPARISON BETWEEN DESTRUCTIVE AND NON DESTRUCTIVE TEST ON CONCRETE INCORPORATED WITH FLY ASH" has been successfully completed by Kunal Kharbade, Yash Jadhao, Ankush Ghormode, Pritam Mohinkar, Prashil Bankar, Shribant Chaure under the guidance of Dr. V. G. Meshram in recognition to the partial fulfillment for the award of the degree of Bachelor of Engineering in Civil Engineering, Veshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rushtrasant Tukadoji Maharaj Nagpur University).

Dr. S.R. Khandeshwar

(HOD, C.E. Dept.)

Signature

Dr. U.P. Waghe (Principal, YCCE)

Signature

Dr. V.G. Meshram (Project Guide)

Signature

R.S. Mahabudhdhe

vianabuunune

Signature of External Examiner:

Name: T.K. RAD

Date of Examination: 03 05 2019

ii

Certified that the project report entitled "BIO WALL ONE STEP FORWARD TO NATURE" has been successfully completed by Sayali Koche, Rupal Dhabarde, Meenakshi Sidam, Kajal Borkar, Pranab Aksapure, Harshal Kalambe under the guidance of Prof.S.M. Waghmare in recognition to the partial fulfilment for the award of the degree of Bachelor of Engineering in Civil Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

> Signature Prof.S.M. Waghmare (Project Guide)

Signature

Dr S.R. Khandeshwar

(HOD)

Signature of External Examiner:

Somber, heikund Name: Date of Examination

Signature Dr.U.P Waghe (Principal)

PRINCIPAL

Yeshwantrao Chavan College of Engineering Wanadongri, Hingna Road, NAGPUR - 441 110

Certified that the project report entitled \*BEHAVIOUR OF SELF COMPACTING CONCRETE USING RECYCLED AGGREGATE" has been successfully completed by Shrinath M. Sarpate, Aishwary M. Deshmukh, Apurva R. Chimalwar, Komal R. Dudhe, Sakshi R. Itankar, Shubham P. Kawale, Sumedh R. Shende under the guidance of Prof. V.D.Jayale n recognition to the partial fulfillment for the award of the degree of Bachelor of engineering in Civil Engineering, Yeshwantrao Chavan College of Engineering(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

Prof. Vivek D.Jayale (Guide)

Signature

Dr. U. P. Waghe

(Principal, YCCE)

Signature

Dr. S. R. Khandeshwar

(HOD, CE)

Signature of External Examiner:

Sondey. R. Gaikwy Name:

Certified that the project report entitled "TREATMENT OF DAIRY WASTEWATER BY ROTATING BIOLOGICAL CONTACTOR" has been successfully completed by Yashshree Dhale, Himanshu Aglawe, Mrunal Somkuwar, Huzefa Khan, Juned Sheikh, Mrunal Tarpe under the guidance of Harshal .M. Warade in recognition to the partial fulfillment for the award of the degree of Bachelor Of Engineering in Civil Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

Dr. S. R. Khandeshwar

(HOD)

Prof. H. M. Warade

(Project Guide)

Signature of External Examiner:

Certified that the project report entitled or "A LABORATORY SCALE TREATMENT OF DOMESTIC GREYWATER USING NATURAL FILTER MEDIA" has been successfully completed by ADESH GAIKWAD, KARAN DAHIKAR, SANKET PARDHI, SAUMITRA, TANMAY WALKE under the guidance of PROF. MS.C.S.WAGHMARE in recognition to the partial fulfillment for the award of the degree of Bachelor of Engineering in Civil Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

Prof Ms.C.S. Waghmare

(Project Guide)

Dr. S.R. Khandeshwar (HoD, CE Department)

Name of External: PB Kulkarn

Date of Examination: 4 5 19

Certified that the project report entitled "DEVELOPMENT OF INSTRUMENT FOR BEARING CAPACITY OF SOIL UNDER DYNAMIC LOAD IN FIELD" has been successfully completed by Nayankumar R. Bopate, Harshal V. Avhale, Shubham S. Jadhav, Pallav Bhagat, Keshav Kuhikar, Kisan Agrawal under the guidance of Prof. J.M. Raut and prof.A.P.Edlabadkar in recognition to the partial fulfillment for the award of the degree of Bachelor of engineering in Civil Engineering, Yeshwantrao Chavan College of Engineering(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

Date: / / 2019

Signature

Prof. J. M. Raut

(Guide)

Signature

Prof. A.P.Edlabadkar

(Co-Guide)

Signature

Dr. S.R. Khandeshwar

(H.O.D) (C.E. Dept)

Signature of External

Examiner: Name: P. B. Kulkarni

Certified that the project report entitled "THERMAL PERFORMANCE OF MODEL HOUSE BUILT WITH SUSTAINABLE DEVELOPED BRICK" has been successfully completed by KRUTIKA BHISE, MRINALINI SURPAITHANKAR, ANURAG DESHMUKH, SAJAL BHARBAT, ASHWAJEET ADHAU, PRATIK URADE under the guidance of Prof. D. G. AGRAWAL in recognition to the partial fulfillment for the award of the degree of Master of Technology in Civil Engineering, Yeshwantrao Chavan College of Engineering( An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

Prof. D. G. Agrawal

Dr. S. R. Khandeshwar

(HOD, Civil Dept.)

External Examiner

Name: M.D. Pidurkar

Date of Examination: 06/05/19

This is Certified that the project report entitled "REUSE AND RECYCLE OF GREYWATER BY ECO-WRINGER" has been successfully completed by Aditya Thombre, Mohak Deshpande, Parimal Borkar, Sahil Rangari, Sanket Mahajan under the guidance of Prof. K. S. Ansari in recognition to the partial fulfillment for the award of the degree of Bachelor Of Engineering in Civil Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University).

Signature Prof. K.S. Ansari (Project Guide)

Signature Dr S.R. Khandeshwar (HOD, C.E. DEPT.)

Signature Dr. U.P Waghe (Principal)

Signature of External Examiners

Name:

This is Certified that the project report entitled "ANALYSIS AND DESIGN OF FOUNDATION USED IN HIGH RISE RESIDENTIAL BUILDING" has been successfully completed by Ashay Jambhulkar, Sachin Bidwe, Sanket Lampuse, Sanyukta Saraykar, Parul Patankar, Atharva Deshpande under the guidance of Prof. H. R. NIKHADE in recognition to the partial fulfillment for the award of the degree of Bachelor of Engineering in Civil Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University).

Signature

Prof. H. R. Nikhade

(Project Guide)

Dr. S.R. Khandeshwar (HOD, C.E. Dept.)

Name: PB KN Karmi

Date of Examination: 6 5 19

Certified that the project report entitled "PARTIAL REPLACEMENT OF COARSE AGGREGATE BY CROWN CAPS" has been successfully completed by Neha Rathod, Isha Tekade, Anirudha Deshmukh, Hemant Chandangir, Nikhil Upare ,under the guidance of Prof.A.A.YADAV in recognition to the partial fulfillment for the award of the degree of Bachelor of engineering in Civil Engineering, Yeshwantrao Chavan College of Engineering(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

Signature

Prof. A.A.Yadav

(Project Guide)

Signature

Dr. S.R. Khandeshwar

(H.O.D)

(Civil Engineering Department)

Signature of External Examiner:

Filmen ?

Name: M.D. Pidurkar

Date of Examination 06/05/19

Certified that the project report entitled "Suitability of CUPOLA SLAG as Partial Substitution of Fine Aggregate in Cement Mortar" has been successfully completed by Rishikesh Jaiswal, Siddhesh Bapat, Taher shakir, Kunal Peshne, Ashwin Pethewar under the guidance of Prof S.S. Meshram in recognition to the partial fulfillment for the award of the degree of Bachelor of Engineering in Civil Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

5.5 olcohrum Signature

Prof S.S.Meshram

Project Guide

Signature

Dr. S.R. Khandeshwar

HoD, CE Department

Name of External: M.D.Pi'durkur

Date of Examination: 06/09/19

Certified that the project report entitled "EFFECT OF CURING CYCLE ON VARIOUS MECHANICAL PROPERTIES OF MORTAR CUBES FOR DIFFERENT GRADE OF PROPORTION 1:5 & 1:6" has been successfully completed by ADITYA NAWKHARE, AJINKYA KANKALE, ANIKET NIMKAR, PRANAY WASNIK, SANKET DHOTE, SARANG GADEKAR under the guidance of Prof. P.K. HINGE in recognition to the partial fulfillment for the award of the degree of Bachelor of Engineering in Civil Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University).

Prof. P.K. Hinge (Guide)

Signature

Dr. S.R. Khandeshwar (H.O.D. C.E. Dept.)

Signature of External Examiner:

Fulum

Name: M.D. Pidurkar

Date of Examination: 06/05/13

Signature

Dr. U. P. Waghe

(Principal)

Certified that the project report entitled "MEASUREMENT OF MATRIC SUCTION IN UNSATURATED CLAYEY SOIL", has been successfully completed by the students of final year under the guidance of Prof. P.B.Pande in recognition to the partial fulfillment for the award of the degree of Bachelor of Civil Engineering, Yeshwantrao Chavan College of Engineering, Nagpur.

Prof. P. B. Pande

(Guide)

Prof. Dr. S.R. Khandeshwar

(Head, Department of Civil Engineering)

Signature of External Examiner

Name: M-D Piduskow

Date of Examination: 06/05/13

Certified that the project report entitled "REVIEWS OF VARIOUS TRIANIAL TEST" has been successfully completed by Shrushty Kolhe, Nayan Chandhari, Parag Ambule, Bhaskar Patle, Abhishek Katre and Shashwati Chawre under the guidance of Prof. P.B.Pande in recognition to the partial fulfillment for the award of the degree of Bachelor of Engineering in Civil Engineering. Yeshwantran Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj NagpurUniversity)

Prof. P.B. Pande

(Guide)

(HOD, CE Dept.)

Signature of External

Examiner: Name: M. D. Piche Aus

Certified that the project report entitled "SEISMIC ANALYSIS OF MULTISTORIED BUILDING WITH BRICK MASONARY INFILL" has been successfully completed by Vaibhav Daulat Estam, Rahul Chaudhary, Nikhil Dudhe under the guidance of Prof. S. G. Hirekhan in recognition to the partial fulfilment for the award of the degree of Bachelor of Engineering in Civil Engineering. Yeshwantrao Chavan College of Engineering (An Autonomous Institute Affiliated to Rashtrasant Tukdoji Maharaj Nagpur Unversity)

Prof. S. G. Hirekhan

Dr. Shantanu R. Khandeshwar

Head of Department

Signature of External Examiner

Name: M.D. PKJUSKA 8

Date of examination: 08/05/19

Certified that the project report entitled "ANALYSIS OF EFFECTIVENESS OF OIL SPILL RECOVERY USING DISC TYPE OIL SKIMMER" has been successfully completed by Davidas Satpute ,Aniket Bodele, Aakash Chakravorty, Chetan Panchabhai, Kumar Harsh under the guidance of PROF. S G HIREKHAN in recognition to the partial fulfillment for the award of the degree of Bachelor of Engineering in Civil Engineering, Yeshwantrao Chavan College of Engineering (An Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

Prof S.G.Hirekhan. Guide, CE Dept. Dr S.R. Khandeshwar HOD, CE Dept. Dr. U.P Waghe Principal, YCCE

1 gwag

Signature of Extarnal Examiner:

Name: MD Pichokas
Date of examination: 08/05/19

Certified that the project report entitled "REMOVAL OF HEAVY METALS FROM INDUSTRIAL WASTE WATER BY ADSORPTION" has been successfully completed by Aniruddha Ghodmare, Nishant Ughade, Saurabh Joshi, Topendra Sabu, Saurabh Laujewar, Laxmi Jamulkar under the guidance of Prof. R.M. Bhagat in recognition to the partial fulfillment for the award of the degree of Bachelor of engineering in Civil Engineering, Yeshwantras Chavan College of Engineering(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

Signature

Prof. R.M. Bhagat

(Guide)

Dr. S.R. Khandeshwar

(H.O.D. Civil Engineering)

Signature of External Examiner:

Name:

M.D. Pidurkus

Date of Examination: 08/05/19

Certified that the project report entitled "STUDIES IN RETROFITTING ANALYSIS OF TYPICAL RC FRAMED BUILDING WITH THE HELP OF BRACING USING E-TABS SOFTWARE" has been successfully completed Jaya Pande, Komal Indore, Sushama Shelare, Harish Gawhane, Nitesh Ambadkar, Dhanashree Marge under the guidance of Prof. Monali Wagh in recognition to the partial fulfillment for the award of the degree of Bachelor of engineering in Civil Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University).

Prof. Monali Wagh

(Guide)

Dr.S.R.Khandeshwar

(H.O.D)

( Civil Department )

Signature of External Examiner:

Name: ML-R. S. Bute

Date of Examination 08/05/19

Concrete, has been successfully completed by Abhay fulariya, Rishaba Bambhore, Shreya Gadhave, Pritam Dandekar, Harshal Pawankar, Amruta Raut, under the guidance of Prof. A.S. Kurzekar in recognition to the partial fulfillment for the award of the degree of Bachelor of Engineering in Civil Engineering, Veshwantras Chavan College of Engineering (An Autonomous Institution affiliated to Rashtrasant Tukdoji Maharaj, Nagpur University).

Proj. A.S. Kurzekar (Project Guide)

Dr. S.R.Khandeshwar

(HOD)

Dr.U.P.Waghe (Principal)

Signature of External Examiner

Name: Sandcop. R. Cayland

Certified that the project entitled LABORATORY METRIOD FOR DETERMINE BEARING CAPACITY OF SOIL has been successfully completed by Amul Daharwal, Robit Wagh, Kaustubh Dhurve, Kausal Mullewar, Mangesti Madavi, Amit Gajbhiye, Under The Guidance Of Pro. J. M. Raut in recognition to partial fulfilment for the award of the degree of Eachers of Technology in Coul Engineering, Yeshwantrao chavan college of Engineering (An Autonomous Institution Affiliated To Rashtrasant Tukdoji Maharaj Nagguer University, Nagpur)

DATE: / /2019

Signature

(R. S. Mahabudhdhe)

Signature

(Pro. J. M. Raut)

Signature

( Dr. Dilip Mase)

Signature

(HOD Dr. S. R. Khandeshwar)

Segratura

(Principal Dr. U. P. Waghe)

Signature of External Examiner:-

Name: P.B. Kulkonni

Date of Examination: 06/05/2019

DEVELOPMENT OF PRECAST PANEL FOR SERVICEABILITY IMPROVEMENT & IT'S APPLICATION TO FLEXIBLE PAVEMENT " has been successfully completed by KOMAL D. DAGWAL under the guidance of Dr. U. P. WAGHE and co-guided by Prof. YOGESH P. KHERDE, Assistant Professor, Civil Engineering Department in recognition to the partial fulfillment for the award of the degree of Master of Technology in Structural Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rushtrasant Tukdoji Maharaj Nagpur University).

CE ...

DR. U. P. WAGHE (Guide)

YOGESH P. KHERDE

(Co-Guide)

Dr. V. G. Meshram

(Co-ordinator)

Dr. S. R. Khandeshwar

(HOD, CE Dept.)

Dr. U. P. Waghe

(Principal)

Signature of External Examiner:

Name:

# Certificate

Certified that the project report entitled "Seismic Analysis of Reinforced Concrete Building with Friction Dampers" has been successfully completed by Ms. Aparna N. Bhoyar under the guidance of Prof. B.P. Nandurkar in recognition to the partial fulfillment for the award of the degree of Master of Technology in Structural Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

Signature

Prof. B.P. Nandurkar (Guide)

Signature Prof. V. G. Meshram

(Co-ordinator)

Signature
Dr. S.R. Khandeshwar
(HOD, CE Dept.)

Signature Dr. U. P. Waghe (Principal)

Signature of External Examiner

Name

Certified that the project report entitled "COMPARATIVE STUDY OF REINFORCED CONCRETE SLAB SYSTEM V/S POST-TENSIONED SLAB SYSTEM WITH REFERENCE TO IS AND ACI STANDARDS" has been successfully completed by SHRAWANI A. SHENDE under the guidance of Dr. A.V. PATIL Professor, Civil Engineering Department in recognition to the partial fulfillment for the award of the degree of Master of Technology in Structural Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University).

Dr. A.V. PATIL

(Guide)

Dr. V. G. Meshram

(Co-ordinator)

Dr. S. R. Khandeshwar

(HOD, CE Dept.)

Dr. U. P. Waghe

(Principal)

Signature of External Examiner

Name: Ar. 1. P. Pachyor

Certified that the project report entitled "Comparative Analysis and Design of Tall Building Using IS 16700 – 2017 and ACI 318 – 14" has been successfully completed by Ms. DEEPIKA NAIR under the guidance of Dr. S. P. RAUT in recognition to the partial fulfillment for the award of the degree of Master of Technology in Structural Engineering, YeshwantraoChavan College of Engineering( An Autonomous Institution Affiliated to RashtrasantTukdojiMaharaj Nagpur University)

Signature

Dr. S. P. Raut

(Guide)

Signature

Er. S. V. Denge

(Co Guide)

Signature

Dr. V.G. Meshram

(Coordinator)

Signature

Dr. S. R. Khandeshwar

(HOD, CE Dept.)

Signature

Dr. U. P. Waghe

(Principal)

Signature of External Examiner

Name

Certified that the project report titled "CAPACITY ESTIMATION OF RCC FRAME STRUCTURED BUILDINGS WITH REFERENCE TO STRUCTURAL ASSESSMENT USING NON DESTRUCTIVE TESTING" has been successfully completed by SANKET G. PADISHALWAR under the guidance of Dr. A.V. PATIL, Professor, Civil Engineering Department in recognition to the partial fulfillment for the award of the degree of Master of Technology in Structural Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University).

> Dr. A.V. PATIL (Guide)

Dr. V. G. Meshram

(Co-ordinator)

Primaleshina Dr. S. R. Khandeshwar

(HOD, CE Dept.)

(Principal)

Signature of External Examiner

Name: Ar. J. P. Phypor

Date of Examination: 6.5.19

Certified that the project report titled "BEHAVIOUR OF COLD-FORMED Z PURLINS WITH SAG RODS AND SHEETING IN PRE-ENGINEERED BUILDING" has been successfully completed by STIMITI'S, WAGHMARE under the guidance of BHUPESH P. NANDURKAR and Co-guided by Dr. RAMESH MEGHRAJANI, NEO Infrastructure Consultants, Nagpur in recognition to the partial fulfillment for the award of the degree of Master of Technology in Structural Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University).

BHUPESH P. NANDURKAR

(Guide)

Dr. RAMESH MEGHRAJANI

(Co-guide)

Dr. V. G. Meshram

(Co-ordinator)

Dr. S. R. Khandeshwar

(HOD, CE Dept.)

Dr. U. P. Waghe

(Principal)

Signature of External Examiner

Name:

Certified that the project report entitled "CRITICAL STUDY OF DYNAMIC EFFECTS DUE TO WIND ON HIGH RISE BUILDING STRUCTURES WITH VARIOUS CONFIGURATIONS" has been successfully completed by SUCHANA S. TELRANDHE under the guidance of Dr. A. M. PANDE, Professor, Civil Engineering Department and Director (R&D) in recognition to the partial fulfillment for the award of the degree of Master of Technology in Structural Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University).

> Dr. A. M. Pande (Guide)

Dr. V. G. Meshram

(Co-ordinator)

Dr. S.R. Khandeshwar

(HOD, CE Dept.)

Dr. U. P. Waghe

(Principal)

Signature of External Examiner

Name: Dr. kshinga kadam Date of Examination: 06/5/19

Certified that the project report entitled "Critical Study On The Development Of Forces At Typical Locations Under Seismie Loading On Structures With Some Uncommon Irregularities" has been successfully completed by Anuja A. Pawar under the guidance of Dr. Anant M. Pande, Associate Professor, Civil Engineering Department in recognition to the partial fulfillment for the award of the degree of Master of Technology in Structural Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University).

> Dr. A. M. PANDE (Guide)

Dr. V. G. Meshram

(Co-ordinator)

Dr. S. R. Khandeshwar (HOD, CE Dept.)

Dr. U. P. Waghe

General

(Principal)

Signature of External Examiner

Name: Dr Kshinga Kadam Date of Examination: 06/5/19

Certified that the project report titled "SEISMIC ANALYSIS OF STRUCTURE CONSIDERING SOIL STRUCTURE INTERACTION" has been successfully completed by ALAUKIK K. ALKARI under the guidance of Prof. S. S. MESHRAM, Professor, Civil Engineering Department in recognition to the partial fulfillment for the award of the degree of Master of Technology in Structural Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University).

> Prof. S. S. MESHRAM (Guide)

(Co-ordinator)

Dr. S. R. Khandeshwar (HOD, CE Dept.)

Dr. U. P. Waghe (Principal)

Signature of External Examiner

Name: Anshul R. Mikkode Date of Examination: 08/05/19

Certified that the project report titled "SEISMIC ANALYSIS OF IRREGULAR RC STRUCTURE WITH DIFFERENT BRACING SYSTEM" has been successfully completed by ARCHIT S. TERHA under the guidance of Dr. V.G. MESHRAM, Associate Professor, Civil Engineering Department in recognition to the partial fulfillment for the award of the degree of Master of Technology in Structural Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University).

Dr. V.G. MESHRAM

(Guide)

Dr. V. G. Meshram

(Co-ordinator)

Dr. S. R. Khandeshwar

(HOD, CE Dept.)

Dr. U. P. Waghe

(Principal)

Signature of External Examiner

Name.

Date of Examination:

8/05/19

Certified that the project report entitled "ANALYSIS OF HIGH RISE BUILDING WITH THE EFFECT OF OUTRIGGER" has been successfully completed by NAVNITA C. RAGITE under the guidance of Prof.V.N.Mendhe in recognition to the partial fulfillment for the award of the degree of Master of Technology in Structural Engineering, Yeshwantrao Chavan College of Engineering, Nagpur. (An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University).

> Prof.V.N.Mendhe (Guide)

(Coordinator)

Dr. S.R.Khandeshwar

(HOD, CE Dept.)

(Principal)

Signature of External Examinor
Name: Pr. B. O. Ba

Certified that the project report entitled "Investigation Of Fiber Reinforced Rubberized Concrete" has been successfully completed by Mr SHUBHAM VITTHALRAO LINGARWAR under the guidance of Prof. D.G AGRAWAL. in recognition to the partial fulfilment for the award of the degree of Master of Technology in Structural Engineering, Yeshwantrao Chavan College of Engineering. (An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

Prof. D. G. Agrawal

(Guide)

Dr. V. G. Meshram (Coordinator) Dr. S. R. Khandeshwar (HOD, CE Dept.) Dr. U. P. Waghe (Principal)

Signature of External Examiner:

Name Anshal R. Mikhade

Date of Examination 08/05/19

Page 125 of 313

Certified that the project report entitled "DEVELOPMENT OF NEW EMPIRICAL FORMULAE FOR ESTIMATION OF FUNDAMENTAL TIME PERIOD OF STRUCTURES" has been successfully completed by HARESH REMESHRAO BELKHADE under the guidance of Dr. V. G. MESHRAM. Associate Professor, Civil Engineering Department in recognition to the partial fulfillment for the award of the degree of Master of Technology in Structural Engineering. Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University).

Dr. V. G. MESHRAM (Guide)

Dr. V. G. Meshram

(Co-ordinator)

Dr. S. R. Khandeshwar

(HOD, CE Dept.)

Dr. U. P. Waghe

(Principal)

Signature of External Examine

Name:

N L . 18. X

Date of Examination:

105/19

Certified that the project report titled "RESPONSE OF OPEN GROUND STOREY DUE TO SEISMIC LOADING" has been successfully completed by NEHAL K. RAMTEKE under the guidance of AMRUTA A. YADAV, Assistant Professor, Civil Engineering Department in recognition to the partial fulfillment for the award of the degree of Master of Technology in Structural Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University).

AMRUTA A. YADAV
(Guide)

Dr. V. G. Meshram

(Co-ordinator)

Dr. S. R. Khandeshwar

(HOD, CE Dept.)

Dr. U. P. Waghe

(Principal)

Signature of External Examiner

Name:

Date of Examination:

. R. Can) and

Certified that the project report entitled "EFFECT OF CURING CYCLE ON MECHANICAL PROPERTIES OF CEMENT MORTAR WITH DIFFERENT PROPORTIONS" has been successfully completed by Mr.NAOMAAN AHMED KHAN under the guidance of Prof. P. K. HINGE. Associate Professor, Civil Engineering Department in recognition to the partial fulfillment for the award of the degree of Master of Technology in Structural Engineering. YeshwantraoChavan College of Engineering (An Autonomous Institution Affiliated to RashtrasuntTukdojiMaharaj Nagpur University).

Prof. P. K. HINGE

Dr. V. G. Mesbram

(Coundinator)

Dr. S. R. Khandeshwat

(HOD, CE Dept.)

Dr. U.P. Waghe

(Principal)

Signature of External Examiner

None Sandrep. R. Chailm

Certified that the project report titled "ANALYSIS AND DESIGN OF DIFFERENT GIRDER SHAPES AND PIER SHAPES" has been successfully completed by MAYUR T. GHAIWAT under the guidance of Prof. H.R.Nikhade Professor, Civil Engineering Department in recognition to the partial fulfillment for the award of the degree of Master of Technology in Structural Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University).

Prof. H.R.Nikhade

(Guide)

Dr. A.M.Pande

(Project Mentor

(Director, R&D)

marelgain

N.Mahajan

(Director IAG Institute)

Dr. V. G. Meshram

(Co-ordinator)

Dr. S. R. Khandeshwar

(HOD, CE Dept.)

Dr. U. P. Waghe

(Principal)

Signature of External Examiner

Name:

Somdeup. R. Can lus

Certified that the project report entitled "COMAPARATIVE ANALYSIS OF MULTISTORIED BUILDING RESTING ON SLOPING GROUND BY RESPONSE SPECTRUM METHOD AND SEISMIC COEFFICIENT METHOD" has been successfully completed by SUFYAN ANSARI under the guidance of Prof. M. R. WAGH in recognition to the partial fulfillment for the award of the degree of Master of Technology in Structural Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

Signature

Prof. Monali R. Wagh

(Guide)

Signature

Dr. V. G. Meshram

Signature

Dr. S.R. Khandeshwar

Dr. U. P. Waghe

(Coordinator)

(HOD, CE Dept.)

(Principal)

Signature of External Examiner

Name: Somdeep. R. Caikwis

Certified that the project report entitled "Seismic Response Of Regular Multi storey Building Under Different Soil Condition" has been successfully completed by MEGHA S. MANGLE under the guidance of Prof. S. G. HIREKHAN in recognition to the partial fulfillment for the award of the degree of Master of Technology in Mechanical Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

Signature

Prof. S. G. Hirekhan

(Guide)

Signature

Dr. V. G. Meshram

(Coordinator)

Signature

Dr. S.R. Khandeshwar

(HOD, CE Dept)

Dr.U.P.Waghe

(Principal)

Signature of External Examiner

Name

Certified that the project report entitled "Conversion of organic matter to Bioethanol" has been successfully completed by Aarti J. Sarda under the guidance of Dr. S. V. Ambekar in recognition to the partial fulfillment for the award of the degree of Master of Technology in Environmental Engineering, Yeshwantrao Chavan College of Engineering, Nagpur. (An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University).

Dr. S. V. Ambekar (Guide) Dr. S.R. Khandeshwar (HOD, CE Dept.)

Dr. U. P. Waghe (Principal)

Signature of External Examiner

Name:

28 Kulkarm

Date of Examination:

6/5/19

Certified that the project report entitled "Use of microalgae in wastewater freatment" has been successfully completed by Harshali M. Fating under the guidance of Dr. S.V.Ambekar in recognition to the partial fulfillment for the award of the degree of Master of Technology in Environmental Engineering, Yeshwantrao Chavan College of Engineering, Nagpur. (An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University).

(Guide)

Dr. S.V.Ambekar (Coordinator)

Dr. S.R. Khandeshwar (HOD, CE Dept.)

Dr. U. P. Waghe (Principal)

Signature of External Examiner

P. B. Kultarin.
Examination: 6 5 19

Certified that the project report entitled "Electrocoagulation and Electrofloatation process of removing pollutants from grey water" has been successfully completed by Shital H. Hanumante under the guidance of Prof. Khalid S. Ansari in recognition to the partial fulfillment for the award of the degree of Master of Technology in Environmental Engineering, Yeshwantrao Chavan College of Engineering, Nagpur. (An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University).

Prof Mhalid S. Ansari

(Guide)

Dr.A.N.Shrikhande

prof. KITS Ramtek (coguide)

Dr. S. V. Ambekar

(Coordinator)

Dr. S.R. Khandeshwar

(HOD, CE Dept.)

Dr. U. P. Waghe

(Principal)

Signature of External Examiner

Name: 06/05/19

Certified that the project report entitled "Performance Evaluation Of Drawer Compacted Filter For Grey Water" has been successfully completed by Monika R. Kurekar under the guidance of Prof. Ms. Charuta S. Waghmare in recognition to the partial fulfillment for the award of the degree of Master of Technology in Environmental Engineering, Yeshwantrao Chavan College of Engineering, Nagpur. (An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University).

Prof. Ms. Charuta S. Waghmare (Guide)

Dr. S. V. Ambekar (Coordinator) Dr. S.R. Khandeshwar (HOD, CE Dept.)

Dr. U. P. Waghe (Principal)

dent.

Signature of External Examiner

Name: br. T. B. Gupt

Date of Examination:

06/02/13

Certified that the project report entitled "AN INVESTIGATION ON BLENDING OF UNDIGESTED SEWAGE WITH ORGANIC WASTE IN COMPOSTING" has been successfully completed by SAMRUDDHI SOLE under the guidance of DR. S.R. KHANDESHWAR and DR. N.S. RAMAN in recognition to the partial fulfillment for the award of the degree of Master of Technology in Environmental Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

Signature

Dr. S.R. Khandeshwar

Signature

Dr. N.S. Raman

(Guide, HOD, CE Dept.)

(Co Guide, Deputy Director CSIR NEERI)

Signature

Dr. S.V. Ambekar

gnature

Dr. U.P. Waghe

(Coordinator)

(Principal)

Signature of External Examiner

Name

PB Ku

Date of Examination:

6/5/19

Certified that the project report entitled "Constructed Wetland Filter for Salinity Removal" has been successfully completed by Swateja G. Telang under the guidance of Prof. H. M. Warade in recognition to the partial fulfillment for the award of the degree of Master of Technology in Environmental Engineering, Yeshwantrao Chavan College of Engineering, Nagpur. (An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University).

Prof. HM. Warade

(Guide)

Dr. S. V. Ambekar (Coordinator) Dr. S.R. Khandeshwar (HOD, CE Dept.)

Dr. U. P. Waghe (Principal)

Signature of External Examiner

Name: Dr. T.B. Gupta

Date of Examination:

06/05/19

Certified that the project report entitled "Investigation Into The Issues Related To Treatment And Disposal Of MSW In Nagpur City" has been successfully completed by Mayuri B Mogre under the guidance of Dr. S. R. Khandeshwar and Dr. N.S. Raman in recognition to the partial fulfillment for the award of the degree of Master of Technology in Environmental Engineering, Yeshwantrao Chavan College of Engineering, Nagpur. (An Autonomous Institution Rashtrasant Tukadoji Maharaj Nagpur University).

Dr.S.R.Khandeshwar

(Guide & HOD CE Dept)

(Deputy Director CSIR NEERI, Nagpur)

(Co - Guide)

Dr. S. V. Ambekar

(Co ordinator)

Dr. U. P. Waghe

(Principal)

Signature of External Examiner

Name: PBKulkarm'
Date of Examination: 6 | 5 | 19

Certified that the project report entitled "Comparison of Ac and Dc current in treatment of domestic greywater by electrocoagulation" has been successfully completed by Payal T. Bhusari under the guidance of Prof. Khalid S. Ansari and Prof. Atul S. Lilhare in recognition to the partial fulfillment for the award of the degree of Master of Technology in Environmental Engineering, Yeshwantrao Chavan College of Engineering, Nagpur. (An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University).

Prof Khalid S. Ansari

(Guide)

Prof. Atul S. Lilhare (Co-Guide)

Dr. S. V. Ambekar (Coordinator)

Dr. S.R. Khandeshwar (HOD, CE Dept.)

Dr. U. P. Waghe (Principal)

Signature of External Examiner

Name: Dr. T. B. Gupta

# Yeshwantrao Chavan College of Engineering Hingna Road Wanadongri, NAGPUR-441110

# Jain Sachin

Ledger Account 9730870809

1-Apr-2018 to 2-Nov-2018

		1-Apr-2018 to 2-1	Nov-2018		
Date	Particulars				
1-4-2018 By	Opening Balance	Vch Type	Vch No.	Debit	Page
245019 10	Tirupati Urban Co-Opertive Bank Ltd.,1 Cheque 005990 Cheque 005991 Cheque No. 005990 Your Self issued Raw B Mishra Rs. 15.700/- 8 Cheque 005991 Date-09 04 2018 issued	9-4-2018 9-4-2018 of to Dr	YCCE/BP/ 60 15.700.00 Cr 857.00 Cr	16,557.00	Cred 16,557.0
27-4-2018 By	Provision for Student Project Expense Towards expenses incurred for student project expenses fot Information Tec Dept. [ROBO Studio] bill no. 120 Dat 2018. [Hitesh Shende & Shraddha Pimpikar]	es JOURNAL_	YCCE/JV- 40		4,450 00
	(as per details) FAREWELL EXPENSES TDS - Contractor - 94 C Shree Taj Sakhe Sai Caters & Foods being expenses incurred for Farewell Program for final year students of dep on 03 04 2018. as per details attached	nt of IT	Cr		4,680 00
	Firupati Urban Co-Opertive Bank Ltd.,130 heque 006765 Cheque No 006765 Date-23 06 2018 i for expenses incurred during Farewell Frogram for Final year students.	23-6-2018 4 ssued	YCCE/BP/ 612 4,680.00 Cr	4,680.00	
	Cash Being advance cash paid to Mr Sachin gainst visiting professor scheme dt of ettlement-05 10 2018		YCCE/CP/ 552	10,000.00	
V TI	es per details) isibing Professor DS - Professional - 94 J 30000 x 10% ( A R N P S 6899 R	JOURNAL_ 41,412.00 E 3,000.00 C			38,412.00
White was	TIRUPATI URBAN CO-OPERATIV  Shraddharand Pein Branch, 172, Shraddhanan South Ambracari, Nagnur 440010, IFS CODE: HOFERCTURGE  TUCB-SO13	A/c Payee	Date दिनाक	VALID FOR THREE MONTHS FROM THE	O 1 8
	No.: 002002100000130	Only	अदा करे	**4,450.00	
	Madu	ye co		AO CHAVAN-CÓLLEGE O	) FENGG

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# Yeshwantrao Chavan College of Engineering

(An Autonomous Institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

Hingna Road, Wanadongri, Nagpur - 441 110

Ph.: 07104-237919, 234623, 329249, 329250 Fax: 07104-232376, Website: www.ycce.edu

# Department of Information Technology

DATE:-2/4/18

edit

# NOTE TO THE PRINCIPAL

Final Year students of Information Technology Department require the financial assistance to purchase some hardware equipment for completion of their projects. As these equipments are not available in the YCCE store, the projectees need your permission & approval to purchase it. The respective guides of the projects also have recommended the same for approval.

Total amount required is Rs. 2212/-. Details about the Project & equipment are attached with this notesheet.

Shri. Bhushan U. Bawankar Project Co-ordinator Dr. U.H. Gawande HOD, IT

# Yeshwantrao Chavan College of Engineering, Nagpur

Department of Information Task

# Yeshwantrao Chavan College of Engineering

Hingna Road Wanadongri, NAGPUR-441110

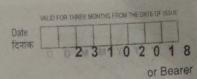
#### Gawande Ujwalla

CT Deptt Ycce

1-Apr-2018 to 2-Nov-2018

					Page 1
Date	Particulars	Vch Type	Vch No.	Debit	Credit
8-5-2018	By Student Project Expenses Primary Cost Category Information Technology 2,212 Primary Cost Category Information Technology 2,212 Towards expenses incurred for sti project, "Mood Sensing Misic Playe of IT Dept [Prachi Randive, Vigne Dipti Bhoge & Anika Sukhdeve]	YCCE/JV-110	JV- 110	2,212.00	
23-10-2018	To Tirupati Urban Co-Opertive Bank Ltd.,130 Bank Payment Cheque 006923 23-10-2018 Ujwalla Gawande TUCB-3056  Primary Cost Category Information Technology 2,212.00 Dr Ch. no. 006923 dt. 23.10.18 issued towards expenses of student project on Mood sensing music player		YCCE/BP/ 1597 2,212.00 Cr	2,212 00	2 242 20
				2,212.00	2,212.00





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A/c Payee Two Thousand Two Hundred Twelve Only इंupees रुपये अदा करें। 2,212.00 Current A/c. No.: 002002100000130 YESHWANTRAO CHAVAN C

Page 142 of 313

## Yeshwantrao Chavan College of Engineering

Hingna Road Wanadongri, NAGPUR-441110

#### Shende S. W.

Ledger Account 9765326126

1-Apr-2018 to 2-Nov-2018

Date	Particulars	Vch Type	Vala Na	Page
3-5-2018	By Student Project Expenses Primary Cost Category Information Technology 2,560.	JOURNAL_	Vch No. YCCE/ JV- 111	Debit Cred 2,560 0
	Primary Cost Category Information Technology 2,560 Towards expenses incurred for stuproject, "Smart Fan with Temperate & Direction Sensor "student of IT I [Chaitali Kaurase, Snehal Dhokane Vaibhavi Ande & Darshan dengale	.00 Cr ident ur control Dept		
6-7-2018	To Cash	Cash Payment	YCCE/CP/ 339	2,000.00
	Being Advance cash paid to Mr St W Shende for BOS meeting on 28 settlement date-04.08.2018	0.00 Dr	1002,017 333	2,000.00
31-7-2018	BOS (Autonomy) Primary Cost Category	JOURNAL_ 1,866.00 Dr	YCCE/ JV- 585	8,166.00
	Information Technology BOS (Autonomy) Primary Cost Category	1,866.00 Dr 7,000.00 Dr		
	Information Technology TDS - Professional - 94 J Primary Cost Category	7,000.00 Dr <b>200.00 Cr</b>		
	SACHIN SATHE 2000 10% [ PAN-A E H P S 854	200.00 Cr 40 Q		
	TDS - Professional - 94 J Primary Cost Category DESHPANDE U A	200.00 Cr 200.00 Cr		
	2000 X 10% [PAN-ABIPD 6 TDS - Professional - 94 J Primary Cost Category UMRE PARIKSHIT	200.00 Cr 200.00 Cr		
	2000 X 10% [PAN-A A I PIY ] TDS - Professional - 94 J Primary Cost Category	7920 <i>R]</i> 100.00 Cr		
	TIRUPATI URBAN CO-OPERATIV	F BANK LTD.	Date T	LID FOR THREE MONTHS FROM THE DATE OF ISSUE
	Shraddhanand Peth Branch, 172, Shradd South Ambrazari, Nagpur 440010. IFS CODE: HDFC0CTUB02	thanand Peth A/c Payee	दिनांक 💄	2 2 1 0 2 0 1 8 or Bearer
Pay s	hailendra Shende Tucb-6373			or board.
Rupees रा		d Sixty Only	अदा करें। ₹	
1				**2,560.00
Cu	arrent A/c. No.: 002002100000130	· · · · cen		(R)
	la	durge 68	YESHWA	NTRAO CHAVAN COLLEGE OF ENGG.

# Yeshwantrao Chavan College of Engineering

Hingna Road Wanadongri. NAGPUR-441110

Dharmik R C Ledger Account 9890388301

1-Apr-2018 to 2-Nov-2018

Date Particulars 8-5-2018 By Student Project Expenses

Primary Cost Category Information Technology 2,846:00 Dr.

Vch Type JOURNAL

Vch No. YCCE/JV-112

Debit

Page Credit

2.846.00

Primary Cost Category

Information Technology Towards expenses incurred for student 2,846.00 Cr project, "Portable Tracking Device/ System. "student of IT Dept [Abhishek Hadaoo,Amol Wadhone Rakesh Kumar & Swapnil

23-10-2018 To Tirupati Urban Co-Opertive Bank Ltd.,130 Bank Payment Primary Cost Category 006922 23-10-2018

Information Technology Ch. no. 006922 dt. 23.10.18 issued towards expenses of student project on Portable tracking device/system

YCCE/BP/ 1596 2,846.00 Cr

2,846.00

2,846.00

2,846.00

TIRUPATI URBAN CO-OPERATIVE BANK LTD. A/c Payee

or Bearer

R.C. Dharmik Tucb- 2221 aupees रुपये

Two Thousand Eight Hundred Forty Six Only

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\*2,846.00

Current A/c. No.: 002002100000130

YESHWANTRAO CHAV LEGE OF ENGG.

"OO6922" 440344002" 000130"

#### Estimate of Project Expenses

-

Annexure "A" Name of Institution ; Yeshwantrao Chavan College of Engineering, Nagpur

Acadenic Session :2018-19

Department :Electronics Engineer Guide Horne Likely Date of Commencement & Total Estimated Estimate of Project Completion of Project Cost (b) Sr. (a) Cost of Major Fabrication (c) Other Components (Rs.) Remark No. Cost Title of Project Completion (a) + (b) + (c)Roll No. Commencement Name of Students Espenses (Rs.) (Rs.) Dr. f. f. Zode A high speed and energy Pranay Kalbhut 55 1 Akanksh Makawade 67 2,298.72 efficient Full Adder 2,298.70 Apr-19 Jul-18 Vedant Dhoble Design Vaishnavi Dhote 28 Nagesh Jankwade 143 Dr. Y.A. Gaidhani Quadcopter-A Smarter Sanjay Kamble 68 Way of Pesticide 15,143 15,143 31/3/19 Vaishnavi Pathe 142 10-Aug-18 Spraying Pratiksh Dange 11 33 29 Akanksh Wagh Minal Gade Prof. Anihet Gokhale Alert System to prevent Neha Avghade 12 23-Mar-19 4,538 4,538 20-Sep-18 animal Vehical Collision 52 29 Shryas Partke Rushikesh Joshi Kajal Humane 9 14 Smart Electricity meter Mrs. T.G. Panse Prachi Nandeshwar 5,639 12/3/2019 5,639 with load theft 5/8/2018 Latika Kokade 32 Detection Kajal Wankhede 31 Pranali Kirpade 16 22 Multifunctional Prof. M-S. Pawar Renuka Hole Jul-18 Apr-19 9,440 9,440 Autonomus Farmingbot Vaishnavi Turasaka Aditya Matharkar 38 Purva Madan 20 Dr. P. M. falsodkan Nikita Pal 30 6985..70 Glass Cleaner Apr-19 Jul-18 6986..70 Shubham Sonarkar 63 Mohsin Shekh 51 Kaustubh Wakodkar 164 Nakul Rastogi Dr. R.D. Thalire 144 Survillence Robot for Kartik Gopal 141 Jun-19 Mar-19 9,737 9,737 surface Vaishali Korde 121 Devyabni Kadu 105

,	A								
1 8	Ardino data glass	Amit Khawse Tejas Dhomne	131 160						
_		Harshal Shambharkar Chanden Uikey	137	Apr-18	18/3/19	15,983		15,983	Mrs. P.P. Zocle
9	Design of Rectagular Microstrip Anteons	Athray Parkhi	135 70 30		30.3.19	3,486			
_	Microstrip Anteena with DGS at 2.45 G	Pragati Godhane Srvesh Sahastrabudhe	15	20.6.18				3,486	forest. A.B. Matera
	PG	, and the second	00	7		Total		73,251	
1	IOT Based facilly smart	Kajal Ambadkar		18-Jul	April,19	4,632			-
	phone security ssytem			10-Jul	April,19	4,032		4,632	Dr. P. K. Dakhole
2	E Shape Patch Anteena Array with DGS	Priyanks Sonkar		18-Jul	April, 19	3520			Prof. A-B. Thate
-	7 500			· · · · ·					Prof. H-B. Thate
					Total	8152	1 2 2	8152	

Remarks By Head of the Department - Recommended - no. of project - 09 PG-02

Total Estimated Cost Rs. - : 81,403.00

Signature of Head of the Department.

Approved / Not Approved

# IMPLEMENTATION OF REVERSIBLE DATA HIDING IN ENCRYPTED IMAGE

This project report is submitted to
Yeshwantrao Chavan College of Engineering
(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur
University) In partial fulfillment of the requirement
For the award of the degree

of

Master of Technology in Electronics Engineering

by

Krutika Parmanand Dhande

Under the guidance of

Dr. Atish Khobragade



#### DEPARTMENT OF ELECTRONICS ENGINEERING

Nagar Yuwak Shikshan Sanstha's

#### YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,

(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)

NAGPUR - 441 110

Certified that the project report entitled "IMPLEMENTATION OF REVERSIBLE DATA HIDING IN ENCRYPTED IMAGE" has been successfully completed by Krutika Parmanand Dhande under the guidance of Dr. Atish Khobragade in recognition to the partial fulfillment for the award of the degree of Master of Technology in Electronics Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University), Nagpur.

Dr. Atish Khobragade

(Guide)

Signature

Mrs. U.S.Ghodeswar

(Co-ordinator)

Signature

Dr.P.T.Karule

(HoD, EE Dept.)

1-Hor

Signature of External Examiner:

Name: Dr. P.R. Rothe

Date of Examination: 4.5.19

# LOSSLESS IMAGE COMPRESSION USING LZW ALGORITHM FOR REAL TIME APPLICATIONS

This project report is submitted to

Yeshwantrao Chavan College of Engineering

(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

In partial fulfillment of the requirement

For the award of the degree

of

Master of Technology in Electronics

by

Miss. Rutuja Sunil Channe

Under the guidance of

Shrikant Y.Ambatkar



#### DEPARTMENT OF ELECTRONICS ENGINEERING

Nagar Yuwak Shikshan Sanstha's

#### YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,

(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)

NAGPUR - 441 110

Certified that the project report entitled "LOSSLESS IMAGE COMPRESSION USING LZW ALGORITHM FOR REAL TIME APPLICATION" has been successfully completed by Miss. Rutuja Sunil Channe under the guidance of Mr. Shrikant Ambatkar in recognition to the partial fulfillment for the award of the degree of Master of Technology in Electronics, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University), Nagpur.

Signature

Shrikant Y.Ambatkar

(Guide)

Signature

Dr. U.S.Ghodeswar

(Co-ordinator)

Signature

Dr.P.TKarule

(HoD, EE, Dept.)

PRole,

Signature of External Examiner:

Name: Dr. P. R. Rothe

Date of Examination: 4.5.19

## TELECONSULTATION AND TELEDIAGNOSIS USING IoT MODULE

This project report is submitted to

Yeshwantrao Chavan College of Engineering

(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

In partial fulfillment of the requirement for the award of the degree

Of

#### **Master of Technology in Electronics Engineering**

By

Yogesh D. Ahir

Under the guidance of

Dr. S. V. Rathkanthiwar



### DEPARTMENT OF ELECTRONICS ENGINEERING

Nagar Yuwak Shikshan Sanstha's

## YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,

(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)

NAGPUR - 441 110

Certified that the project report entitled "TELECONSULTATION AND TELEDIAGNOSIS USING IoT MODULE" has been successfully completed by YOGESH D. AHIR under the guidance of Dr. S. V. Rathkanthiwar in recognition to the partial fulfillment for the award of the degree of Master of Technology in Electronics Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

Dr. S. V. Rathkanthiwar (Guide)

Dr. U. S. Ghodeswar

(Coordinator)

Signature

Dr. P. T. Karule

(HoD, EE Dept.)

Signature of External Examiner

Name: De. J. Duhigean Koe

Date of Examination: 04/05/2019

## IDENTIFICATION OF LEAF DISEASES IN AGRICULTURE CROPS

This project report is submitted to

Yeshwantrao Chavan College of Engineering

(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

In partial fulfillment of the requirement

For the award of the degree

Of

## Master of Technology in Electronics Engineering

By

Charulata S. Raut

Under the guidance of

Prof. A. V. Gokhale



## DEPARTMENT OF ELECTRONICS ENGINEERING

Nagar Yuwak Shikshan Sanstha's

## YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,

(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)

NAGPUR - 441 110

Certified that the project report entitled "IDENTIFICATION OF LEAF DISEASES IN AGRICULTURE CROPS" has been successfully completed by CHARULATA RAUT under the guidance of Prof. A. V. Gokhale in recognition to the partial fulfillment for the award of the degree of Master of Technology in Electronics Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

Prof. A. V. Gokhale

(Guide)

Signature

Dr. U. S. Ghodeswar

(Coordinator)

Dr. P. T. Karule

(HoD, EE Dept.)

Signature of External Examiner

Name: Dr. D. J. Danigaonkar Date of Examination: 04/05/2019

# MRI IMAGES RECONSTRUCTION USING GENERATIVE ADVERSARIAL NETWORK

This project report is submitted to

Yeshwantrao Chavan College of Engineering

(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

In partial fulfillment of the requirement

For the award of the degree

of

Master of Technology in Electronics Engineering

by

Priyanka Milind Shende

Under the guidance of

Prof. Mahesh S. Pawar



#### DEPARTMENT OF ELECTRONICS ENGINEERING

Nagar Yuwak Shikshan Sanstha's

### YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,

(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)

NAGPUR - 441 110

Certified that the project report entitled "MRI IMAGES RECONSTRUCTION USING GENERATIVE ADVERSARIAL NETWORK" has been successfully completed by Priyanka Milind Shende under the guidance of Prof. M. S. Pawar in recognition to the partial fulfillment for the award of the degree of Master of Technology in Electronics Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University), Nagpur.

Prof. M. S. Pawar

(Guide)

Dr. U. S. Ghodeswar

(Co-ordinator)

Dr. P. T. Karule (HoD, EE Dept.)

Signature of External Examiner:

Name: Dr. D. J. Dahigaakar

Date of Examination: 04 05 2019

## IMPLEMENTATION OF DIGITAL WATERMARKING FOR COLOR IMAGES USING DWT

This project report is submitted to

Yeshwantrao Chavan College of Engineering

(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

In partial fulfillment of the requirement for the award of the degree

of

Master of Technology in Electronics Engineering

by

Mr. Aditya Anantrao Awaghate

Under the guidance of

Dr Rajesh. D. Thakare



### DEPARTMENT OF ELECTRONICS ENGINEERING

Nagar Yuwak Shikshan Sanstha's

YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,

(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

NAGPUR - 441 110

Certified that the project report entitled "IMPLEMENTATION OF DIGITAL WATERMARKING FOR COLOR IMAGES USING DWT" has been successfully completed by Mr. Aditya Anantrao Awaghate under the guidance of Dr. Rajesh D. Thakare in recognition to the partial fulfillment for the award of the degree of Master of Technology in Electronics Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University), Nagpur.

Dr. Rajesh. D. Thakare
(Guide)

Dr. U. S. Ghodeswar

(Co-ordinator)

Dr. P. T. Karule

(HoD, EE Dept.)

Signature of External Examiner:

Name: Dr. P.R. Rothe

Date of Examination: 4.5.19

## DESIGN OF QUADRATURE ERROR CORRECTION LOOP FOR COMMUNICATION

This project report is submitted to

Yeshwantrao Chavan College of Engineering

(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

In partial fulfillment of the requirement

For the award of the degree

Of

#### Master of Technology in VLSI Design

By

Bhagyashri D. kale

Under the guidance of

Dr.U.S.Ghodeswar



#### DEPARTMENT OF ELECTRONICS ENGINEERING

Nagar Yuwak Shikshan Sanstha's

#### YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,

(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)

NAGPUR - 441 110

Certified that the project report entitled "DESIGN OF QUADRATURE ERROR CORRECTION LOOP FOR COMMUNICATION" has been successfully completed by Bhagyashri kale under the guidance of Dr. U.S.Ghodeswar in recognition to the partial fulfillment for the award of the degree of Master of Technology in VLSI Design, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

Signature

Dr.U.S.Ghodeswar

(Guide and

coordinator)

Manuel Signature

Dr. P. T. Karule

(HoD, EE Dept.)

Signature of External Examiner

Name: S.S. Dovle

Date of Examination: 4/5/19

II

# Fractal Image Compression by using quantized quad- tree partitioning technique

This project report is submitted to
Yeshwantrao Chavan College of Engineering

(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)
In partial fulfillment of the requirement
For the award of the degree

of

Master of Technology in VLSI Design

by

Miss. Kiran Dilip Shende

Under the guidance of

Dr. A. S. Khobragade



#### DEPARTMENT OF ELECTRONICS ENGINEERING

Nagar Yuwak Shikshan Sanstha's

#### YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,

(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)

NAGPUR – 441 110

Certified that the project report entitled "Fractal image compression by using quantized quad- tree partitioning technique" has been successfully completed by Miss. Kiran Dilip Shende under the guidance of Dr. A. S. Khobragade in recognition to the partial fulfillment for the award of the degree of Master of Technology in VLSI Design, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University), Nagpur.

Signature

Dr. A. S. Khobragade

(Guide)

Signature

Mrs. U. S. Ghodeswar

(Co-ordinator)

Signature

Dr. P. T. Karule

(HoD, EE Dept.)

Signature of External Examiner:

Name: Dr. P.R. Rothe

Date of Examination: 4|5|19

## E SHAPE PATCH ANTENNA ARRAY WITH DGS

This project report is submitted Yeshvantrao Chavan College of Engineering

(An Autonomous Institution Affilated to Rashtrasant Tukadoji Maharaj Nagpur University) in partial fulfillment of the requirement for the award of the degree

of

Master of Technology in VLSI Design

by

Priyanka R. Sonkar

Under the guidance of

Prof. A.B. Thatere



#### DEPARTMENT OF ELECTRONICS ENGINEERING

Nagar Yuwak Shikshan Sanstha's

## YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,

(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)

NAGPUR – 441 110 2018-2019

Certified that the project report entitled E shape Patch Antenna Array with DGS has been successfully completed by Priyanka R. Sonkar under the guidance of **Prof A.B. Thatere** in recognition to the partial fulfillment for the award of the degree of Master of Technology in VLSI Design igineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University), Nagpur.

Assoc. Prof. A.B Thatere

(Guide)

Prof. U. S. Ghodeswar

(Coordinator)

Signature of External Examiner:

Name:  $D_A \cdot S \cdot S \cdot Double$ .

Date of Examination: 4/5/2019

Dr.P.T.Karule (HOD, EE Dept.)

## Fractal Image Compression by using quantized quad- tree partitioning technique

This project report is submitted to

Yeshwantrao Chavan College of Engineering

(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

In partial fulfillment of the requirement

For the award of the degree

of

#### Master of Technology in VLSI Design

by

#### Miss. Kiran Dilip Shende

Under the guidance of

Dr. A. S. Khobragade



#### DEPARTMENT OF ELECTRONICS ENGINEERING

Nagar Yuwak Shikshan Sanstha's

### YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,

(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)

NAGPUR – 441 110

Certified that the project report entitled "Fractal image compression by using quantized quad- tree partitioning technique" has been successfully completed by Miss. Kiran Dilip Shende under the guidance of Dr. A. S. Khobragade in recognition to the partial fulfillment for the award of the degree of Master of Technology in VLSI Design, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University), Nagpur.

Signature

Dr. A. S. Khobragade

(Guide)

Signature

Mrs. U. S. Ghodeswar

(Co-ordinator)

Signature

Dr. P. T. Karule

(HoD, EE Dept.)

Signature of External Examiner:

Name: Dr. P. R. Rothe

Date of Examination: 4.5.19

## COMPRESSOR BASED DESIGN OF LOW POWER VEDIC MULTIPLIER

This project report is submitted to

Yeshwantrao Chavan College of Engineering

(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

In partial fulfillment of the requirement

For the award of the degree

of

Master of Technology in VLSI Design

by

Payal L. Sharnagat

Under the guidance of

Dr. P. T. Karule

Under the co-guidance of

Mrs. Rashmi Keote



#### DEPARTMENT OF ELECTRONICS ENGINEERING

Nagar Yuwak Shikshan Sanstha's

YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,
(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)

NAGPUR = 441 110 2018-2019

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Certified that the project report entitled "Compressor based Design of Low Power Vedic Multiplier" has been successfully completed by Payal L. Sharnagat under the guidance of Dr. P. T. Karule and co-guidance of Mrs. Rashmi Keote in recognition to the partial fulfillment for the award of the degree of Master of Technology in VLSI Design, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

Dr. P. T. Karule (Guide)

Mrs. Rashmi Keote (Co- Guide)

Dr. U. S. Ghodeswar Coordinator, M.Tech (EE), M.Tech (VLSI Design) Dr. P. T. Karule (HoD, EE)

Signature of External Examiner Name: S-S-D

Date of Examination:

### **Stochastic Fast Convolution**

This project report is submitted to

Yeshwantrao Chavan College of Engineering

(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

In partial fulfillment of the requirement

For the award of the degree

of

Master of Technology in VLSI Design

By

Sana Kausar Ansari

Under the guidance of

Dr.P.P.Palsodkar



### DEPARTMENT OF ELECTRONICS ENGINEERING

Nagar Yuwak Shikshan Sanstha's

## YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,

(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur) NAGPUR – 441 110

Certified that the project report entitled Stochastic Fast Convolution has been successfully completed by Sana Kausar Ansari under the guidance of Dr.P.P.Palsodkar in recognition to the partial fulfillment for the award of the degree of Master of Technology VLSI Design Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

Signatures

Dr.U.S.Ghodeswar

Coordinator

M.Tech(VLSI Design)

Signature

DrP.P.Palsodkar (Guide) Signature

Dr.P.T.Karule (HoD,EE)

Signature of External Examiner

Name S.S. Dolle

Date of Examination: 4/5/19

### **IOT BASED SMART HOME SECURITY SYSTEM**

This project report is submitted to

Yeshwantrao Chavan College of Engineering

(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

In partial fulfillment of the requirement

For the award of the degree

of

Master of Technology in VLSI Design

by

Kajal M. Ambadkar

Under the guidance of

Dr. P. K. Dakhole



### DEPARTMENT OF ELECTRONICS ENGINEERING

Nagar Yuwak Shikshan Sanstha's

YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING, (An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)

NAGPUR - 441 110 2018-2019

Certified that the project report entitled "IOT Based Smart Home Security System" has been successfully completed by KAJAL AMBADKAAR under the guidance of Dr. P. K. Dakhole in recognition to the partial fulfillment for the award of the degree of Master of Technology in VLSI Design, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

Signature

Dr. P. K. Dakhole

(Guide)

Signature

Dr. Mrs. U. S. Ghodeswar

(Coordinator)

Quamb Signature

Dr. Mr. P. T. Karule

(HOD, EE Dept.)

Signature of External Examiner

Name: Do. D. J. Daligaonkar Date of Examination: 04/05/2019

## DESIGN OF QUADRATURE ERROR CORRECTION LOOP FOR COMMUNICATION

This project report is submitted to

Yeshwantrao Chavan College of Engineering

(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

In partial fulfillment of the requirement

For the award of the degree

Of

#### Master of Technology in VLSI Design

By

Bhagyashri D. kale

Under the guidance of

Dr.U.S.Ghodeswar



### DEPARTMENT OF ELECTRONICS ENGINEERING

Nagar Yuwak Shikshan Sanstha's

## YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,

(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)

NAGPUR - 441 110

Certified that the project report entitled "DESIGN OF QUADRATURE ERROR CORRECTION LOOP FOR COMMUNICATION" has been successfully completed by Bhagyashri kale under the guidance of Dr. U.S.Ghodeswar in recognition to the partial fulfillment for the award of the degree of Master of Technology in VLSI Design, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

Signature

Dr.U.S.Ghodeswar

(Guide and

coordinator)

Signature

Dr. P. T. Karule

(HoD, EE Dept.)

Signature of External Examiner

Name: Dr.S.S. Durle

Date of Examination: 4/5-19

## "DESIGN AND FABRICATION OF COMPACT COMPOSTER"

This project report is submitted to

Yeshwantrao Chavan College of Engineering
(An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

In partial fulfillment of the requirement

For the award of the degree

Of

Bachelor of Engineering in Mechanical Engineering

By

ABHISHEK AGRAWAL KAMAL TARWANI PRAJWAL LANGDE CHETAN PATIL
PARAS BODHALE
PRATIK DHAGE

Under the guidance of

Dr. S. S. KHEDKAR



#### DEPARTMENT OF MECHANICAL ENGINEERING

Nagar Yuwak Shikshan Sanstha's

YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING, (An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)

**NAGPUR - 441 110** 

2018-2019

Page 175 of 313

This is to certify that the project report entitled "DESIGN AND FABRICATION OF COMPACT COMPOSTER" has been successfully completed by ABHISHEK AGRAWAL, KAMAL TARWANI, PARAS BODHALE, CHETAN PATIL, PRATIK DHAGE, PRAJWAL LANGDE under the guidance of DR. S. S. KHEDKAR in recognition to the partial fulfillment for the award of the degree of Bachelor of Engineering in Mechanical Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

Signature

(Dr S.S. KHEDKAR)

Sighature Prof. N. J. Giradkar

(Coordinator)

Prof. S. S. Chaudhari (HOD, ME Dept.)

Signature of External Examiner:

Name:

Date of Examination:

06905112019. Jaley Dro S. S. Sohmhaley

# DESIGN AND DEVELOPMENT OF UNIVERSAL GOVERNOR EXPERIMENTAL SETUP

This project report is submitted to

Yeshwantrao Chavan College of Engineering

(An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

In partial fulfillment of the requirement

For the award of the degree

Of

**Bachelor of Engineering in Mechanical Engineering** 

By

1. AMIT

3. NIKHIL RENGE

2. ATHARY JUMDE

4. RUPESH HAKANDE

Under the guidance of

Prof. D. Y. Shahare



### DEPARTMENT OF MECHANICAL ENGINEERING

Nagar Yuwak Shikshan Sanstha's

YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,

(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)

NAGPUR - 441 110

2018-2019

Page 177 of 313

Certified that the project report entitled "DESIGN AND DEVELOPMENT OF UNIVERSAL GOVERNOR EXPERIMENTAL SETUP" has been successfully completed by AMIT, ATHARV JUMDE, NIKHIL RENGE, RUPESH HAKANDE under the guidance of Prof. D. Y. SHAHARE in recognition to the partial fulfilment for the award of the degree of Bachelor of Engineering in Mechanical Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University.)

Signature

Prof. D. V. SHAHARE

(Guide)

Signature

Prof. N. J. Giradkar

(Project Co-ordinator)

Disptitud ME

Dr. S. S. Chaudhari

(HOD, ME Dept.)

Signature of External Examiner:

Name: Dr. rijery Acoute, CHREE regar

Date of Examination: (15120)

# DESIGN AND FABRICATION OF SETUP FOR DETERMINATION OF HTC OVER A FLAT VERTICAL PLATE SUBJECTED TO UHF AND FORMULATION OF EMPIRICAL CORRELATION IN NATURAL CONVECTION

This project report is submitted to Yeshwantrao Chavan College of Engineering , Nagpur

(An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

In partial fulfillment of the requirement For the award of the degree

Of

Bachelor of Engineering in Mechanical Engineering

by

Ankit Prakash Dahekar Charandas Domaji Mahamandre Vinay Mahadeo Wankhede

Under the guidance of

Prof. V. M. Korde



#### DEPARTMENT OF MECHANICAL ENGINEERING

Nagar Yuwak Shikshan Sanstha's

YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,

(An autonomous institution affiliated to Rashtrasant Tukdoji Maharaj Nagpur University, Nagpur)

NAGPUR - 441 110

Certified that the project report entitled "DESIGN AND FABRICATION OF SETUP FOR DETERMINATION OF HTC OVER A FLAT VERTICAL PLATE SUBJECTED TO UHF IN NATURAL CONVECTION AND FORMULATION OF EMPIRICAL CORRELATION" has been successfully completed by Ankit Dahekar, Charandas Mahamandre And Vinay Wankhede under the guidance of Prof. V. M. Korde in recognition to the partial fulfillment for the award of the degree of Bachelor of Engineering in Mechanical Engineering, Yeshwantrao Chavan College of Engineering(An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

Prof. V. M. Korde

(Project guide)

Dr. S. S. Chaudhari

(HOD, ME Dept.)

Prof. N.J.Giradkar

(Project Coordinator)

Signature of External Examiner

Dr. A. M. Andhave

Name: RCOEM, Nogpul

Date of Examination: 06/05/19

# DESIGN AND FABRICATION OF SETUP FOR DETERMINATION OF HEAT TRANSFER COEFFICIENT OVER A FLAT VERTICAL PLATE SUBJECTED TO UHF IN FORCED CONVECTION.

This project report is submitted to

Yeshwantrao Chavan College of Engineering
(An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

In partial fulfillment of the requirement

For the award of the degree

Of

**Bachelor of Engineering in Mechanical Engineering** 

By

Rahul B. Likhar Shubham A. Dhande Gunvanta Admane Tushar V. Jambhulkar

Under the guidance of

Prof. V. M. Korde



#### DEPARTMENT OF MECHANICAL ENGINEERING

Nagar Yuwak Shikshan Sanstha's

YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING, (An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University,

Nagpur)
NAGPUR – 441 110

Certified that the project report entitled "DESIGN AND FABRICATION OF SETUP FOR DETERMINATION OF HEAT TRANSFER COEFFICIENT OVER A FLAT VERTICAL PLATE SUBJECTED TO UHF IN FORCED CONVECTION." has been successfully completed by RAHUL BHANUDAS LIKHAR, SHUBHAM ANIL DHANDE, GUNVANTA VIJAYRAO ADMANE, TUSHAR VILAS JAMBHULKAR under the guidance of Prof. V. M. Korde in recognition to the partial fulfillment for the award of the degree of Bachelor of Engineering in Mechanical Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

Signature

Rahul B. Likhar

Shubham A. Dhande & Gunvanta Admane yunvan

Tushar V. Jambhulkar

Prof. V. M. Korde

(Project Guide)

Chaudhari

(HOD, ME Dept.)

Prof. N. J. Giradkar

(Project Coordinator)

Signature of External Examiner

Name: DT. A. M. Andhauc (RCOEM, Naypul)

Date of Examination:

# DESIGN AND FABRICATION OF COCONUT WATER EXTRACTION, DEHUSKING AND COCOPEAT FORMING MACHINE

This project report is submitted to

Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

> In partial fulfillment of the requirement For the award of the degree

> > Of

**Bachelor of Engineering in** 

**Mechanical Engineering** 

By

Pooja A. Bante Sameer Suryawanshi

Sakshi Meshram Dhanashree Barai

Prasanna Meshram

Under the guidance of

Dr. S. S. Chaudhari



#### **DEPARTMENT OF MECHANICAL ENGINEERING**

Nagar Yuvak Shikshan Sanstha's

YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING

(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University,

Nagpur)

NAGPUR-441 110

Certified that the project report entitled "DESIGN AND FABRICATION OF COCONUT WATER EXTRACTION, DEHUSKING AND COCOPEAT FORMING MACHINE"has been successfully completed by the students given below under the guidance of DR. S. S. CHAUDHARI in recognition to the partial fulfillment for the award of the degree of Bachelor of Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

(Project Co-ordinator)

(HOD, ME Dept.)

Signature of External Examiner

Name: Prof R.D. Thanks
Date of Examination: Property

#### DESIGN AND DEVELOPMENT OF AUTOMATIC WALKER

This project report is submitted to

Yeshwantrao Chavan College of Engineering

(An Autonomous Institution Affiliated to Rushtrasant Tukadoji Maharaj Nagpur University)

In partial fulfillment of the requirement For the award of the degree

Of

**Bachelor of Engineering in Mechanical Engineering** 

By

Mr. Himanshu Lute

Mr. Manthan Diwate

Mr. Mohit Fuke

Mr. Tanmay Moon

Under the guidance of

Prof. Rajesh G Bodkhe



### DEPARTMENT OF MECHANICAL ENGINEERING

Nagar Yuwak Shikshan Sanstha's

YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING, (An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)

NA CDUD 441 110

Certified that the project report entitled "DESIGN And DEVELOPEMENT OF AUTOMATIC WALKER" has been successfully completed by HIMANSHU LUTE, MANTHAN DIWATE, MOHIT FUKE and TANMAY MOON under the guidance of PROF. RAJESH G BODKHE in recognition to the partial fulfillment for the award of the degree of Bachelor of Engineering in Mechanical Engineering, Yeshwantrao Chavan College of Engineering(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University).

Signature

Prof. Rajesh G Bodkhe (Guide)

Dr. S.S. Chaudhari

(HOD, ME Dept.)

Signature of External Examiner:

Name: C.N. Sakhle

Date of Examination: 8/5/2019

## DESIGN OF PAINT GEAR PUMP

This project report is submitted to

## YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING

(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University) In partial fulfillment of the requirement For the award of the degree

Of

Bachelor of Engineering in Mechanical Engineering

By

Ankit B. Hajare

Sourabh B. Jiwtode

Akansha D. Jogawe

Under the guidance of

Dr. S. P. Untawale



#### DEPARTMENT OF MECHANICAL ENGINEERING

Nagar Yuwak Shikshan Sanstha's

YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING, (An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur) NAGPUR - 441 110

#### DEVELOPMENT OF INTELLIGENT BIKE SYSTEM

This project report is submitted to

YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING

(n Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

In partial fulfillment of the requirement

For the award of the degree

Of

BACHELOR OF ENGINEERING IN MECHANICAL ENGINEERING

Bv

Mr. AKSHAY RAGHUSHE
Mr. KUMESH BANKAR

Mr. NIKHIL LAHE

Mr. PUSHKAR CHAVAN

Mr. ROHIT PANZADE

Under the guidance of

Prof. P.N. SHENDE



#### DEPARTMENT OF MECHANICAL ENGINEERING

Nagar Yuwak Shikshan Sanstha's

#### YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,

(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)

NAGPUR - 441 110

2018-2019

#### DECLARATION

We certify that

- a. The work contained in this project has been done by us under the guidance of our
- b. The work has not been submitted to any other Institute for any degree or diploma.
- We have followed the guidelines provided by the Institute in preparing the project report.
- d. We have conformed to the norms and guidelines given in the Ethical Code of Conduct of the Institute.
- e. Whenever we have used materials (data, theoretical analysis, figures, and text) from other sources, we have given due credit to them by citing them in the text of the report and giving their details in the references. Further, we have taken permission from the copyright owners of the sources, whenever necessary.

Name of students:

Akshay Raghushe

Kumesh Banker

Nikhil Lahe

Pushkar Chavan

Rohit Panzade

A. P. Raghashe Statem

iii

#### CERTIFICATE OF APPROVAL

Certified that the project report entitled "DEVELOPMENT OF INTELLIGENT BIKE SYSTEM" has been successfully completed by Alshay Raghushe, Kumesh Bankar, Nikhil Lahe, Pushkar Chavan, Rohit Panzade, under the guidance of Prof. P. N. SHENDE in recognition to the partial fulfillment for the award of the degree of Bachelor of Engineering in Mechanical Engineering. Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

Signature

Prof. P. N. SHENDE (Guide)

Signature rof N.I. Giradh

Prof. N.J. Giradka

Dr. S. S. Chaudhari

of External Examiner Page 188 of 313

Name Do, S. N. Washmay Date of Examination 54/15

## DESIGN AND FABRICATION OF PAPER BAG MAKING MACHINE

This project report is submitted to

Yeshwantrao Chavan College of Engineering

(An Autonomous Institution Affiliated to RashtrasantTukdoji Maharaj Nagpur University)

In partial fulfillment of the requirement

For the award of the degree

Of

**Bachelor of Engineering in Mechanical Engineering** 

Ву

Akshay Rane

Harshvardhan

Shital Sarode

Yash Hajare

Yashasvi Pawar

Under the guidance of

Prof. A.S. Bonde



#### DEPARTMENT OF MECHANICAL ENGINEERING

Nagar YuwakShikshanSanstha's

#### YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,

(An autonomous institution affiliated to RashtrasantTukadoji Maharaj Nagpur University, Nagpur)

## PARAMETER OPTIMIZATION FOR OPTIMUM SURFACE FINISH IN FUSED DEPOSITION MODELING

This project report is submitted to

Yeshwantrao Chavan College of Engineering
(An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

In partial fulfillment of the requirement For the award of the degree of

Bachelor of Engineering in Mechanical Engineering

By

KOHINOOR NANDESHWAR

**MEGH TUMANE** 

NITIN PATLE

SHRUTI SHRIWAS

Under the guidance of

Dr. J. P. GIRI SIR



**DEPARTMENT OF Mechanical Engineering** 

Nagar Yuwak Shikshan Sanstha's

YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING, (An autonomous institution affiliated to Rashtrasant Tukdoji Maharaj Nagpur University, Nagpur)

> NAGPUR - 441 110 2018-2019

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Certified that the project report entitled "PARAMETER OPTIMIZATION FOR OPTIMUM SURFACE FINISH IN FUSED DEPOSITION MODELING" has been successfully completed by KOHINOOR NANDESHWAR, MEGH TUMANE, NITIN PATLE, SHRUTI SHRIWAS under the guidance of Dr. J. P. GIRI in recognition to the partial fulfillment for the award of the degree of Bachelor of Engineering in Mechanical Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

Signature
Dr. Jayant P. Giri
(Guide)

Signature

Prof. N.J. Giradkar (Co-ordinator)

Dr. S. S. Chaudhary

(HoD, ME Dept.)

Signature of External Examiner: Name:-

Date of Examination:

### DESIGN AND DEVELOPMENT OF VERTICAL WALLTILE CLEANING MACHINE

This project report is submitted to

#### YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING

(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

In partial fulfilment of the requirement

For the award of the degree

Of

#### BACHELOR OF ENGINEERING IN MECHANICAL ENGINEERING

By

Amey Bhoyar

Aditya Bhandwalkar

Mohit Bhivgade

Sanket Ganorkar

Yash Belkhode

Under the guidance of

Dr. S. T. Bagde



#### DEPARTMENT OF MECHANICAL ENGINEERING

Nagar Yuwak Shikshan Sanstha's

#### YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,

(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)

NAGPUR - 441 110

2018-2019

Page 192 of 313

Certified that the project report entitled "DESIGN AND DEVELOPMENT OF VERTICAL WALL TILE CLEANING MACHINE" has been successfully completed by AMEY BHOYAR, ADITYA BHANDWALKAR, MOHIT BHIVGADE, SANKET GANORKAR, YASH BELKHODE under the guidance of DR. S. T. BAGDE in recognition to the partial fulfilment for the award of the degree of Bachelor of Engineering in Mechanical Engineering. Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

Signature

Dr. S. T. Bagde

(Guide)

Signature

Prof N.J.Giradkar

(Coordinator)

gnature

.S.Chaudhari

(HOD, ME Dept.)

Signature of External Examiner

Name: R. D. Thau

Date of Examination:

## DESIGN AND DEVELOPMENT OF SPRAY PAINTING MACHINE

This project report is submitted to

Yeshwantrao Chavan College of Engineering

(An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

In partial fulfilment of the requirement

For the award of the degree

of

Bachelor of Engineering in

**Mechanical Engineering** 

By

Chetan Raut

Deepak Pendam

Prasad Madankar

Utkarsh Deshmukh

Under the Guidance of

Dr. S.R Jachak



#### DEPARTMENT OF MECHANICAL ENGINEERING

Nagar Yuwak Shikshan Sanstha's

YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,

(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)

NAGPUR - 441110

Certified that the project report entitled "DESIGN AND DEVELOPMENT OF SPRAY PAINTING MACHINE" has been successfully completed by Chetan Raut, Deepak Pendam, Prasad Madankar and Utkarsh Deshmukh under the guidance of Dr S.R Jachak in recognition to the partial fulfilment for the award of the degree of Bachelor of Technology in Mechanical Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

Dr. SR Jachak

(Project Guide)

Dr S.S Chadhari

(H.O.D M.E Dept)

Signature of External Examiner:

Name: Prof. G.M. Dhote

Date of Examination: 6-5-19

Certified that the project report entitled "DESIGN AND DEVELOPMENT OF SPRAY PAINTING MACHINE" has been successfully completed by Chetan Raut, Deepak Pendam, Prasad Madankar and Utkarsh Deshmukh under the guidance of Dr S.R Jachak in recognition to the partial fulfilment for the award of the degree of Bachelor of Technology in Mechanical Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

Dr. SR Jachak

(Project Guide)

Dr S.S Chaudhari

(H.O.D M.E Dept)

Signature of External Examiner:

Name: Prof. G.M. Dhote

Date of Examination: 6-5-19

#### IMPROVING PRODUCTIVITY OF THE PLASTIC INDUSTRY A CASE STUDY AT BILARAT PLASTIC INDUSTRIA

This project report is submitted to

Yeshwantrao Chavan College of Engineering
(An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

In partial fulfillment of the requirement

For the award of degree

Of

Bachelor of Engineering in

Mechanical Engineering

150

Nikhil Rathod

Himanshu Atram

Sahil Gohane

Abhinay Mehendre

Under the guidance of

Prof. D.S. Karbert



#### DEPARTMENT OF MECHANICAL ENGINEERING

Nagar Yuwak Shikshan Sanstha s

#### YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING

(An autonomous institution affiliated to Rashtrasant Tukdoji Maharaj University Nagpur Nagpur)

NAGPUR-441110

Certified that the project report entitled, IMPROVING PRODUCTIVITY OF THE PLASTIC INDUSTRY -A CASE STUDY AT BHARAT PLASTIC INDUSTRIES has been successfully completed by NIKHIL RATHOD, SAHIL GOHANE, HIMANSHU ATRAM, ABHINAV MEHENDRE under the guidance of Prof. D.N. KASHYAP in recognition to the partial fulfillment for the award of the degree of Bachelor of Engineering in Mechanical. Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

Signature

Prof. D.N Kashyap (ProjectGuide)

Dr.S.S.Chaudhari

(HOD, Mechanical Dept.)

Signature Prof. N.J.Giradkar (Project Incharge)

Signature of External Examiner:

Name: Y.V. Dandetar

Date of Examination:

#### Certificate

This is certify that Nikhil Rathod, Sahil Goahne, Abhinav Mehendre, Himanshu Atram are bonafied student of Bachelor of engineering course for academic 2015-2019 of the department Mechanical Engineering, Yeshwantrao Chavan College of ngineering, Nagpur.

1

The candidates has worked under the supervision of **Prof D. N Kashyap** and has satisfactorily finished in project work in the academic session. The project submitted by them is theirs hard work and is complete so as to warranty its presentation foe examination.

Their project work titled "Improving Productivity Of The Plastic Industry - A Case Study Of Bharat Plastic Industry" which is partial fulfillment of the requirement for the above course.

Project Guide

Prof D N Kashyap

Mechanica Depatment

(YCCE)

Bharat Plastic Industries

Proprietor

Director

Mr Vaibhay Dhondrikar

(Bharat Plastic Pvt ltd)

Nagpur

#### "IMPROVEMENT IN EFFICIENCY OF SOLAR AIR COOLER"

This project report is submitted in

Veshwantran Chavan Cullege of Engineering

(An Automoreous Institution Affiliated to Hachtenanis Fishadaji Maharaj Pagent Cateoritis)

In partial fulfillment of the requirement For the invard of the degree

01

Bachelor of Engineering in Mechanical Engineering

Hy

Mr. Ketan Milind Indurkar

Mr. Aushul Raju Taklikar

Mr. Pranay Madhukar Mahajan

Under the guidance of

Prof. Dilip I. Sangotra



DEPARTMENT OF MECHANICAL ENGINEERING

Nagar Yuwak Shikaban Sanstha's

YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,

(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Naggur University, Naggor)

NAGPUR - 441 110 2018-2019

Certified that the project report entitled "IMPROVEMENT IN EFFICIENCY OF SOLAR AIR COOLER" has been successfully completed by KETAN INDURKAR, ANSHUL TAKLIKAR and PRANAY MAHAJAN under the guidance of PROF. DILIP L. SANGOTRA in recognition to the partial fulfillment for the award of the degree of Bachelor of Engineering in Mechanical Engineering, Yeshwantrao Chavan College of Engineering(in Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University).

Prof. Dilip I. Sangotra

(Guide)

Dr. S.S. Chaudhari

(HOD, ME Dept.)

Signature of External Examiner:

Name Dr. Mileon Awall

Date of Examination: (1512019

#### \*DESIGN AND FABRICATION OF COTTON STALKS CUITING AND CRUSHING TOOL FOR POWER TILLER"

This project report is submitted to

Yeshwantrao Chavan College of Engineering

(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Mahuraj Nagpur University)

In partial fulfillment of the requirement for

the award of the degree

01

Master of Technology in CAD/CAM

By

Prashant Atmaramji Khedkar

Under the guidance of

Dr. S. S. Khedkar



#### DEPARTMENT OF MECHANICAL ENGINEERING

Nagar Yuwak Shikshan Sanstha

YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING, NAGPUR - 441110

(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)

Session 2018-19

#### "DESIGN AND FABRICATION OF COTTON STALKS CUTTING AND CRUSHING TOOL FOR POWER TILLER"

This project report is submitted to

Yeshwantrao Chavan College of Engineering

(An Autonomous Institution Affiliated to Rashtrasant Tukudoji Maharaj Nagpur University)

In partial fulfillment of the requirement for

the award of the degree

Of

Master of Technology in CAD/CAM

By

Prashant Atmaramji Khedkar

Under the guidance of

Dr. S. S. Khedkar



#### DEPARTMENT OF MECHANICAL ENGINEERING

Nagar Yuwak Shikshan Sanstha

#### YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING, NAGPUR - 441110

(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)

Session 2018-19

#### "PERFORMANCE INVESTIGATIONS OF SOLAR WATER PUMPING SYSTEM USING SCREW PUMP"

This project report is submitted to

Yeshwantrao Chavan College of Engineering
(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

In partial fulfillment of the requirement

For the award of the degree

Of
Master of Technology in
CAD/CAM

By

Mustaquim Shakeel Sheikh

Under the guidance of

Dr. R. B. Lhadge



#### DEPARTMENT OF MECHANICAL ENGINEERING

Nagar Vawak Shikshan Sanstha's -

#### YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING.

(An autonomous institution affiliated to Rashtrasant Tukadoji Mahacaj Nagpur University, Nagpur)
NAGPUR - 441 110

## "PERFORMANCE INVESTIGATIONS OF SOLAR WATER PUMPING SYSTEM USING SCREW PUMP"

This project report is submitted to

Yeshwantrao Chavan College of Engineering

(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

In partial fulfillment of the requirement

For the award of the degree

Of

Master of Technology in CAD/CAM

By

Mustaquim Shakeel Sheikh

Under the guidance of

Dr. R. B. Chadge



#### DEPARTMENT OF MECHANICAL ENGINEERING

Nagar Yuwak Shikshan Sanstha's

#### YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,

(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)

NAGPUR - 441 110

#### DEPARTMENT OF MECHANICAL ENGINEERING

STUDENT PROJECT EXPENSES						
Year	Name of the non government funding	Purpose of the Grant	Funds/ Grants received in INR			
2018-19	S.D. KSHIRSAGAR	Being provision made towards student project expenses 18-19 of various faculty for mech. depatt.	3805.00			
2018-19	S.S. KHEDKAR	Being provision made towards student project expenses 18-19 of various faculty for mech. depatt.	50474.00			
2018-19	S.D. KSHIRSAGAR	Being provision made towards student project expenses 18-19 of various faculty for mech, depatt.	4478.00			
2018-19	R.B. CHADGE	Being provision made towards student project expenses 18-19 of various faculty for mech. depatt.	4044.00			
2018-19	D.Y.SAHARE	Being provision made towards student project expenses 18-19 of various faculty for mech. depatt.	17565.00			
2018-19	S.S. KHEDKAR	Being provision made towards student project expenses 18-19 of various faculty for mech. depatt.	32820.00			
2018-19	V.M. KORDE	Being provision made towards student project expenses 18-19 of various faculty for mech. depatt.	14053.00			
2018-19	V. M. KORDE	Being provision made towards student project expenses 18-19 of various faculty for mech. depatt.	15145.00			
2018-19	Chadge R B	Expenses Incurred for Student Project on "Experimental Investigation of Diff.Configuration on PV Module Array" Session 2016-17-Student of Mechanical Engg. Anuj Ingle[Chadge R B]	10880.00			

Dr. S S Chaudhari HOD ME br. S. S. Shaudhari

Hoad, Dept. Of Mechanical Engineering

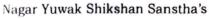
YCCE, Nappur



#### Department of Electrical Engineering

#### Reimbursement of project bill UG/PG student-18-19

Year	Name of Faculty	Purpose of grant	Funds/ Grants received (INR in lakhs)	COST CENTER
2018-19	(S.G. KADWANE)	being provision made towards student project expenses for the session of 18-19 by varius staff of Electrical engg.	0.06502	Electrical Engg
2018-19	(R.N. NAGPURE)	being provision made towards student project expenses for the session of 18-19 by varius staff of Electrical engg.	0.0506	Electrical Engg
2018-19	(S.P. NAGPURE)	being provision made towards student project expenses for the session of 18-19 by varius staff of Electrical engg.	0.08385	Electrical Engg
2018-19	(P.B. JOSHI)	being provision made towards student project expenses for the session of 18-19 by varius staff of Electrical engg.	0.07333	Electrical Engg
2018-19	(P.S. PATIL)	being provision made towards student project expenses for the session of 18-19 by varius staff of Electrical engg.	0.13243	Electrical Engg
2018-19	(S.P. ADHAU)	being provision made towards student project expenses for the session of 18-19 by varius staff of Electrical engg.	0.05418	Electrical Engg
2018-19	(P.M. MESHRAM)	being provision made towards student project expenses for the session of 18-19 by varius staff of Electrical engg.	0.02945	Electrical Engg
2018-19	(A.Y. FADNIS)	being provision made towards student project expenses for the session of 18-19 by varius staff of Electrical engg.	0.12908	Electrical Engg
2018-19	(A.P. MUNSHI)	being provision made towards student project expenses for the session of 18-19 by varius staff of Electrical engg.	0.13254	Electrical Engg
2018-19	(P.S. SHETE)	being provision made towards student project expenses for the session of 18-19 by varius staff of Electrical engg.	0.02128	Electrical Engg
2018-19	(R. M. MOHRIL)	being provision made towards student project expenses for the session of 18-19 by varius staff of Electrical engg.	0.06818	Electrical Engg
2018-19	(S.B. REWATKAR)	being provision made towards student project expenses for the session of 18-19 by varius staff of Electrical engg.	0.0801	Electrical Engg
2018-19	(P.S. SHETE)	being provision made towards student project expenses for the session of 18-19 by varius staff of Electrical engg.	0.08896	Electrical Engg
2018-19	(X.A. POTE)	being provision made towards student project expenses for the session of 18-19 by varius Page 207 of 313 staff of Electrical engg.	0.02814	Electrical Engg





Yeshwantrao Chavan College of Engineering 'An Autonomous Institution alfiliated to Rashtrasant Tukadoji Maharaj Nagpur University) Hingna Road, Wanadongri, Nagpur - 441 110

2018-19	(S.G. KADWANI)	being provision made towards student project expenses for the session of 18-19 by varius staff of Electrical engg.	0.06986	Electrical Engg
2018-19	(S.P. GAWANDE)	being provision made towards student project expenses for the session of 18-19 by varius staff of Electrical engg.	0.04162	Electrical Engg

(Dr. B. Y. Bayde) HOD, EL, YCCE

Project Courdinatur
U.V. Waghmare

### HYBRID POWER GENERATION USING SOLAR PANEL AND WIND TURBINE

#### This project report is submitted to Yeshwantrao Chavan College of Engineering

(An Autonomous Institution Affiliated to Rashtrasant Tukadoj Maharaj Nagpur University)

In partial fulfillment of the requirement

For the award of the degree

Of

#### Bachelor of Engineering in Electrical Engineering

By

Ankit A. Chumble Mahesh P. Vairagade

Mithun A. Wanjari Navinkumar R. Sahu

Sumit S. Shankarpure Virag G. Shivdharkar

Under the guidance of

Prof. V. R. Doifode



#### DEPARTMENT OF ELECTRICAL ENGINEERING

Nagar Yuwak Shikshan Sanstha's

#### YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,

(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

NAGPUR - 441 110

2018-2019

Page 209 of 313

Certified that the project report entitled

#### "HYBRID POWER GENERATION USING SOLAR PANEL AND WIND TURBINE"

has been successfully completed by

Ankit A. Chumble

Mahesh P. Vairagade

Mithun A. Wanjari

Navinkumar R. Sahu

Sumit S. Shankarpure

Virag G. Shivdharkar

Under the guidance of

Prof. V. R. Doifode

In recognition to the partial fulfillment for the award of the degree of Bachelor in Electrical Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

Prof. V. R. Doifode (Project guide)

Prof. U. V. Waghmare (Umare) (Project Coordinator)

Dr. B. Y. Bagde (HOD, EL Dept.)

Signature of External Examiner

Name

Date of Examination:

#### POWER GENERATION USING PIEZOELECTRIC MATERIALS BY PLACING IT BENEATH THE SLEEPERS OF RAILWAY TRACKS

This project report is submitted to

Yeshwantrao Chavan College of Engineering, Nagpur

(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

In partial fulfillment of the requirement

For the award of the degree

01

Bachelor of Engineering in Electrical Engineering

Hy

Mayur Wanjari

Parikshit Balpande

Nitesh Charpe

Pawan Amle

Om Prakash Sharma

Rushikesh Vele

Anand Gawande

under the guidance of

Prof. Mrs. Xma R. Pote



#### DEPARTMENT OF ELECTRICAL ENGINEERING

Nagar Yuwak Shikshan Sanstha's

#### YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING

(An Autonomous Institution Affiliated To Rashtrasant Tukadoji Maharaj Nagpur University)

NAGPUR – 441 110 2018-2019

Certified that the project report entitled "POWER GENERATION USING PIEZOELECTRIC MATERIALS BY PLACING IT BENEATH SLEEPERS OF RAILWAY TRACKS" has been successfully completed by

Mayur Wanjari

Parikshit Balpande

Nitesh Charpe

Pawan Amle

Om Prakash Sharma

Rushikesh Vele

Anand Gawande

under the guidance of

Prof. Mrs. Xma R. Pote

in recognition to the partial fulfilment for the award of the degree of Bachelor of Engineering in Electrical Engineering. Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University).

Dr. M. V. Palandurkar

(Co-Guide)

Prof. Mrs. Xma R.Pote

(Guide, EL Dept.)

Prof. U. V. Waghmare (umre)

(Project Co-ordinator)

Dr.B. Y. Bagde

(HoD, EL Dept.)

Signature of External Examiner

Name:

Date of Examination:

Analysis for replacing existing steam dryer with energy efficient Electric dryer also design a SLD for CCL and power saving opportunities by implementing a variable frequency drive for cold well pump at JSW Kalmeshwar, Nagpur

This project report is submitted to

#### Yeshwantrao Chavan College of Engineering

(An Antonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)
In partial fulfillment of the requirement

For the award of the degree

01

Bachelor of Engineering in Electrical Engineering

By

1. Deepak Chaffe

3. Dhananjay Pimpalkar

2. Payan Rokade

4. Shubham Balki

Under the guidance of

Prof. P. S. Shete

(Assistant Professor, YCCE)

&

Mr. S. Chauhan

(Senior Manager JSW Steel Ltd.)



#### DEPARTMENT OF ELECTRICAL ENGINEERING

Nagar Yuwak Shikshan Sanstha's

#### YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,

(An autonomous institution affiliated to Rashtrasant Tukdoji Maharaj

University, Nagpur)

NAGPUR – 441 110

Certified that the project report entitled "Analysis for replacing existing steam dryer with energy efficient electric dryer also design a SLD for CCL and power saving opportunities by implementing a variable frequency drive for cold well pump at JSW, Kalmeshwar, Nagpur" has been successfully completed by Deepak M. Chafle, Pavan R. Rokade, Shubham T. Balki and Dhananjay G. Pimpalkar under the guidance of Prof. P. S. Shete in recognition to the partial fulfillment for the award of the degree of Bachelor of Engineering in Electrical Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University).

Prof. P.S. Shete (Project Guide) Mr. S. Chauhan (Project Guide)

G80206001

Prof. P.B. Joshi

Prof. P.B. Joshi (Special-Term In charge) Dr. B.Y. Bagde (HOD, EL Dept.)

Signature of External Examiner

Name: MS. S. D. ABHYANKAR

Date of Examination: 06/05/19

## Study of 400 KV EHV Substation at Durgapur

This project report is submitted to

Yeshwantrao Chavan College of Engineering

(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

> In partial fulfillment of the requirement For the award of the degree

> > of

Bachelor of Engineering in Electrical Engineering

By

Nihal Kumar

Under the guidance of

Dr. B.Y.Bagde (HOD, Electrical, YCCE)

&

Mr Palak Mani (Dy. Manager, O & M, PGCIL)



#### DEPARTMENT OF ELECTRICAL ENGINEERING

Nagar Yuwak Shikshan Sanstha's
YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,
(An autonomous institution affiliated to Rashtrasant Tukdoji Maharaj University,
Nagpur)

NAGPUR - 441 110 2018-2019

Durgapur" has been successfully completed by Nihal Kumar under the moderne of Dr. B.Y Bagde & Mr. Palak Mani in recognition to the narral fulfillment for the award of the degree of Bachelor of Engineering in Hertrical Engineering. Veshwantran Chavan College of Engineering (An Autonomous Institution Affiliated to Rushtravant Tukdoji Maharaj Nagpur University).

Dr. B.Y.Bagde

(Guide) and (HOD-Electrical Department)

Mr. Palak Mani (Project Guide)

Prof. P.B Joshi

(Special Term Incharge)

Signature of External Examiner

Name PRANAV AMBASELKAR

Date of Examination: 06 May - 2019

# TOTAL PRODUCTIVE MAINTENANCE (TPM), ENERGY CONSERVATION AND ENERGY MANAGEMENT SYSTEM

(TAL Manufacturing Solution Limited, SEZ MIHA 9, Seggar)

This project report is submitted to

Yeshwantrao Chavan College of Engineering, Naggar (An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Naggar I, neverily) In partial fulfillment of the requirement

For the award of the degree

01

Bachelor of Engineering in Electrical Engineering

By

Akash M. Titirmare

Dhanshri S. Balapure

Kunal V. Nimje

Kisan R. Mesare

Mrunali V. Tarale

Pranjali G. Bhute

Swati A. Thakur

Swati U. Iwarkar

Tejaswi S. Chandekar

Under the guidance of

Prof. P.B. Joshi (Guide)

&

Mr. T.M. Manjunath (Co-guide)



Nagar Yuwak Shikshan Sanstha's

## YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,

(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)

NAGPUR - 441 110 2018-2019

Page 217 of 313

Certified that the project report entitled "TOTAL PRODUCTIVE MAINTENANCE, ENERGY CONSERVATION AND MANAGEMENT SYSTEM" has been successfully completed by

Pranjali Bhute

Mrunali Tarale

Akash Titirmare

Dhanshri Balapure

Kisan Mesare

Swati Thakur

Kunal Nimje

Swati Iwarkar

#### Tejaswi Chandekar

In recognition of partial fulfillment for the award of the degree of Bachelor of Engineering in Electrical Engineering, YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University), Nagpur.

Prof. P.B.Joshi

(Project Guide)

Mr. T. M. Manjunath

(Co-Guide)

Prof. P.B.Joshi

(Special Term Incharge)

(HOD-ELDept.)

Dr. B.Y. Bagde

Signature of External Examiner :-

Name:-

Date of Examination :-

## SMART CONTROLLING SYSTEM

This project report is submitted to

Yeshwantrao Chavan College of Engineering

(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

In partial fulfillment of the requirement

For the award of the degree

01

## Bachelor of Engineering in ELECTRICAL ENGINEERING

By

Arpit Dhok

Ritesh Ranjan

Shashi Ranjan

Abhishek Dhumal

Rutvik Choudhari

Suraj Askar

Vaibhav Pajai

Under the guidance of

Prof R. M. Gimonkar

Co-Guided by

Prof. S. Y. Ambatkar



### DEPARTMENT OF ELECTRICAL ENGINEERING

Nagar Yuwak Shikshan Sanstha's

## YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,

(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)

NAGPUR - 441 110

2018-2019

ı

Page 219 of 313

Certified that the project report entitled - SMART CONTROLLING SYSTEM - has been successfully completed by

Arpit Dhok

Abhishek Dhumal

Ritesh Ranjan

Rutvik Choudhari

Shashi Ranjan

Suraj Askar

Vaibhay Pajai

under the guidance of Prof. R. M. Gimonkar And co-guided by Prof. S.Y. Ambatkar in recognition to the partial fulfillment for the award of the degree of Bachelor of Technology in Electrical Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

Prof. U. V. Waghmare (Umre)

(Co-ordinator)

of R. M. Gimonkar

Dr. B. Y. Bagde

Signature

Prof.S.Y.Ambatkar

(Project Guide)

(HOD, EL Dept.)

(Project Co-guide)

Name Dr. P. D. Deb-C

Date of Examination: 6.05.19

# ENERGY CONSERVATION BY AUTOMATIC SWITCHING OF CHARGING STATION

This project report is submitted to

Yeshwantrao Chavan College of Engineering

(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

In partial fulfillment of the requirement

For the award of the degree

of

Bachelor of Engineering in Electrical Engineering

Ву

Nitesh Jadhao Ashwini Karpe

Sarthak Belekar Pragati Kadhav

Suraj Darwalkar Sakshi Raut

Under the guidance of

PROF. T. D. TEMBHEKAR



#### DEPARTMENT OF ELECTRICAL ENGINEERING

Nagar Yuwak Shikshan Sanstha's

YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING.

(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)

NAGPUR -441110

2018-2019

## Certificate of Approval

Certified that the project report entitled "I nergy Conservation By Automatic Switching of Charging Station" has been successfully completed by Nitesh Jadhao, Sarthak Belekar, Suraj Darwalkar, Ashwint Karpe, Pragati Kadhav, Sakshi Raut under the guidance of Prof. 1. D. Tembhekar in recognition to the partial fulfillment for the award of the degree of trachelor of Engineering in Electrical Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

Mr. P.S.Gadmade

Sylmont

(Co-Guide)

Prof. T. D. Tembhekar

· Il ambhatan

(Guide)

Prof. U. V. Waghmare (Umre)

(ProjectCoordinator)

Dr. B. Y. Bagde

(HOD, Electrical Dept.)

Signature of External Examiner

Name: Prasonna Prabharras Tilarmore

Date of Examination: 6/5/19

## SMART TECHNOLOGY FOR CLASSROOM

## This project report is submitted to

## Yeshwantrao Chavan College of Engineering

(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

In partial fulfillment of the requirement For the award of the degree

Of

Bachelor of Engineering in Electrical Engineering

Bv

Amita A. Narnaware

Priyanka S. Dabhade

Kailas R. Londhe

Sonu T. Thenge

Karishma J. Atram

Vivek S. Pawar

Under the guidance of

Prof. A. S. Lilhare



#### DEPARTMENT OF ELECTRICAL ENGINEERING

Nagar Yuwak Shikshan Sanstha's

## YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,

(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)

NAGPUR - 441 110

2018-2019

i

C'ertified that the project report entitled " SMART TECHNOLOGY FOR CLASS ROOM " has been successfully completed by

Amita A. Narnaware

Priyanka S. Dabhade

Kailas R. Londhe

Sonn T. Thenge

Karishma J. Atram

ViveleS, Pawar

In recognition to the partial fulfillment for the award for degree of bachelor in Ecctrical Engineering, Yeshwantrao Chavan College Of Engineering (An Autonomous Institution Affiliated To Rashtrasant Tukadoji Maharaj Nagpur University), Nagpur.

Signature

(Project Coordinator)

Prof. U.V. Waghmare (Umare)

Dr. B.Y. Bagade

(HOD, EL Dept.)

Prof. Atul S.Lilhare

(Project Guide)

Signature of External Examiner

Name

Date of Examination:

# TO STUDY MANUFACTURING OF ELECTRICAL CONTROL PANEL.

## (SHREE BALAJI INDUSTRIES, NAGPUR)

This project report is submitted to

Yeshwantrao Chavan College of Engineering

(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

In partial fulfillment of the requirement For the award of the degree

Of

Bachelor of Engineering in Electrical Engineering

Bv

Vaibhav G. Talkhande

Under the guidance of

Prof. Sandeep R. Gaigowal (Guide)

&

Mr. Pravin V. Gadve (Co-Guide)



#### DEPARTMENT OF ELECTRICAL ENGINEERING

Nagar Yuwak Shikshan Sanstha's

#### YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING

(An Autonomous Institution Affiliated To Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)

NAGPUR - 441 110 2018-2019

> I Page 225 of 313

Certified that the project report entitled "TO STUDY MANUFACTURING ELECTRICAL CONTROL PANEL" has been successfully completed by Vaibhav Gunwant Talkhande under the guidance of Prof. S. R. Gaigowal (Guide) and Mr. P. V. Gadve (Co-Guide) in recognition to the partial fulfillment for the award of the degree of Bachelor of Technology in Electrical Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University).

Prof. S. R. Gaigowal

(Guide)

Mr. P. V. Gadve

(. 6-1)

(Co- Guide)

Prof. P. B. Joshi

(Special Term Incharge)

Dr. B. Y. Bagde

(HOD, EL'Dept.)

Signature of External Examiner

Name B.S. NETANRAS

Date of Examination: 08/05/2019

Analysis for replacing existing steam driver with energy efficient Electric driver also design a SLD for CCL and power saving approximation by implementing a variable frequency drive for cold well pump at JSW Kalmestovar, Nagpur

The gregard region is submitted to

Yeahnader an Charles Cullege of Engineering

Le partie (a Comme of the requirement

for the board of the degree

1

Bachelor of Lagineering in Electrical Engineering

BI

1. Deepak Chafle

3. Dhananjay Pimpalkar

2. Pan an Rokaide

4. Shubham Balki

I nder the guidance of

Prof. P. S. Shete

(Assistant Professor, YCCE)

2

Mr. S. Chauhan

(Senior Manager JSW Steel Ltd.)



## DEPARTMENT OF ELECTRICAL ENGINEERING

Nagar Yuwak Shikshan Sanstha's

## YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,

(An automomous institution affiliated to Rashtrasant Tukdoji Maharaj

University, Nagpur)

NAGPUR - 441 110 2018-2019



Certified that the project report entitled "Analysis for replacing existing steam dryer with energy efficient electric dryer also design a SLD for CCL and power saving opportunities by implementing a variable frequency drive for cold well pump at JSW, Kalmeshwar, Nagpur has been successfully completed by Deepak M. Chafle, Pavan R. Rokad Shubham T. Balki and Dhananjay G. Pimpalkar under the guidance of Prof. S. Shete in recognition to the partial fulfillment for the award of the degree Bachelor of Engineering in Electrical Engineering, Yeshwantrao Chavan Colle of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukd Maharaj Nagpur University).

Prof. P.S. Shete (Project Guide)

.

Mr. S. Chauhan (Project Guide)

( FERENIES)

Prof. P.B. Joshi (Special-Term In charge) Dr. B.Y. Bagde (HOD, EL Dept.)

Signature of External Examiner

Name: Mt. S. D. ABHYANKAR

Date of Examination: 06/05/2019

# COMPRESSED AIR ENERGY STORAGE SYSTEM (An Alternate Solution for Energy Storage Methods)

## This project report is submitted to Yeshwantrao Chavan College of Engineering, Nagpur

(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)

in partial fulfillment of the requirement

for the award of the degree

of

Bachelor of Engineering in Electrical Engineering

by

Krunal Urade

Mayur Deshmukh

Tushar Bhoyar

Sagar Mehar

Tushar Girade

Ramchandra Sarode

Shruti Tinghase

under the guidance of

Prof. G. C. Gondhalekar



#### DEPARTMENT OF ELECTRICAL ENGINEERING

Nagar Yuwak Shikshan Sanstha's

## YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,

(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)

NAGPUR - 441 110

2018-2019

Certified that the project report entitled

## "COMPRESSED AIR ENERGY STORAGE SYSTEM

(An Alternate Solution for Energy Storage Methods)" has been successfully completed by

Krunal Urade

Mayur Deshmukh

Tushar Bhoyar

Sagar Mehar

Tushar Girade

Ramchandra Sarode

### Shruti Tinghase

In recognition to the partial fulfillment for the award of the degree of Bachelor in Electrical Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)

Signature

Prof. U.V. Waghmare

(Project Co-ordinator)

Dr. B. Y. Bagade

(HOD, EL Dept.)

Signature

Prof.G.C.Gondhalekar

(Project Guide)

Signature & External Examiner:

Name: Prasarna Prabhakarrao Titarmare
Date of examination: 6 May 2019

# ENERGY CONSERVATION USING VARIABLE FREQUENCY DRIVE

## This project report is submitted to Yeshwantrao Chavan College of Engineering, Nagpur

(An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

In partial fulfillment of the requirement For the award of the degree

of

Bachelor of Engineering in Electrical Engineering

by

Ashlesha Shrirao

Raksha Mahajan

Aishwarya Giri

Medhavi Meshram

Rashika Nanotkar

Yashasvi Dhamane

Under the guidance of

Prof. N. T. Sahu (Guide EL. Dept.)

Er. Amol Bhalerao Er. Ankush Kamdi (Co-guide)



## DEPARTMENT OF ELECTRICAL ENGINEERING

Nagar Yuwak Shikshan Sanstha's
YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING

(An Autonomous Institution Affiliated To Rashtrasant Tukadoji Maharaj Nagpur University)

NAGPUR - 441 110 2018-2019

Certified that the project report entitled "ENERGY CONSERVATION USING VARIABLE FREQUENCY DRIVE" has been successfully completed by

Ashlesha Shrirao

Raksha Mahajan

Aishwarya Giri

Medhavi Meshram

Rashika Nanotkar

Yashasvi Dhamane

in recognition to the partial fulfilment for the award of the degree of Bachelor of Engineering in Electrical Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University).

(Guide, EL Dept.)

Er. Amol Bhalerao

(Co-Guide, Asst Er. Khaperkheda Thermal power station)

Er.Ankush Kamdi

(Co-Guide, Sr. Service Engineer,

Dr. B.Y.Bagde

(HOD, EL' Dept.)

Ganesh Automation)

Prof.U.V.Waghmare (Umre)

(Project Co-ordinator)

Signature of External Examiner

Name: BISINEPAMRAD

Date of Examination: 06/05/2019

## BLADELESS WIND TURBINE

# This project report is submitted to Yeshwantrao Chavan College of Engineering

(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)

In partial fulfillment of the requirement For the award of the degree

Of

Bachelor of Engineering in Electrical Engineering

By

Ambika Kulkarni

Niharika Yedekar

Animesh Khairkar

Shubham Badure

Shubham Bawaskar

under the guidance of

Dr. R. M. Moharil



#### DEPARTMENT OF ELECTRICAL ENGINEERING

Nagar Yuwak Shikshan Sanstha's

## YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,

(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur

NAGPUR - 441 110

2018-2019

Page 233 of 313

Certified that the project report entitled "BLADELESS WIND TURBINE" has been successfully completed by

Ambika Kulkarni

Niharika Yedekar

Animesh Khairkar

Shubham Badure

Shubham Bawaskar

under the guidance of

Dr. R. M. Moharil

In recognition to the partial fulfillment for the award of the degree of Bachelor in Electrical Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University).

Dr. R. M. Moharil.

(Project Guide)

5 =

Prof. U. V. Waghmare (Umare)

(Project Coordinator)

Dr. B. Y. Bagde

(HOD, EL Dept.)

Signature of External Examiner

Name Mr. S.D. Abyan Kar

Date of Examination: 06/05/2019

## SUPERCAPACITOR BASED METRO TRAIN

This project report is submitted to

Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj University, Nagpur)

> In partial fulfillment of the requirement For the award of the degree

> > of

Bachelor of Engineering in Electrical Engineering

Ashlesha Satpute Sayali Thawkar Pankaj Waghdhare

Priyanka Madgulla **Bhagesh Mathure** Sampresh Lipte

Shashwat Dhok

Under the guidance of

Dr. B.Y.Bagde



## **DEPARTMENT OF ELECTRICAL ENGINEERING**

Nagar Yuwak Shikshan Sanstha's YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,

(An Autonomous institution affiliated to Rashtrasant Tukadoji Maharaj University. Nagpur)

> NAGPUR - 441 110 2018-2019

Certified that the project report entitled "Supercapacitor Based Metro Train" has been successfully completed by Ashlesha Satpute, Priyanka Madgulla, Sayali Thawkar, Bhagesh Mathure, Pankaj Waghdhare, Sampresh Lipte, Shashwat Dhok under the guidance of Dr.B.Y.BAGDE in recognition to the partial fulfillment for the award of the degree of Bachelor of Engineering in Electrical Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj University, Nagpur).

Dr. B.Y.Bagde

(Guide) and (HOD- Electrical Department)

Prof. U.V. Waghmare (Umre) (Project Coordinator)

Signature of External Examiner

Name

Date of Examination:

## INTELLIGENT WHEELCHAIR

This project report is submitted to

Yeshwantrao Chavan College of Engineering

(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

In partial fulfilment of the requirement

For the award of the degree

Of

Bachelor of Engineering in Electrical Engineering

By

Kamini Patil

Pradnya Raut

Samruddhi Dewalkar

Shivani Lanjewar

Snehal Patil

Kaustubh Chichate

Rushikesh Warkhede

Under the guidance of

Prof. Gaurav Gondhalekar



#### DEPARTMENT OF ELECTRICAL ENGINEERING

Nagar Yuwak Shikshan Sanstha's

YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,

(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)

NAGPUR - 441110

2018-2019

Certified that the project report entitled "Intelligent Wheelchair" has been successfully completed by

Kamini Patil

Pradnya Raut

Samruddhi Dewalkar

Shivani Lanjewar

**Snehal Patil** 

Kaustubh Chichate

Rushikesh Warkhede

nder the guidance of **Prof. Gaurav Gondhalekar** in recognition to the partial fulfilment for the award of the degree of Bachelor of Engineering in Electrical Engineering.

Yeshwantrao Chavan College of Engineering

(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur

University)

Prof. Gaurav C. Gondhalkar (Guide)

Ujwala V. Waghmare (Umre)

(Project Coordinator)

Dr. B. Y. Bagde

(HOD,EL Dept.)

Signature of External Examiner

Name:

P.P. Titarmare

Date:

06/05/2019

# WIRELESS MONITORING AND CONTROLLING OF TRANSFORMER OIL TEMPERATURE

This project report is submitted to

Yeshwantrao Chavan College of Engineering

(An Autonomous Institution Affiliated to Rashtrasant Tukudaji Maharaj Nagpur University, Nagpur)

In partial fulfillment of the requirement for the award of the degree

01

Bachelor of Engineering in Electrical engineering

 $B_V$ 

Abhijeet Sawalkar

Ashwin Girhepunje

Kunal Bopate

Runal Lokhande

Subham Durgey

Tushar Bawner

Tushar Bhakre

Under the guidance of

Dr. R. M. MOHARIL



#### DEPARTMENT OF ELECTRICAL ENGINEERING

Nagar Yuwak Shikshan Sanstha's

#### YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,

(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)

NAGPUR - 441 110

2018-2019



Certified that the project report entitled "Wireless Monitoring and Controlling of Transformer Oil Temperature" has been successfully completed by Abhijeet Sawalkar. Ashwin Girhepunje, Kunal Bopate, Runal Lokhande, Subham Durgey, Tushar Bawner and Tushar Bhakre under the guidance of Dr. R. M. Moharil in recognition to the partial fulfillment for the award of the degree of Bachelor of Engineering in Electrical Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)

Dr. R. M. Moharil

(Guide)

Prof. U.V. Waghmare (Umre)

(Project Co-ordinator)

Dr.B.Y.Bagde

(Head of EL, Dept.)

Signature of External Examiner

Name

Date of Examination:

## ADVANCED SOLAR PUMPING SYSTEM

This project report is submitted to

Yeshwantrao Chavan College of Engineering, Nagpur

(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)
in partial fulfillment of the requirement

for the award of the degree

of

Bachelor of Engineering in Electrical Engineering

By

Sumit D. Meshram Pratik K. Dahake

Tanmay B. Fulzele

Pranay M. Bhujbal Saurabh V. Kapse Adesh R. Bobde

under the guidance of

Prof. S R. Gaigowal



#### DEPARTMENT OF ELECTRICAL ENGINEERING

Nagar Yuwak Shikshan Sanstha's

## YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,

(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)

NAGPUR - 441 110 2018-2019

i

Certified that the project report entitled "ADVANCED SOLAR PUMPING SYSTEM"has been successfully completed by

Sumit D. Meshram

Pranay M. Bhujbal

Pratik K. Dahake

Saurabh V. Kapse

Tanmay B. Fulzele

Adesh R. Bobade

in recognition to the partial fulfillment for the award of the degree of Bachelor in Electrical Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University), Nagpur.

Prof. S. R. Gaigowal

(Project Guide)

Prof. U. V. Waghmare (umre)

(Project Co-ordinator)

Dr. B. Y. Bagde

(HoD, EL Dept.)

Signature of External Examiner:

Name: P.10. Torono coo

Date of Examination: 06/05/19

## IOT BASED SMART ENERGY METER

This project report is submitted to Yeshwantrao Chavan College of Engineering

(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

In partial fulfillment of the requirement For the award of the degree

of

Bachelor of Engineering in Electrical Engineering

 $B_{V}$ 

Mrinali Mankar

Nikita Patil

Prachi Gourkhede

Shradha Suryawanshi

Yashoda Manthanwar

Kaustubh Dane

Latit Munne

Akanksha Dhabarde

Ankita Dharmadhikari

Under the guidance of

Prof. P. S. Shete

Prof. N. U. Sambhe





#### DEPARTMENT OF ELECTRICAL ENGINEERING

Nagar Yuwak Shikshan Sanstha's

## YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING

(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University Nagpur)

NAGPUR - 441 110 2018-2019

Certified that the project report entitled "IoT BASED SMART ENERGY METER" has been successfully completed by

Mrinali Mankar

Nikita Patil

Prachi Gourkhede

Shradha Suryawanshi

Yashoda Manthanwar

Kaustubh Dane

Latit Munne

Akanksha Dhabarde

Ankita Dharmadhikari

under the guidance of

Prof. P. S. Shete

Prof. N. U. Sambhe

In recognition to the partial fulfillment for the award of the degree of Bachelor in Electrical Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University), Nagpur.

(Guide EL Dept.)

Prof. U.V. Waghmare (Umre) (Project Co-Ordinator)

Prof. N.U. Sambhe (Guide CT Dept.)

> Dr. B.Y. Bagde (HoD EL Dept.)

Signature of External Examiner
PRANAV AMBASELKAR

Date of Examination 06 - May - 2019

## AURDINO BASED PICK AND PLACE ROBOTIC VEHICLE

THIS PROJECT REPORT IS SUBMITTED TO

Yeshwantrao Chavan College of Engineering Nagpur

(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

## In partial fulfillment of the requirement

For the award of degree

Of

Bachelor of Engineering in Electrical Engineering

Akshay Khonde Kalyani Gaykwad

Mausami Rahate Tushar Wankhede

Ruchika Budhe. Suraj Wakde.

Abhijeet Mandourney

Under the guidance of

Dr. S S GOKHALE.



#### DEPARTMENT OF ELECTRICAL ENGINEERING

Nagar Yuwak Shikshan Sanstha's

Yeshwantrao Chavan College Of Engineering Nagpur

(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

NAGPUR -441 110

2018-2019



## Certificate Of Approval

rtified that the project report titled "ARDUINO BASED PICK AND PLACE OBOTIC VEHICLE" has been successfully completed by

Akshay Khonde

Kalyani Gayakwad

Mausami Rahate

Tushar Wankhede

Ruchika Budhe

Suraj Wakde

Abhijeet Mandourney

recognition to the partial fulfilment for the award of the degree of Bachelorof engineering in ectrical Engineering, Yeshwantrao Chavan College of Engineering (An solchalo. tonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University).

Prof. U.V Waghmare (Umre)

(Project Coordinator)

Dr. S. S. Gokhle

(Project guide)

Signature of External

Name Dr. D. D. Debol

Date 6/3719

Dr.B .Y Bagde

(HOD, Electrical Dept.)

## PLC BASED AUTOMATED BOTTLE FILLING PLANT

This project report is submitted to

Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rushtrasant Tukadoji Maharaj Nagpur University)

In partial fulfillment of the requirement

For the award of the degree

01

Bachelor of Engineering in Electrical Engineering

By

Akshata Matte

Prisha Gajbhiye

Dhanashree Baxy

Pratiksha Morey

Prashant Umak

Onkar Gajbhe

Under the guidance of

Prof. J.A.Shaikh (Guide)

8

Prof.P.B.Joshi (Co-Guide)



#### DEPARTMENT OF ELECTRICAL ENGINEERING

Nagar Yuwak Shikshan Sanstha's

YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING, An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur) NAGPUR – 441 110

2018-2019

Certified that the project report entitled "PLC BASED AUTOMATED BOTTLE FILLING PLANT", has been successfully completed by

Akshata Matte

Prisha Gajbhiye

Dhanashree Baxy

Pratiksha Morey

Prashant Umak

Onkar Gajbhe

In recognition of partial fulfillment for the award of the degree of Bachelor of Engineering in Electrical Engineering, YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING (An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University), Nagpur.

Prof. Shaikh

(Project Guide)

Prof. P. B .Joshi

(Co-Guide)

Prof. U. V. Waghmare

(Project Co-ordinator)

Signature of External Examiner

Name: Branay Ambasel Kare

Date of Examination: 6/5/19

Dr. B.Y. Bagde (HOD-EL Dept.)

# UPGRADATION OF MONORAIL CARRIER SYSTEM IN INDO RAMA SYNTHETICS INDIA LTD.

This project report is submitted to

Yeshwantrao Chavan College of Engineering

(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

In partial fulfillment of the requirement

For the award of the degree

of

**Bachelor of Engineering in Electrical Engineering** 

By

**Durgesh Shende** 

Nayan Chavhan

Under the guidance of

Prof. V R Doifode

Mr. Sunil Kale



#### DEPARTMENT OF ELECTRICAL ENGINEERING

Nagar Yuwak Shikshan Sanstha's

YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,

(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur

University, Nagpur)

NAGPUR - 441 110

2018-2019

Certified that the project report entitled "UPGRADATION MONORAIL CARRIER SYSTEM IN INDO RAMA SYNTHETICS (INDIA) LTD" has been successfully completed by Durgesh Shende and Nayan Chavhan under the guidance of Prof. V R Doifode in recognition to the partial fulfillment for the award of the degree of Bachelor of Engineering in Electrical Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University).

Prof. V R Doifode (Guide-EL Dept.) Mr. Sunil Kale (Co-Guide from INDO RAMA)

Prof. P B Joshi (Project Co-ordinator Special term) Dr. B Y Bagde (HOD EL Dept)

Signature of External Examiner

Name:-

Date of Examination:

## OPTIMIZATION OF POWER CONSUMPTION IN ROLLING MILLS & STANDARDISATION OF INSTRUMENTS AS PER PERFORMANCE AND APPLICATION

This project report is submitted to

Yeshwantrao Chavan College of Engineering

(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)
In partial fulfillment of the requirement
For the award of the degree

01

**Bachelor of Engineering in Electrical Engineering** 

By

Aniket Rokade

**Bhavesh Salve** 

Kshitij Tikle

Ranjeetkumar Rahangdale

Tanjil Sheikh

Under the guidance of

Prof. P. S. Shete

(Assistant Professor, YCCE)

&

Mr. J.H. Nigam

(Senior Manager, JSW Steel Ltd.)



#### DEPARTMENT OF ELECTRICAL ENGINEERING

Nagar Yuwak Shikshan Sanstha's

#### YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING

(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)

NAGPUR – 441 110 2018-2019

i

Certified that the project report entitled "OPTIMIZATION OF POWER CONSUMPTION IN ROLLING MILLS & STANDARDISATION OF INSTRUMENTS AS PER PERFORMANCE AND APPLICATION" has been successfully completed by

**Aniket Rokade** 

**Bhavesh Salve** 

Kshitij Tikle

Ranjeetkumar Rahangdale

#### Tanjil Sheikh

in recognition to the partial fulfillment for the award of the degree of Bachelor in Electrical Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University), Nagpur.

Prof. P.S. Shete (Project Guide) Mr. J.H. Nigam (Project Guide)

Prof. P.B. Joshi

(Special-Term In charge)

Dr. B. Y. Bagde (HOD, EL Dept.)

Signature of External Examiner:

Name: S. b. Abhyonkor

Date of Examination: 6.05.2019

## "REAL TIME ENERGY MONITORING SYSTEM FOR SMART OFFICES"

This project report is submitted to Yeshwantrao Chavan College of Enginnering

(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

In partial fulfilment of the requirement

For the award of the Degree

Of

**Bachelor of Engineering In Electrical Engineering** 

By

Jitendra Maind

Saurabh Dhole

**Tushar Nikose** 

Sagar Chikhale

**Shripad Channe** 

Vaibhav Khobragade

Under the guidance of

Prof. P.B. Joshi



### DEPARTMENT OF ELECTRICAL ENGINEERING YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,

(An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj ,Nagpur University,Nagpur)

NAGPUR - 441110 2018-2019

This is to certify that project report entitled "REAL TIME ENERGY MONITORING SYSTEM FOR SMART OFFICES" has been successfully completed by

Jitendra Maind

Sagar Chikhale

Saurabh Dhole

Shripad Channe

Tushar Nikose

Vaibhay Khobragade

under the guidance of Prof P.B. Joshi Guide) and Prof. N.M.Magrulkar (Co-Guide) in recognition to the partial fulfilment for the award of degree of Bachelor of technology in Electrical Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

(Project guide)

Prof. Nikhil Magrulkar

(Project Co Guide, CT-Dept)

Prof. U.V. Waghmare (Umre)

(Project Co-ordinator)

Prof. B.Y.

(HOD, EL Dept.)

Signature of External Examiner

Rahu D. Jawale

Date of Examination:

### MODELING, DESIGNING AND FABRICATION OF DC – DC CONVERTER

This project report is submitted to

#### Yeshwantrao Chavan College of Engineering

(An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)
In partial fulfillment of the requirement

For the award of the degree

Of

**Bachelor of Engineering in Electrical Engineering** 

By

Pranali Mhaiskar

Sonali Mate

Snehal Kurhade

Vaishnavi Wanmali

Snehal Thengane

Under the guidance of

Prof. R. N. NAGPURE



#### DEPARTMENT OF ELECTRICAL ENGINEERING

Nagar Yuwak Shikshan Sanstha's

#### YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,

(An autonomous institution affiliated to Rashtrasant Tukdoji Maharaj Nagpur University, Nagpur)

**NAGPUR 441 110** 

Certified that the project report entitled "MODELING, DESIGNING AND FABRICATION OF DC - DC CONVERTER" has been successfully completed by

Pranali Mhaiskar

Sonali Mate

Snehal Kurhade

Vaishnavi Wanmali

**Snehal Thengane** 

under the guidance of Prof. R. N. Nagpure in recognition to the partial fulfillment for the award of the degree of Bachelor of Engineering in Electrical Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University).

Prof. R. N. Nagpure

Kano spura

(Project Guide)

Prof. U. V. Waghmare

(Project Coordinator)

Dr. B. Y. Bagde

(HOD, Electrical Dept.)

Signature of External Examiner:

Name:

Date of Examination:

Prof. Gausan Gadge.

#### SOME DESIGN ASPECTS OF DC-DC CONVERTER

This project report is submitted to

Yeshwantrao Chavan College of Engineering

(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

In partial fulfillment of the requirement

For the award of the degree

Of

**Bachelor of Engineering in Electrical Engineering** 

Harshada M. Wath

Sanika V. Turang

Hrushikesh D. Sahare

Aashutosh D. Thakre

Nikhil A. Shanware

Shivam H. Talkhande

Under the guidance of

Dr. P. M. Meshram

Co-guide

Mr. V. R. Waghmare



#### DEPARTMENT OF ELECTRICAL ENGINEERING

Nagar Yuwak Shikshan Sanstha's

#### YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING

(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)

**NAGPUR - 441 110** 

Certified that the project report entitled "SOME DESIGN ASPECTS OF DC-DC CONVERTER" has been successfully completed by

Harshada M. Wath

Sanika V. Turang

Hrushikesh D. Sahare

Aashutosh D. Thakre

Nikhil A. Shanware

Shivam H. Talkhande

in recognition to the partial fulfillment for the award of the degree of Bachelor in Electrical Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University), Nagpur.

Dr. P. M. Meshram

(Project Guide)

Mr. V. R. Waghmare

(Project Co-Guide)

Mrs. U. V. Waghmare (Umre)

(Project Coordinator)

Mr. B. Y. Bagde

(HOD, EL Dept.)

Signature of External Examiner:

Name:

Date of Examination:

## OPTIMIZATION OF POWER CONSUMPTION IN ROLLING MILLS & STANDARDISATION OF INSTRUMENTS AS PER PERFORMANCE AND APPLICATION

This project report is submitted to

Yeshwantrao Chavan College of Engineering

(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)
In partial fulfillment of the requirement
For the award of the degree

Of

**Bachelor of Engineering in Electrical Engineering** 

By

Aniket Rokade

**Bhavesh Salve** 

Kshitij Tikle

Ranjeetkumar Rahangdale

Tanjil Sheikh

Under the guidance of

Prof. P. S. Shete

(Assistant Professor, YCCE)

&

Mr. J.H. Nigam (Senior Manager, JSW Steel Ltd.)



#### DEPARTMENT OF ELECTRICAL ENGINEERING

Nagar Yuwak Shikshan Sanstha's

#### YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING

(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)

NAGPUR – 441 110 2018-2019

i

Certified that the project report entitled "OPTIMIZATION OF POWER CONSUMPTION IN ROLLING MILLS & STANDARDISATION OF INSTRUMENTS AS PER PERFORMANCE AND APPLICATION" has been successfully completed by

Aniket Rokade

**Bhavesh Salve** 

Kshitij Tikle

Ranjeetkumar Rahangdale

#### Tanjil Sheikh

in recognition to the partial fulfillment for the award of the degree of Bachelor in Electrical Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University), Nagpur.

Prof. P.S. Shete (Project Guide) Mr. J.H. Nigam (Project Guide)

Prof. P.B. Joshi (Special-Term In charge) Dr. B. Y. Bagde (HOD, EL Dept.)

Signature of External Examiner:

Name: S.D. Abhyankor

Date of Examination: 6 05 2018

### UPGRADATION OF MONORAIL CARRIER SYSTEM IN INDO RAMA SYNTHETICS INDIA LTD.

This project report is submitted to

Yeshwantrao Chavan College of Engineering

(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur

University)

In partial fulfillment of the requirement

For the award of the degree

of

**Bachelor of Engineering in Electrical Engineering** 

Bu

**Durgesh Shende** 

Nayan Chavhan

Under the guidance of

Prof. V R Doifode

Mr. Sunil Kale



#### DEPARTMENT OF ELECTRICAL ENGINEERING

Nagar Yuwak Shikshan Sanstha's

YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,

(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur

University, Nagpur)

NAGPUR - 441 110

Certified that the project report entitled "UPGRADATION MONORAIL CARRIER SYSTEM IN INDO RAMA SYNTHETICS (INDIA) LTD" has been successfully completed by Durgesh Shende and Nayan Chavhan under the guidance of Prof. V R Doifode in recognition to the partial fulfillment for the award of the degree of Bachelor of Engineering in Electrical Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University).

Prof. V R Doifode (Guide-EL Dept.)

Mr. Sunil Kale (Co-Guide from INDO RAMA)

Prof. P B Joshi

(Project Co-ordinator Special term)

Dr. B Y Bagde (HOD EL Dept)

Signature of External Examiner

Name:-

Date of Examination:

# MICROCONTROLLER BASED AUTOMATED CONCENTRATING SOLAR COLLECTOR FOR PHOTOVOLTAIC APPLICATION

This project report is submitted to
Yeshwantrao Chavan College of Engineering, Nagpur

(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)
in partial fulfillment of the requirement

for the award of the degree

of

**Bachelor of Engineering in Electrical Engineering** 

by

Shubham Mandawkar

Shubham Zalke

Nishant Kumar

Sagar Rahangdale

Taresh Satikosare

under the guidance of

Prof. A.P. Munshi



#### DEPARTMENT OF ELECTRICAL ENGINEERING

Nagar Yuwak Shikshan Sanstha's

#### YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,

(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)

NAGPUR - 441 110 2018-2019

Certified that the project report entitled "MICROCONTROLLER BASED AUTOMATED CONCENTRATING SOLAR COLLECTOR FOR PHOTOVOLTAIC APPLICATION" has been successfully completed by

Shubham Mandawkar

Shubham Zalke

Nishant Kumar

Sagar Rahangdale

Taresh Satikosare

in recognition to the partial fulfillment for the award of the degree of Bachelor in Electrical Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University), Nagpur.

Prof. U.V. Waghmare (Umare)

(Project Coordinator)

Dr. B.Y. Bagde

(HOD, EL Dept.)

Prof. A.P Munshi

(Project Guide)

Signature of External Examiner:

Name:

1. m. lancarkar

Date of Examination: 06/05/19

## PERFORMANCE OF DC ELECTRIC SPRING IN DC MICROGRID

This project report is submitted to

Yeshwantrao Chavan College of Engineering

(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

In partial fulfillment of the requirement

For the award of the degree

Of

**Bachelor of Engineering in Electrical Engineering** 

By

**Angad Rakshak** 

Divyani Dhanvijay

Rupal Wagde

Ashwin Panchbuddhe

Ritesh Khobragade

Sujitkumar Hujare

Under the guidance of

Dr. S. P. Gawande



#### DEPARTMENT OF ELECTRICAL ENGINEERING

Nagar Yuwak Shikshan Sanstha's

#### YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING

(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)

NAGPUR - 441 110

# STUDY AND IMPLEMENTATION OF Z-SOURCE INVERTER BASED SOLAR PV SYSTEM FOR MOTORING APPLICATIONS WITH HARDWARE IMPLEMENTATION

This project report is submitted to

Yeshwantrao Chavan College of Engineering

(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

In partial fulfillment of the requirement

For the award of the degree

0f

#### **Bachelor of Engineering in Electrical Engineering**

By

AKSHAY DAMKE YUGANTAR FISKE

ANKET AWACHAT SARANG KHAPNE

AJINKYA NAGRARE GOVIND NAVGHARE

RAGHAVENDRA TIWARI

Under the guidance of

Prof. A. P. MUNSHI



#### DEPARTMENT OF ELECTRICAL ENGINEERING

Nagar Yuwak Shikshan Sanstha's

#### YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,

(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)

NAGPUR - 441 110

Certified that the project report entitled "STUDY AND IMPLEMENTATION OF Z-SOURCE INVERTER BASED PV SYSTEM MOTORING **FOR** APPLICATIONS WITH HARDWARE IMPLEMENTATION" has been successfully completed by Akshay Damke, Yugantar Fiske, Anket Awachat, Sarang Khapne, Ajinkya Nagrare, Govind Navghare, Raghavendra Tiwari under the guidance of Prof. A.P MUNSHI in recognition to the partial fulfillment for the award of the degree of Bachelor of Engineering in Electrical Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University).

> Mrs. U.V. Waghmare(Umre) (Project Co-ordinator)

(Project Guide)

Dr. B. Y.Bagde

(HOD, EL Dept.)

Signature of External Examiner:

Prof Ganzon Gordge; St. Vincent Pallotti, Negpus Name:

Date of Examination: 06/05/2019,

### DESIGN, ANALAYSIS AND FABRICATION OF HEXAPOD ROBOT

This project report is submitted to

Yeshwantrao Chavan College of Engineering, Nagpur

(An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

In partial fulfillment of the requirement

For the award of the degree

Of

**Bachelor of Engineering in Electrical Engineering** 

By

Pawan Bonde

Soham Lakhe

Jayesh Mandhaniya

Anup Kurve

Niranjan Dayal

**Anurag Raut** 

under the guidance of

Prof. Mrs. S.S. Kewte( Rewatkar )

Under the co guidance of

Prof. N.A. Pande



#### DEPARTMENT OF ELECTRICAL ENGINEERING

Nagar Yuwak Shikshan Sanstha's

#### YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING

(An Autonomous Institution Affiliated To Rashtrasant Tukadoji Maharaj Nagpur University)

**NAGPUR - 441110** 

(2018-2019)

Certified that the project report entitled "DESIGN, ANALYSIS AND FABRICATION OF HEXAPOD ROBOT" has been successfully completed by

Pawan Bonde

Soham Lakhe

Jayesh Mandhaniya

Anup Kurve

Niranjan Dayal

**Anurag Raut** 

under the guidance of

Prof. Mrs. S.S.Kewte (Rewatkar)

in recognition to the partial fulfilment for the award of the degree of Bachelor of Engineering in Electrical Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University).

Prof. N.A.Pande

(Co-Guide, ETC Dept.)

Prof. Mrs.S.S.Kewte (Rewatkar)

(Guide, ELDept.)

Prof. U. V. Waghmare (Umre)

(Project Co-ordinator)

Dr.B. Y. Bagde

(HoD, EL Dept.)

Name: For P. D. DeBre

Date of Examination: 6/5

### ADVANCED SAFETY AND SECURITY OF HOME

This project report is submitted to

Yeshwantrao Chavan College of Engineering, Nagpur

(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)
in partial fulfillment of the requirement

for the award of the degree

of

**Bachelor of Engineering in Electrical Engineering** 

By

Aditya D. Nimsarkar Amey R.Patil Saurabh B. Thote Atul S. Patil Shatul S.Shewade Nikhilesh N. Shrirao

Navjot Koreti

under the guidance of

Prof.B.S.Sudame



#### DEPARTMENT OF ELECTRICAL ENGINEERING

Nagar Yuwak Shikshan Sanstha's

#### YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,

(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)

**NAGPUR - 441 110** 

#### AUTOMATIC SOLAR TRACKING SYSTEM

#### This project report is submitted to

#### Yeshwantrao Chavan College of Engineering

(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

In partial fulfillment of the requirement

For the award of the degree

Of

Bachelor of Engineering in Electrical Engineering

By

Onkar Khati Piyush Lade

Sumedh Janbandhu Ashish Patne

Shubham Shinde Ankit Kumar

Gaurav Buwade

Under the guidance of

PROF.ROHAN KHONDE



#### DEPARTMENT OF ELECTRICAL ENGINEERING

Nagar Yuwak Shikshan Sanstha's

YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,

(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)

NAGPUR - 441 110

It is hereby certified that the project report entitled "AUTOMATIC SOLAR

TRACKING SYSTEM" has been successfully completed by

Onkar Khati

Piyush Lade

Sumedh Janbandhu

**Ashish Patne** 

Shubham Shinde

**Ankit Kumar** 

Gaurav Buwade

In recognition to the partial fulfilment for the award of the degree of Bachelor in electrical engineering YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING (An Autonomous Institution Affiliated to Rashtrashant

Tukadoji Maharj Nagpur University)

Prof.U.V.Waghmare(Umre)
(Project Coordinator)

Prof.Rohan Khonde

(Guide)

Dr. B.Y.Bagde

(HOD, EL Dept.)

Signature of External

Examiner Name

Rahul D. Jawale

Date of Examination:

#### SMART IRRIGATION MONITORING AND CONTROLLING SYSTEM

This project report is submitted to

Yeshwantrao Chavan College of Engineering

(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)
in partial fulfillment of the requirement
for the award of the degree

Of

#### **Bachelor of Engineering in Electrical Engineering**

By

Akash J. Bhati

Avirat C. Patil

Harshad N. Itankar

Kaustubh D. Satkar

Prajwal S. Wadafale

Rajat B. Pathrabe

Samrat R. Thuse

Vaibhay D. Gawande

Under the guidance of Mrs. Xma R. Pote

&

Under the co-guidance of Prof. M. B. Gaikwad



#### DEPARTMENT OF ELECTRICAL ENGINEERING

Nagar Yuwak Shikshan Sanstha's

YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING, NAGPUR

(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

**NAGPUR-441110** 

Certified that the project report entitled "Smart Irrigation Monitoring and Controlling System" has been successfully completed by

Akash J. Bhati

Prajwal S. Wadafale

Avirat C. Patil

Rajat B. Pathrabe

Harshad N. Itankar

Samrat R. Thuse

Kaustubh D. Satkar

Vaibhav D. Gawande

under the guidance of Mrs. Xma R. Pote in recognition to the partial fulfillment for the award of the degree of Bachelor of Engineering in Electrical Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University), Nagpur

Prof. M. B. Gaikwad (Co-Guide) (EL Engg, RCOEM)

Mrs. Xma R. Pote

(Project Guide)

Mrs. U. V. Waghmare (Umre)

(Project Coordinator)

Dr. B. Y. Bagde

(HoD EL Department)

Signature of External Examine

Name:

Date of Examination:

#### Design Advance Utility Box Using Peltier Plates

This project report is submitted to

Yeshwantrao Chavan College of Engineering

(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

In partial fulfillment of the requirement

For the award of the degree

Of

**Bachelor of Engineering in Electrical Engineering** 

by

Adarsh Singh

Shivani Meshram

Parul Patle

Shubham Ramteke

Prashant Gondule

Vibha Tembhare

Under the guidance of

Prof. P. S. Patil

Co-guided by

Er. Vishal Pahune

Manager, GMR Warora Energy Ltd



#### **DEPARTMENT OF Electrical Engineering**

Nagar Yuwak Shikshan Sanstha's

#### YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,

(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)

**NAGPUR - 441110** 

2018-2019

İ

Certified that the project report entitled "Design Advance Utility Box Using Peltier Plates" has been successfully completed by

Adarsh Singh

Shivani Meshram

**Prashant Gondule** 

Shubham Ramteke

Parul Patle

Vibha Tembhare

under the guidance of Prof P.S.Patil in recognition to the partial fulfillment for the award of the degree of Bachelor in Technology in Electrical Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

Prof. P. S. Patil (Project Guide)

Er. Vishal Pahune Manager, GMR Warora Energy Ltd (Project Co-guide)

Prof. U. V. Waghmare (Umre)

(Project Coordinator)

Dr B. Y. Bagde

(HOD,EL Dept)

Signature of External Examiner

Name

Rohul D. Jawale

Date of Examination

#### THE AUTOMATIC POWER FACTOR CONTROL USING ARDUINO UNO

#### This project report is submitted to

#### Yeshwantrao Chavan College of Engineering

(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

In partial fulfillment of the requirement

For the award of the degree

Of

**Bachelor of Engineering in Electrical Engineering** 

By

Saurabh Sharma

Abhimanyu Kankhar

Datta Madavi

**Jayant Chavan** 

Rakshanda Thote

Karishma Rade

Sharddha Kuparne

Under the guidance of

PROF.S.L.TIWARI



#### DEPARTMENT OF ELECTRICAL ENGINEERING

Nagar Yuwak Shikshan Sanstha's

#### YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,

(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)

NAGPUR - 441 110

## TOTAL PRODUCTIVE MAINTENANCE (TPM), ENERGY CONSERVATION AND ENERGY MANAGEMENT SYSTEM

(TAL Manufacturing Solution Limited, SEZ MIHAN, Nagpur)

This project report is submitted to

Yeshwantrao Chavan College of Engineering, Nagpur
(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)
In partial fulfillment of the requirement

For the award of the degree

Of

#### Bachelor of Engineering in Electrical Engineering

By

Akash M. Titirmare

Dhanshri S. Balapure

Kunal V. Nimje

Kisan R. Mesare

Mrunali V. Tarale

Pranjali G. Bhute

Swati A. Thakur

Swati U. Iwarkar

Tejaswi S. Chandekar

Under the guidance of

Prof. P.B. Joshi (Guide)

&

Mr. T.M. Manjunath (Co-guide)



Nagar Yuwak Shikshan Sanstha's

#### YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,

(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)

NAGPUR - 441 110 2018-2019

Certified that the project report entitled "TOTAL PRODUCTIVE MAINTENANCE, ENERGY CONSERVATION AND MANAGEMENT SYSTEM" successfully completed by

Pranjali Bhute

Mrunali Tarale

Akash Titirmare

Dhanshri Balapure

Kisan Mesare

Swati Thakur

Kunal Nimje

Swati Iwarkar

#### Tejaswi Chandekar

In recognition of partial fulfillment for the award of the degree of Bachelor of Engineering in Electrical Engineering, YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University), Nagpur.

Prof. P.B.Joshi

(Project Guide)

Mr. T. M. Manjunath

(Co-Guide)

Prof. P.B.Joshi

Dr. B.Y. Bagde

(HOD-ELDept.)

(Special Term Incharge)

Signature of External Examiner :-

Name: - Mr. Yogesh Vanadpande.
Date of Examination: - 06-05.2019

### Harnessing Maximum Energy from Biowastes and Production of Biogas

This project report is submitted to

Yeshwantrao Chavan College of Engineering

(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

In partial fulfillment of the requirement

For the award of the degree

Of

#### **Bachelor of Engineering in Electrical Engineering**

By

Akanksha Yawalkar

Ankita Padole

Anuja Hore

Karishma Dighore

Swati Kodape

Vaishnavi Mawale

Under the guidance of

Dr. Mrs. S. P. Adhau



#### DEPARTMENT OF ELECTRICAL ENGINEERING

Nagar Yuwak Shikshan Sanstha's

#### YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,

(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)

**NAGPUR - 441110** 

Certified that the project report entitled "HARNESSING MAXIMUM ENERGY FROM BIOWASTES AND PRODUCTION OF BIOGAS" has been successfully completed by

Akanksha Yawalkar (EL)

Karishma Dighore (EL)

Ankita Padole (EL)

Swati Kodape (EL)

Anuja Hore (EL)

Vaishnavi Mawale (EL)

under the guidance of **Dr. Mrs. S. P. Adhau** in recognition to the partial fulfillment for the award of the degree of Bachelor of Engineering in Electrical Engineering, **Yeshwantrao Chavan College of Engineering** 

(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

Signature of Co-Guide

Dr. Mrs. Sarita Mowade

(Director, SS Techno-vision & Eco-solution)

Signature of Guide

Dr. Mrs. S. P. Adhau

SAlhan

(Asso.Prof. EL Dept.)

Signature

Prof. Mrs. U. V. Waghmare (Umre)

(Project Co-ordinator)

Signature

Dr.B.Y.Bagde

(HOD, ELDept.)

Signature of External Examine

Name

o. m. lassow fors

Date of Examination:

# SOME INVESTIGATIONS ON DC MICROGRID USING DC ELECTRIC SPRING WITH STORAGE SYSTEM CONFIGURATION

This project report is submitted to
Yeshwantrao Chavan College of Engineering

(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

In partial fulfillment of the requirement

For the award of the degree

of

Master of Technology in Integrated Power System

by

Kalyani E. Dhawad

Under the guidance of

Dr. S. P. Gawande



#### DEPARTMENT OF ELECTRICAL ENGINEERING

Nagar Yuwak Shikshan Sanstha's

YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING, (An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

NAGPUR — 441 110

**2018-2019**Page 282 of 313

Certified that the project report entitled "SOME INVESTIGATIONS ON DC MICROGRID USING DC ELECTRIC SPRING WITH STORAGE SYSTEM CONFIGURATION" has been successfully completed by, Kalyani E. Dhawad in recognition to the partial fulfillment for the award of the degree of Master of Technology in Integrated Power Systems, Electrical Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University), Nagpur.

(Project Guide)

Prof. U. V. Waghmare

(Project Coordinator)

Prof. A. Y. Fadnis (M.Tech Coordinator)

(HoD, Electrical Dept.)

Signature of External Examiner:

Name: VI) Borghale

Date of Examination: 04/05/2019

Page 283 of 313

## CONTROL OF CASCADED H-BRIDGE MULTILEVEL INVERTER WITH UNEQUAL INPUT VOLTAGES

This project report is submitted to

Yeshwantrao Chavan College of Engineering

(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

In partial fulfillment of the requirement

For the award of the degree

of

Master of Technology in Integrated Power System

by

Alviya Mahevash

Under the guidance of

Dr. S. G. Kadwane



#### DEPARTMENT OF ELECTRICAL ENGINEERING

Nagar Yuwak Shikshan Sanstha's

YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,
(An Autonomous Institution Affiliated to Rashtrasaut Tukadoji Maharaj Nagpur University)
NAGPUR – 441 110

Certified that the project report titled "CONTROL OF CASCADED H-BRIDGE MULTILEVEL INVERTER" has been successfully completed by Alviya Mahevash under the guidance of Dr S. G. Kadwane in recognition to the partial fulfillment for the award of the degree of Master of Technology in Integrated Power System, Electrical Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University), Nagpur.

5

Prof. U. V. Waghmare

(Project Coordinator)

Affhadus Prof. A. Y. Fadnis

(M. Tech Coordinator)

Dr. B. Y. Bagde

(Head Of Department)

Dr. S. G. Kadwane

S. Kaderon

(Project Guide)

Signature of External Examiner:

Name: M. M. Rend

Date of Examination: 04/05/2019

Page 285 of 313

#### PV-ECS INTEGRATED TO DISTRIBUTION GRID FOR **ACTIVE POWER TRANSFER AND POWER QUALITY IMPROVEMENT**

This project report is submitted to

Yeshwantrao Chavan College of Engineering

(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

In partial fulfillment of the requirement for the award of the degree of

Master of Technology in Integrated Power System

by

Ms. Yashashri B. Deshmukh

under the guidance of

Dr. Sarala P. Adhau



### DEPARTMENT OF ELECTRICAL ENGINEERING

Nagar Yuwak Shikshan Sanstha's

### YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING

(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)

NAGPUR - 441 110

Certified that the project report titled "PV-ECS Integrated to Distribution Grid for Active Power Transfer and Power Quality Improvement" has been successfully completed by Yashashri B. Deshmukh in recognition to the partial fulfillment for the award of the degree of Master of Technology in Integrated Power System, Electrical Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University), Nagpur.

Dr. S.P. Adhau

Solhar

(Guide)

Prof. U.V. Waghmare

(Project coordinator)

Prof. A. Y. Fadnis

(M.tech Coo

Dr. B. Y. Bagde

(HOD, EL Dept.)

Signature of External Examiner:

Name: P. S. Kallkaroni

# ASSESSMENT OF AVAILABLE TRANSFER CAPABILITY IN ELECTRICITY MARKET

This project report is submitted to

Yeshwantrao Chavan College of Engineering

(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

In partial fulfillment of the requirement

For the award of the degree

of

Master of Technology in Integrated Power System

by

Poonam A. Shende

Under the guidance of

Dr. B. Y. Bagde



#### **DEPARTMENT OF ELECTRICAL ENGINEERING**

Nagar Yuwak Shikshan Sanstha's

YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,

(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)  $NAGPUR-441\ 110$ 

2018-2019

Certified that the project report titled "ASSESSMENT OF AVAILABLE TRANSFER CAPABILITY IN ELECTRICITY MARKET" has been successfully completed by Poonam A. Shende under the guidance of Dr B. Y. Bagde in recognition to the partial fulfillment for the award of the degree of Master of Technology in Integrated Power System, Electrical Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University), Nagpur.

Prof. U. V. Waghmare

(Project Coordinator)

Typhoduis

Prof. A. Y. Fadnis

(M. Tech Coordinator)

Dr. B. Y. Bagde

(Project Guide and HOD)

Signature of External Examiner:

Name:

Date of Examination:

Dr. B. S. Umre

4.5.19

## A MPPT DESIGN USING WODE TECHNIQUE FOR PARTIALLY SHADED SOLAR PV SYSTEM

This project report is submitted to
Yeshwantrao Chavan College of Engineering

(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

In partial fulfillment of the requirement

For the award of the degree

of

Master of Technology in Integrated Power System

by

Ruchita S. Chaudhari

Under the guidance of

Dr. R. M. Moharil



#### DEPARTMENT OF ELECTRICAL ENGINEERING

Nagar Yuwak Shikshan Saustha's

YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,
(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)
NAGPUR – 441 110

2018-2019

Certified that the project report titled "A MPPT DESIGN USING WODE TECHNIQUE FOR PARTIALLY SHADED SOLAR PV SYSTEM" has been successfully completed by Ruchita S. Chaudhari under the guidance of Dr. R. M. Moharil in recognition to the partial fulfillment for the award of the degree of Master of Technology in Integrated Power System, Electrical Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University), Nagpur.

Dr. R. M. Moharil

(Project Guide)

Prof. U. V. Waghmare

(Project Co-ordinator)

Alghaduil

Prof. A. Y. Fadnis

(M.Tech Co-ordinator)

(HOD, Electrical Dept.)

Kokulkask. Signature of External Examiner:

Name: P.S. KWIKATRU

Date of Examination: 04/PS/10

## DESIGN OF ENHANCED RESONANT CURRENT CONTROLLER FOR GRID-TIED CONVERTER WITH LCL FILTER

This project report is submitted to

Yeshwantrao Chavan College of Engineering, Nagpur

(An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

In partial fulfillment of the requirement

For the award of the degree

of

Master of Technology in Integrated Power Systems

by

Niyati S. Jaulkar

Under the guidance of

Dr. P. M. Meshram



DEPARTMENT OF ELECTRICAL ENGINEERING
Nagar Yuwak Shikhan Sanstha's
YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING
(An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

NAGPUR-441110 2018-2019

Certified that the project report entitled "DESIGN OF ENHANCED RESONANT CURRENT CONTROLLER FOR GRID-TIED INVERTER WITH LCL FILTER" has been successfully completed by NIYATI S. JAULKAR in recognition to the partial fulfillment for the award of the degree of Master of Technology in Integrated Power Systems, Electrical Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University), Nagpur.

Dr. P. M. Meshram

(Project-Guide)

Prof. U.V. Waghmare

(Project Coordinator)

A.Y. Fadnis

(M-Tech Coordinator)

(HOD, EL Dept.)

Signature of External Examiner:

Name: M-M-Rerel

Date of Examination: 04 | 05 | 2019

# SHUNT FAULTS ANALYSIS OF SOLAR PV-BASED AC STANDALONE SYSTEM

This project report is submitted to

Yeshwantrao Chavan College of Engineering
(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

In partial fulfillment of the requirement

For the award of the degree

Of

Master of Technology in Integrated Power System

By

Rinkesh G. Satpute

Under the guidance of

Prof. P. S. Shete



#### DEPARTMENT OF ELECTRICAL ENGINNERING

Nagar Yuwak Shikshan Sanstha's

YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING, (An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

NAGPUR – 441 110

2018-2019

Certified that the project report entitled "SHUNT FAULTS ANALYSIS OF SOLAR PV-BASED AC STANDALONE SYSTEM" has been successfully completed by Rinkesh G. Satpute under the guidance of Prof. P. S. Shete in recognition to the partial fulfillment for the award of the degree of Master of Technology in Integrated Power System, Electrical Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

Prof. P. S. Shete (Project Guide)

Prof. U. V. Waghmare (Project Co-ordinator)

Prof. A. Y. Fadnis (M. Tech. (IPS) Co-ordinator) Dr. B. Y. Bagde (HOD, EL Dent.)

Signature of External Examiner: -

Name: -

Date of Examination: -

4.5.19

## SOME IMPROVEMENTS IN PHASE SHIFTED PWM FOR FLYING CAPACITOR MULTILEVEL CONVERTER

This project report is submitted to

Yeshwantrao Chavan College of Engineering

(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

in partial fulfillment of the requirement for the award of the degree

of

Master of Technology in Integrated Power System

by

Netra Manwatkar

under the guidance of

Prof. Avantika Y. Fadnis



## DEPARTMENT OF ELECTRICAL ENGINEERING

Nagar Yuwak Shikshan Sanstha's

YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING

(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)

NAGPUR - 441 110

2018-2019

Page 296 of 313

Certified that the project report titled "SOME IMPROVEMENTS IN PHASE SHIFTED PWM FOR FLYING CAPACITOR MULTILEVEL CONVERTER" has been successfully completed by Netra A. Manwatkar in recognition to the partial fulfillment for the award of the degree of Master of Technology in Integrated Power System, Electrical Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University), Nagpur.

(Guide and M. Tech Coordinator)

Prof.U.V.Waghmare

(Project Co-ordinator)

(HOD Electrical Engineering)

Signature of External Examiner:

Name:

Date of Examination:

Certified that the project report entitled "Printing Defect Identification using Image Processing" has been successfully completed by ADESH LAD, AJINKYA MISHRIKOTKAR, MANDAR KHARODE, KAUSTUBH THAKRE under the guidance of Dr. M. M. MUSHRIF in recognition to the partial fulfillment for the award of the degree of Bachelor of Engineering in Electronics & Telecommunication Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

Signature

Dr.M. M. MUSHRIF (GUIDE)

Dr.M.S.Narlawar (HOD, ET DEPT)

Signature of External Examiner:

Name:

Certified that the project report entitled "IOT based smart home" has been successfully completed by Bhushan Dhangar, Ramprasad Bhosle, Vikky Ghate, Vishal Ugemuge under the guidance of Prof. R. P. Deshmukh in recognition to the partial fulfilment for the award of the degree of Bachelor of Engineering in Electronics & Telecommunication Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

Signature

Prof. R. P. Deshmukh

(Guide)

Dr. M. S. Narlawar

(HOD,ET Dept.)

Signature of External Examiner

Name:

Date of Examination:

3/05/19

Certified that the project report entitled "Non-Contact Based Baby Monitoring System" has been successfully completed by Ankita Kawale, Indrayani Deshmukh, Monika Hakande, Payal Raut under the guidance of Dr. Y. U. Chitriv (Dubey) in recognition to the partial fulfillment for the award of the degree of Bachelor of Engineering in Electronics & Telecommunication Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

Dr. Y. U. Chitriv (Dubey)

Dr. Sachin Damke

Dr M S Narlawar

Dr. M.S. NAMLAWAR

the id his pariment Electron a & size car conication I

( Head of the Dept.)

(Guide)

(Co Guide)

Signature of External Examiner:

Name: - Pr. Vibha Bora

Date of Examination: **6**3 / 0**5**/2019
Page 300 of 313

Certified that the project report entitled "Wireless Equipment Control Using MATLAB Based GUI System" full has been successfully completed by Kajal Bankar, Mrunal Deodhe, Samiksha Borkar, Shreya Thamke under the guidance of Prof. Dr. P. W. Raut in recognition to the partial fulfillment for the award of the degree of Bachelor of Engineering in Electronics& Telecommunication Engineering, Yeshwantrao Chavan College of Engineering.(An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

Prof. Dr. P.W. Raut

(Guide)

Dr.M.S. Narlawar

(HOD, ET Dept.)

Signature of External Examiner

Certified that the project report entitled "Image Processing Based Automatic Quad-Copter Pesticide Sprayer" has been successfully completed by Arpita Singh, Jayesh Thakre, Jidhnyasa Khondey, Saurabh Somani, Dr. Mrs. A.D Belsere in recognition to the partial fulfilment for the award of the degree of Bachelor of Engineering in Electronics and Telecommunication Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

Dr. Mrs. A.D Belsare

(Project Guide)

Prof. Nandkishor Lavhe Enterpolary

**Entomology Section** 

Dept of Entomology, College of Agriculture, Nagpur.

Dr.Panjabrao Deshmukh Krishi Vidyapeeth,

Nagpur

(Project Coguide)

Dr.M.S. Narlawar

(HOD, ET Dept.)

Signature of External Examiner: White Signature of External Examiner: Name: Dr. A. R. Konclettoon

Date of Examination: 2/5/2019

This is Certified that the project report entitled "Sign Language to speech translator" has been successfully completed by Bhushan Chimurkar, Darpan Agade, Krushna Sawne, Namrata Gondane, Nupur Shrivastva, Prof C.S. Gode in recognition to the partial fulfilment for the award of the degree of Bachelor of Engineering in Electronics and Telecommunication Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

Signature

Prof. C.S.Gode

(Guide)

Mr. M.S. Narlawar

(HOD, ET Dept.)

Signature of External Examiner: DE Cong.) S.W. Vacade

Certified that the project report entitled "Multiband MIMO Antenna For Wireless Application" has been successfully completed by Divyani Rane Samiksha Gawali Samiksha FulzeleAkanksha Sanchetiunder the guidance of Dr.S.S.Khade in recognition to the partial fulfilment for the award of the degree of Bachelor of Engineering in Eectronics And TeleCommunication Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

Dr. S. S. Khade (Guide)

(H.O.D ET Department)

Signature of External Examiner:

Name: 28. V. G. Girhepunge

Date of Examination: 02/05/2019

Certified that the project report entitled "Smart Luggage Carrier" has been successfully completed by Abhiruchi Zope, Kirti Bodkhe, Manisha Kolhare, Pratiksha Helonde under the guidance of Prof M. L. Keote in recognition to the partial fulfillment for the award of the degree of Bachelor of Engineering in Electronics & Telecommunication Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

Prof. M. L. Keote

(Guide)

Dr. M. S. Narlawar

(HoD, ET Dept.)

Signature of External Examiner

Name:-

Certified that the project report entitled "COIN BASED WATER DISPENSING SYSTM USING IMAGE PROCESSING" has been successfully completed by GAURI DHOTE, SHRADDHA TIJARE, SHRUTIKA GOMASE, VAISHNAVI PAIKANE under the guidance of Prof. M.L.KEOTE in recognition to the partial fulfillment for the award of the degree of Bachelor of Engineering in Electronics & Telecommunication Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

Signature

Prof. M.L.KEOTE

Signature

(HoD, ET Dept.)

Signature of External Examiner

Name:-

Date of Examination: 62/05/2019

Certified that the project report entitled "Measure the parameters of electric motor using wireless smart meter" has been successfully completed by KSHITIJA DHOKNE, PAYAL PARATE, DHIRAJ SONI, SUDHIR WANODE under the guidance of Prof. B. Y. MASRAM in recognition to the partial fulfillment for the award of the degree of Bachelor of Engineering in Electronics & Telecommunication Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

Prof. B. Y. Masram (Guide ET Dept) Prof. P. S. Shete
(Guide EL Dept.)
(An Interdisciplinary project
with Dept. of Electrical
Engineering)

Dr. M. S. Narlawar (HoD, ET Dept)

Signature of External Examiner

Name: -

Date of Examination: 02/05/19

Certified that the project report entitled "Automated Waste Segregation System and its approach towards generation of Ethanol" has been successfully completed by Vaishnav Dahake, Sanket Puradbhat, Vaishnavi Hirlekar, Shriya Gadhawe under the guidance of Dr. Pravin Raut and Prof. Abhishek Madankar in recognition to the partial fulfilment for the award of the degree of Bachelor of Engineering in Electronics & Telecommunication Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

Signature

Prof. Abhishek Madankar

Signature

(HoD, ET Dept.)

Dr. Milind Narlawar

Signature -

Dr. Pravin Raut

Signature of External Examiner

Name:-

Certified that the project report entitled "Mobile Health Monitoring System Using IOT" has been successfully completed by Aayushi Kurode, Manish Kshetrapal, Shruti Mendhule, Sunil Adamaneunder the guidance of Prof. Yogesh S. Kale Sirin recognition to the partial fulfillment for the award of the degree of Bachelor of Engineering in Electronics and Telecomunication Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

(M)

Prof. Yogosh S. Kale Sir

Calde's

Signature

Dr.M.S.Narlawar Sir

(HOD, ET Dept. ))

Signature of External Examiner

Name:

Certified that the project report entitled " Portable Fuel Adulteration Detection System" has been successfully completed by Sandeep Mehtri, Krunal Ramteke, Praful Fulzele, Sourabh Bargi under the guidance of Dr. Y. K. Dubey (Chitriv) / Prof. M. S. Patil in recognition to the partial fulfillment for the award of the degree of Bachelor of Engineering in Electronics & Telecommunication Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

Dr. Y. K. Dubey (Chitriv) / Prof. M.

Dr. M. S. Narlawar

Signature of External Examiner Name:Date of Examination:

ii

Certified that the project report entitled "DAM SAFETY AND WATER MANAGEMENT USING INTERNET OF THINGS" has been successfully completed by Kishor Chillewad. Rushikesh Raut. Vishal Gore, Vaibhav Mangar under the guidance of Dr. P. D. Dorge in recognition to the purifical fulfillment for the award of the degree of Bachelor of Engineering in Electronics& Telecommunication Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

Signature

Name: Dr. P. D. Dorge

(Guide)

Signature

Name: Dr. M. S. Narlawar

(H.O.D, ET Dept.)

Signature of External Examiner

Name:-

Dr. P. R. Rajard

Certified that the project report entitled "Design and Implementaion of AES on FPGA for Security of IOT Data" has been successfully completed by Shelly R. Wankhede under the guidance of Dr. D.B. Bhoyar and in recognition to the partial fulfilment for the award of the degree of Master of Technology in Communication Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

Dr. D.B. Bhoyar

(Guide)

Dr. M.S. Narlawar

(H.O.D ET Department)

Signature of External Examiner:

Name:

Certified that the project report entitled "High Security Data Efficient Routing for MANET" has been successfully completed by Mr. Swapnil S. Bhalsagar under the guidance of Dr. M. D. Chawhan of in recognition to the partial fulfillment for the award of the degree of Master of Technology in Electronics Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University), Nagpur.

Dr. M. D. Chawhan

Varshan

(Guide)

(HOD, ET Dept.)

Signature of External Examiner:

Name: Dy GM Attiv



## Yeshwantrao Chavan College of Engineering

(An Autonomous Institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

Hingna Road, Wanadongri, Nagpur - 441 110

NAAC Accredited with 'A' Grade

Ph.: 07104-242919, 242623, 242588

Website: www.ycce.edu E-mail: principal@ycce.edu

### Declaration by Head of Institute

I hereby declared that the data, information and support documents attached herewith are genuine and correct to my knowledge.



Dr. U. P. Waghe (Principal)

Principal
Yeshwantrao Chavan
College of Engineering
Wanadongri Hingna Road,
NAGBUR - 441110