



LokmanyaTilakJankalyanShikshanSanstha's
**PRIYADARSHINI J. L. COLLEGE OF ENGINEERING,
NAGPUR**
Accredited with Grade "A" by NAAC
846, New Nandanvan Layout, Nagpur – 440 009



Internal Quality Assurance Cell (IQAC)

MINUTES OF THE MEETING

Date of Meeting: **15/06/2019** Time: **03:00 PM**

Minutes Prepared By: **Mrs. A. D. Kadam**

Meeting Objective: **IQAC inception (2019-20)**

Attendance at Meeting:

Meeting Chaired by: **Dr. A. M. Shende**

AGENDA :

1. Introduction of IQAC members by Chairman
2. NAAC AQAR 18-19 process by Member-Secretary
3. Measures for improvement in Academic and administrative performance
4. Updation of various cells
5. Adoption and dissemination of Best practices
6. Induction programme for new teachers
7. Any other matter with the permission of the chair.

DISCUSSION & DECISION: During meeting following points were discussed and concern decisions were taken.

1. Introduction of IQAC members by Chairman – Dr. A. M. Shende informed the external members about the establishment of IQAC in College along with introducing all the members. Further, expressed that Institute has also secured Excellence award by Sakal Group recently.
2. NAAC AQAR 18-19 process: Mrs.A.D.Kadam, IQAC, Member-Secretary, PJLCE gave an overview of Strategies, Objective, Functions, Benefits, and operation of the Internal Quality Assurance Cell (IQAC) and explain the AQAR 18-19 format in detail. She expressed in brief about the academic year 2018-19 was an eventful, action packed year for the IQAC, especially in the context of the conduct of certificate courses, Add-on-courses, value added courses, VET programmes, IPR programmes, Industry-Academia innovative practices, Activities for promotion of universal values, Gender-equity programmes, Capability enhancement programmes, Extension and outreach activities, MOU'S, linkages, Faculty development programmes and various quality audits.
3. Dr. A. M. Shende shared his invaluable suggestions, and provided guidelines for preparation of College AQAR 19-20 report as per format. Dr.A.M.Shende expressed that for monitoring the curricular/co-curricular activities, the functioning of the

various departments, committees, clubs and cells of the College effective documentation through a system of annual report is prime requisite.

4. The meeting discussed the measures undertaken for improvement of academic and administrative performance.

•**The approval of Certification courses and Bridge Course:**

In addition to this, the institution strives towards the overall development of students and quality enhancement of learners through various, orientation and life skill enrichment Programmes. The courses other than those offered by the University are conducted, keeping in view of the growing demand

5. Updation of cells by principal, Dr. A. M. Shende, for timely, efficient and progressive performance of academic and administrative activities of the institution.

- Anti-Ragging Squad
- Anti-Ragging Committee
- Women Grievance Cell
- NSS Advisory Committee
- Library Advisory Committee
- Examination Committee
- Departmental Advisory Board
- Research Committee
- Industry Institute Interaction Cell
- Cultural committee
- Equipment & Computer Furniture Maintenance Committee
- Building/Furniture Maintenance Committee
- Student Council
- Training and Placement Cell
- Student Grievance Redressal Cell
- House Keeping Committee

6. Adoption and dissemination of Best practices:

- **Best Practice I:**

Title of the Practice: “Faculty Training for Enhancement of Teaching-Learning process and Soft-Skill Training for students excellence” .

Goal:

To empower and synergize students and faculty members to achieve excellence in one's own life and in the process improve the quality of students.

- **Best Practice II:**

Title of the Practice: “Practical Exposure and 360⁰ development of the students”.

Goal: The goal of this practice is to give practical exposure to students and 360⁰ development of the students.

7. The Principal, Dr. A. M. Shende, informed that many new faculty members were joined in the institution in the current academic year. Training programmes on innovative teaching methodologies are to be arranged so as to equip the new faculty with the skills needed.

8. Discussion on measures to be taken to strengthen teaching-learning process and all the students become eligible for taking the placement.

END OF MEETING:

The meeting ended with a vote of thanks to the Chair.

It was decided that the next meeting of IQAC shall be held on **16/08/2019 (Friday)** at 3.00 P.M.



LokmanyaTilakJankalyanShikshanSanstha's
PRIYADARSHINI J. L. COLLEGE OF ENGINEERING,
NAGPUR
 Accredited with Grade "A" by NAAC
 846, New Nandanvan Layout, Nagpur – 440 009



Action taken report on the decisions of the meeting

Decisions of the previous meeting	Action taken
NAAC AQAR 18-19 process	<i>Successfully upload of AQAR -18-19 report on NAAC portal.</i>
Adoption and dissemination of Best practices	Soft-Skill Training started Institute activity planned Departmental forum formation CiT - CSE SPACE - Civil Exordium - ETC SURGE - Electrical
Training programme on innovative teaching methodologies for new teachers	Orientation programme for newly joined teacher organized from 11/06/2019 to 14/06/2019. Faculty participated
To strengthen teaching-learning process and the students become eligible for taking the placement.	Major Activities are listed in TABLE-1

TABLE-1

Sr. No.	Activity	Activity Details	Date	Dept
1	Workshop	"Advancement in air pollution monitoring by remote sensing".	30-07-2019	Civil
2	Workshop	"Building Information Model"	07/08/2019	Civil
3	Workshop	"Introduction to Off Shore Design & Installation".	24-08-2019	Civil
4	Workshop	"Dimensional & Model Analysis	12-09-2019	Civil
5	Value added Course	Course on Matlab & Simulation	26/08/2019 - 30/08/2019	Electrical
6	Value added Course	Fundamentals of Python Programming	15/07/2019- 19/07/2019	ETC
7	Certificate course	Automation in Industry	05/08/2019 Daily 01 Hrs	Electrical
8	Certificate course	Course on AUTOCAD & REVIT MEP	02/08/2019-31-08-2019	Electrical
9	Certificate course	Course on Arduino	08/07/2019- 13/07/2019	ETC
10	Certificate course	Verilog	22/07/2019-27/07/2019	ETC
11	Diploma Course	Mechatronics	02/08/2019-31-08-2019	ETC
12	Diploma Course	DSP Processor	06/09/2019-28/09/2019	ETC



LokmanyaTilakJankalyanShikshanSanstha's
**PRIYADARSHINI J. L. COLLEGE OF ENGINEERING,
NAGPUR**
Accredited with Grade "A" by NAAC
846, New Nandanvan Layout, Nagpur – 440 009



Internal Quality Assurance Cell (IQAC)

MINUTES OF THE MEETING

Date of Meeting **16/09/2019** Time : **03:00 PM**

Minutes Prepared By: **Mrs. A. D. Kadam**

Meeting Objective: **Academic Excellence and Student centric Core system**

Attendance at Meeting:

Meeting Chaired by: **Dr. A. M. Shende**

AGENDA :

1. Conduction of Value added courses.
2. Academic Excellence and Student centric Core system
3. Organization of inter and intra-institutional workshops, seminars on quality related themes and promotion of quality circles.
4. Any other matter with the permission of the chair.

DISCUSSION & DECISION: During meeting following points were discussed and concern decisions were taken.

1. Dr. A.M.Shende praised the efforts of the IQAC committee in preparing AQAR 19-20 Report.
2. Dr. A.M. Shende, took review of various activities proposed in previous meeting and proposed guidelines for value added courses, guest lectures, workshop, certificate courses.
3. The committee authorized the IQAC coordinator to organize Workshop/ Seminars for IQAC.
4. The institution must take necessary steps to ensure that all the students become eligible for taking the placement.
5. A brainstorming session was suggested to discuss the various innovative steps that could be taken in the teaching-learning process and the examination pattern as per university and the consequent benefits that could be achieved by adopting these steps.
6. Felicitation of all awardees

END OF MEETING :

The meeting ended with a vote of thanks to the Chair.

It was decided that the next meeting of IQAC shall be held on **14/12/2019** at 3.00 P.M.



LokmanyaTilakJankalyanShikshanSanstha's
**PRIYADARSHINI J. L. COLLEGE OF ENGINEERING,
NAGPUR**
Accredited with Grade "A" by NAAC
846, New Nandanvan Layout, Nagpur – 440 009



Action taken report on the decisions of the meeting

Decisions of the previous meeting	Action taken
To strengthen teaching-learning process and To improve technical skills	Various Workshops,value added courses, certificate courses organized by dept. (TABLE-I)
Faculty Awards	TABLE-II
Students Awards	<ul style="list-style-type: none">• Aishwarya Harke (4th Sem.ETC) & Ms Bharti Dhote (IInd Sem) won Guinness World Record prize in Group dance competition held in Pune, Maharashtra.• Mr. Swapnil Challani (8^h Sem ETC) secured Prize in Hackathon 2.0 Competition by NMC Nagpur• Ms. Pratiksha Bawane and Ms. Bhagyashree Lute from CSE Dept. Bagged first position in Quiz Comp. By Engineers Forum Nagpur.• Mr. Nakul bhoier (Sixth Sem CSE) secured Gold Medal in Free Style Swimming Comp. Organized by RTMNU.• Pratik Maske, Yashi Jain, Grishma Tandekar, Tanvi Channawar, Prachi Chorghade, Rutuja Wagh, Pratisha Navghare, Yash Bangare, Gayatri Sakharkar, Chinmay Mokhare, Ayush Jain, Sakshi Kukde, Vedanti Gabhane, Ariz Kahn, Sandeep Singh, Kamlesh Sonkusare, Adesh Gonnade, Himanshu Itankar, Prachi Shendre, Pooja Pawankar, Laboni Bera, Ashwini Bodhkar from CSE bagged prizes in Hackathon 2.0 Competition by NMC Nagpur.• Rushikesh popte, Himanshu devikar, Prateek Dadudure, Aakash lanjewar, Satish Gabhane, Virendra Damaye, Sachin Yadav from Civil Engineering bagged prizes in Hackathon 2.0 Competition by NMC Nagpur.

TABLE-I

Sr. No.	Activity	Activity Details	Date	Dept
1	Workshops	“GIS Software”	20-09-2019	Civil Engineering
2	Value added Course	Micro Electronics	29/10/2019- 02/11/2019	ETC
3	Value added Course	Embedded C and 8051	04/11/2019- 11/11/2019	ETC
4	Certificate course	Automation in Industry	05/08/2019 Daily 01 Hrs	Electrical Engineering
6	Certificate course	Hands on MATLAB	23/12/2019-27/12/2019	ETC
7	Diploma Course	DSP Processor	06/09/2019-28/09/2019	ETC

TABLE-II

Sr. No.	Faculty	Award by
1	Dr.V. P. Balpande	Mayor innovation Council,NMC,Nagpur
2	Dr. P. B .Pokle	Mayor innovation Council,NMC,Nagpur
3	Mr. M. G. Pathan	Mayor innovation Council,NMC,Nagpur
4	Mr. A.M. Mendhe	Mayor innovation Council,NMC,Nagpur
3	Mr. Ravindra N. Jogekar	Mayor innovation Council,NMC,Nagpur
5	Mr. Pranay M. Meshram	Mayor innovation Council,NMC,Nagpur
6	Mr. Pranay M. Meshram	Babasaheb Ambedkar National Associations for Engineers.
7	Mr.A.P.Mohod	Mayor innovation Council, NMC, Nagpur
8	Mr.C.S.Gode	Mayor innovation Council,NMC,Nagpur



LokmanyaTilakJankalyanShikshanSanstha's
**PRIYADARSHINI J. L. COLLEGE OF ENGINEERING,
NAGPUR**
Accredited with Grade "A" by NAAC
846, New Nandanvan Layout, Nagpur – 440 009



Internal Quality Assurance Cell (IQAC)

MINUTES OF THE MEETING

Date of Meeting - **14/12/2019** Time : **03:00 PM**

Minutes Prepared By : **Mrs. A. D. Kadam**

Meeting Objective: **Review of R&D and Motivational Measures**

Attendance at Meeting:

Meeting Chaired by: **Dr. A. M. Shende**

AGENDA :

1. Academic activities
2. Industrial Visits
3. R&D cell - Review
4. Annual Cultural fest
5. Alumina Meet
6. Faculty for participation in social activity
7. Any other matter with the permission of the chair.

DISCUSSION & DECISION: During meeting following points were discussed and concern decisions were taken.

1. Dr. A. M. Shende, provide guidelines to that every teacher should attend some training program which is available outside in plenty, and he / she should learn teaching methodology to learn the current trends in their specializations and facilitate them to handle the concerned subjects with better preparation and confidence. It was proposed that a seminar/workshop be conducted for teachers to help them become skillful in using technology in education.
2. Organizing annual cultural festival TARANG in college.
3. Organizing alumina meet.
4. Organization of industrial visit for the students of college.
5. Research activities are promoted by providing financial assistance for faculty

participation in various conferences, duty leave for training programmes outside the campus and budget for students' projects.

6. In order to provide better interaction between the institution and industry, the institute operates a separate Industry Institute Interaction Cell (III Cell). It was proposed that more MOU's to be signed to strengthen R&D activity as well as need to strengthen interaction between the institution and industry by organizing events.
7. Organization of value added courses.

END OF MEETING:

The meeting ended with a vote of thanks to the Chair.

It was decided that the next meeting of IQAC shall be held on **17/02/2020** at 3.00 P.M.



LokmanyaTilakJankalyanShikshanSanstha's
PRIYADARSHINI J. L. COLLEGE OF ENGINEERING,
NAGPUR
 Accredited with Grade "A" by NAAC
 846, New Nandanvan Layout, Nagpur – 440 009



Action taken report on the decisions of the meeting

Decisions of the previous meeting	Action taken report
To strengthen teaching-learning process and to improve technical skills	Various guest lectures and workshops organized and value added courses, certificate courses organized (TABLE-I)

TABLE-I

Sr.No.	Activity	Activity Details	Date	Dept
1	Workshops	“Robotic SurgeryMarvel of Engineering ”	03-01-2020	Civil Engineering
2	Workshops	“Career Prospect After Graduation ”	06-01-2020	Civil Engineering
3	Workshops	“Introduction to Civil Engineering Softwares like AutoCad, Rivet, Staddpro, Civil 3D ”	15-02-2020	Civil Engineering
4	Workshops	How to be an Enterprenuer in Electrical Erectoin, Commisioning & Relative Job Oppurtunities	10/02/2020	Electrical Engineering
5	Workshops	Seminar on Robotics anf Technology	24/01/2020	Electrical Engineering
6	Workshops	Two Days Workshop on Vehicle wiring and Harshing	17/01/2020	Electrical Engineering
7	Workshops	“Corporate Hiring Trend Post Covid 19”	23 rd May 2020	ETC
8	Workshops	“Artificial Intelligence and Neural Networks”	29 th May 2020	ETC
9	Workshops	“Role of electronics Engineers in Building India :- Post Covid-19”	11 th June 2020	ETC
10	Value added Courses	Advance Surveying	06/01/2020-06/02/2020	Civil Engineering
11	Value added Courses	Green Building	16/12/2019-16/01/2020	Civil Engineering
12	Value added Courses	Auto-cad	03/02/2020-03/03/2020	Civil Engineering
13	Value added Courses	Python	02/01/2020 to 22/02/2020	Computer Science & Engineering
14	Value added Course	Course on Handling ETAP software	13/01/2020-17/01/2020	Electrical Engineering
15	Value added Course	Micro Electronics	29/10/2019-02/11/2019	ETC

16	Value added Course	Embedded C and 8051	04/11/2019-11/11/2019	ETC
17	Value added Course	Embedded Systems 40PID for Communication and Industrial Application	13/01/2020-17/01/2020	ETC
18	Certificate course	Green Building	16/12/2019 to 16/01/2020	Civil Engineering
19	Certificate course	Auto-cad	03/Feb/2020 - 18/02/2020	Civil Engineering
20	Certificate course	Rooftop Solar system	03/02/2020 Daily 01 Hrs	Electrical Engineering
21	Certificate course	Hands on MATLAB	23/12/2019-27/12/2019	ETC



LokmanyaTilakJankalyanShikshanSanstha's
PRIYADARSHINI J. L. COLLEGE OF ENGINEERING,
NAGPUR
Accredited with Grade "A" by NAAC
846, New Nandanvan Layout, Nagpur – 440 009



Internal Quality Assurance Cell (IQAC)

MINUTES OF THE MEETING

Date of Meeting : **17/02/2020** Time : **03:00 PM**

Minutes Prepared By : **Mrs. A. D. Kadam**

Meeting Objective: **Programmes/activities leading to quality improvement.**

Attendance at Meeting:

Meeting Chaired by: **Dr. A. M. Shende**

AGENDA :

1. Certified with ISO : 9001– 2015
2. Motivate Faculty for participation in various activities
3. Organizing Student activities
4. Research inputs contributing to new initiatives and social Development
5. Project for society
6. Ensuring the adequacy, maintenance and functioning of the support structure and services-Feedback
7. Any other matter with the permission of the chair.

DISCUSSION & DECISION: During meeting following points were discussed and concern decisions were taken.

1. PJJCE college has been **certified with ISO : 9001– 2015** and thus has added one more feather in our cap expressed by Chairman, IQAC
2. The institution should strives towards the overall development of students and faculties for quality enhancement through various, orientation and life skill enrichment programmes. The courses other than those offered by the University should be conducted, keeping in view of the growing demand. So, conducting job oriented certification courses in collaboration with industries/ agency was suggested.
3. Review- on periodic feedback from the students and the staff, analysing the feedback and suggesting ways for improving teaching-learning process. The members of IQAC evolve strategies for the quality enhancement in teaching learning process.
4. Review of students projects by industry person through organizing project competitions at college level.

5. Research inputs contributing to new initiatives and social Development are suggested.

END OF MEETING :

The meeting ended with a vote of thanks to the Chair.

It was decided that the next meeting of IQAC shall be held on **30/04/2020** at 3.00 P.M.



LokmanyaTilakJankalyanShikshanSanstha's
PRIYADARSHINI J. L. COLLEGE OF ENGINEERING,
NAGPUR
 Accredited with Grade "A" by NAAC
 846, New Nandanvan Layout, Nagpur – 440 009



Action taken report on the decisions of the meeting

Decisions of the previous meeting	Action taken report
MoUs with Industrial Partners	Department of Computer Science and Engineering signed MoU with Jetking Hardware and Networking Institute, Nagpur. And Department of Civil Engg has signed an MOU with Modern Arch Infrastructure Pvt. Ltd. Also, PJCCE signed another MOU with the very renowned National Association of Software and Service Company (NASSCOM). Activities with all MoUs (Industrial Partners) are compiled
Activities for Students	TABLE-I and Department brief Report
Faculty participation in other institute	All information compiled for faculty participation in other institute in professional development programm,STTP,Webinars,Quiz etc...
Student activities	All information compiled for Student participation in college as well as outside college activities
Industrial Visits/Tours	To give the Final year students a practical approach and to develop their technical skills & proficiency, every year our institute (Civil, CSE, EN/ETC, EE,) organize Industrial Visits/Tours. Students visited various companies like , Persistant Nagpur, Dotsquare Technologies Pvt. Ltd Jaipur, Global Logic India Pvt. Ltd, Yalamanchili, Nagpur, KEC International(Butibori, Nagpur), Water Treatment Plant (Pench-I) Gorewada, Nagpur, Visit to Sewage Water Treatment Plant, Bhandewadi, Industrial Tour to Chandigarh and Rishikesh Railway station,(North India), Lokmat Press Nagpur, Visit at Transformer Manufacturing Industry Jaipur and Sunflag Steel Bhandara
Feedback from stakeholders	Feedback collected,analysed and action taken
Projects for society	TABLE-III

TABLE-I

Title of the Activities	Organising unit/ agency/ collaborating agency	Department
State level Quiz Contest	BANAE, Nagpur	Computer Science & Engineering
Guest Lecture on "Aptitude Training"	Vikalp Education, Nagpur	Computer Science & Engineering
Guest Lecture on "Database Technology"	Unisoft Technologies, Nagpur	Computer Science & Engineering
Workshop on "Basic Python and K-Means Clustering"	DataLytics, Nagpur	Computer Science & Engineering

Workshop on “COMMUNICATION SKILLS IN ENGLISH & GD”	The Hope, Nagpur and ICEICO, Nagpur	Computer Science & Engineering
Workshop on “GATE Preparation”	IICEC, Nagpur	Computer Science & Engineering
Workshop on “FUTURE TECHNOLOGY- PYTHON”	Softronix IT Solution, Nagpur	Computer Science & Engineering
Workshop on Machine Learning	(i)Dr.Kishore Bhoyar Vice Chair, ACM Nagpur Chapter (ii)Dr. Ram Hablani Associate Professor, RCOEM (iii)Mukta Paliwal Persistent Systems Ltd. Nagpur	Computer Science & Engineering
One day Workshop on “Google Assistant”	Girls Script Foundation	Computer Science & Engineering
One week workshop on “Basics”	Girls Script Foundation	Computer Science & Engineering
Internship drive for 3rd sem and 5th sem CSE	Girls Script Foundation	Computer Science & Engineering
Internship drive for 5th sem CSE	ICEICO Technologies, Nagpur	Computer Science & Engineering
Industrial Visit at LOKMAT PRESS, Buttibori Nagpur	PJLCE	ETC
Technical Quiz on Basic Electronics	PJLCE	ETC
“” Corporate Hiring Trend Post Covid 19”	PJLCE	ETC
"Artificial Intelligence and Neural Networks"	PJLCE	ETC
“Role of Electronics Engineers in Building India :- Post Covid-19”	PJLCE	ETC
Industrial Visit at LOKMAT PRESS, Buttibori Nagpur	PJLCE	Electrical Engineering
Technical Quiz on Electrical Engineering	PJLCE	Electrical Engineering
Poster Presentation	PJLCE	Electrical Engineering
Industrial Visit at Wind Power Plant, Jaisalmer	PJLCE	Electrical Engineering
Webinar on Research Methodology in the era of Covid 2019	PJLCE	Electrical Engineering
project work Condition assessment of buildings in Police Colony	Dr D P Mase (P T Mase Associates, Nagpur)	Civil Engineering
project work Analysis of flat slab	Er. Riyaz Siddique (R&G Associates, Nagpur)	Civil Engineering
project work Case study of Lithely Arch Bridge	Er. Chetan Pawar (Modern Arch Infra, Nagpur)	Civil Engineering
project work Design and analysis of arch bridge	Er. Chetan Pawar (Modern Arch Infra, Nagpur)	Civil Engineering
project work Generation of renewable energy and organic manure from Food industry waste	Er. Milind Joshi (Director, Surya Environtech, Nagpur)	Civil Engineering

Department brief Report

Department of EN/ETC organized a Workshop on Basic Electronics which was conducted by Mr. Swapnil Challani, Ms. Komal Lute, Ms Rashni Gajghate, Mr Akshay Naxine. Workshops were also conducted on Circuit design, PCB Designe and 3 D printing. Quiz Competition and GD were also organized for the students. All events were a great success with students and faculties.

Civil Department organized workshop on Green Building and Concrete Mix Design and the speaker was Mr.Y.D. Chintanwar and Mr. O.V. Sapate. Students found the workshop to be highly fruitful and gained a lot out of it. Guest Lectures were conducted by Astral Informatics on “Civil Advancement” by Dr. Hemant Bherwani,

“Offshore Structure” by Dr. Sachin Chavhan. Department also conducted two days Survey camp at Ghorpad, Kalmeshwar. It was an adventure cum discipline camp where in along with the learning of values, students enjoyed various extra-curricular activities like rock climbing, rappelling, trekking, swimming, playing kabaddi and other sports etc.

Department of CSE organized workshop on topics like “Google Assistant” and “Basics” by Girls Script Foundation, “Future Tech. Machine Learning in AI”, “Basic Python & K-means Clustering”, “Gate Preparation”, Aptitude & Communication Skills, and ACM Workshop on Machine Learning , Guest lecture conducted on “Aptitude Training”, by Mr Rishi Chourasiya, on “Database Technology”by Mrs .Pratigya Thakur, Director & Technical Trainer, Unisoft Technologies, Industry Person Talk by Mr. Lakman Potbhare_Executive member, ACM Nagpur, Student Chapter, Persistent Systems Ltd. Students participated in all events with great zeal and vigor.

Department of Electrical Engg organized guest lectures on Electrical Contractorship By Mr. Rahul Somukwar, on “ROBOTICS & CLOUD Tech” by Mr. Anil Tatote , “Electical Wiring in Vehicle” by Mr Ganesh Madankar, CEO, Circui City Nagpur, and on 3d Printing. All events were a great success with students and faculties.

TABLE-III - Projects for society

Sr. No	Project Name
1	Condition assessment of buildings in Police Colony
2	Analysis of flat slab
3	Case study of Lithely Arch Bridge
4	Design and analysis of arch bridge
5	Generation of renewable energy and organic manure from Food industry waste
6	Web Application for Sports Department
7	Android App for medical artho-equipment
8	Metro Ticket generation using QR code
9	Involuntary meter reading using Microcontroller
10	Building Security Camera system using Raspberry-Pi
11	Smart Electricity Generation From Solid Waste
12	Fire Fighting ROBOT
13	Wall E ROBOT
14	Voice Controlled Home Automation
15	Implementation of Automatic Beach cleaning robot
16	Green Dustbin / Industrial Project
17	Candy Wending Machine
18	Staircase chair Lift
19	Solar Power Automatic Pesticides Sprayer