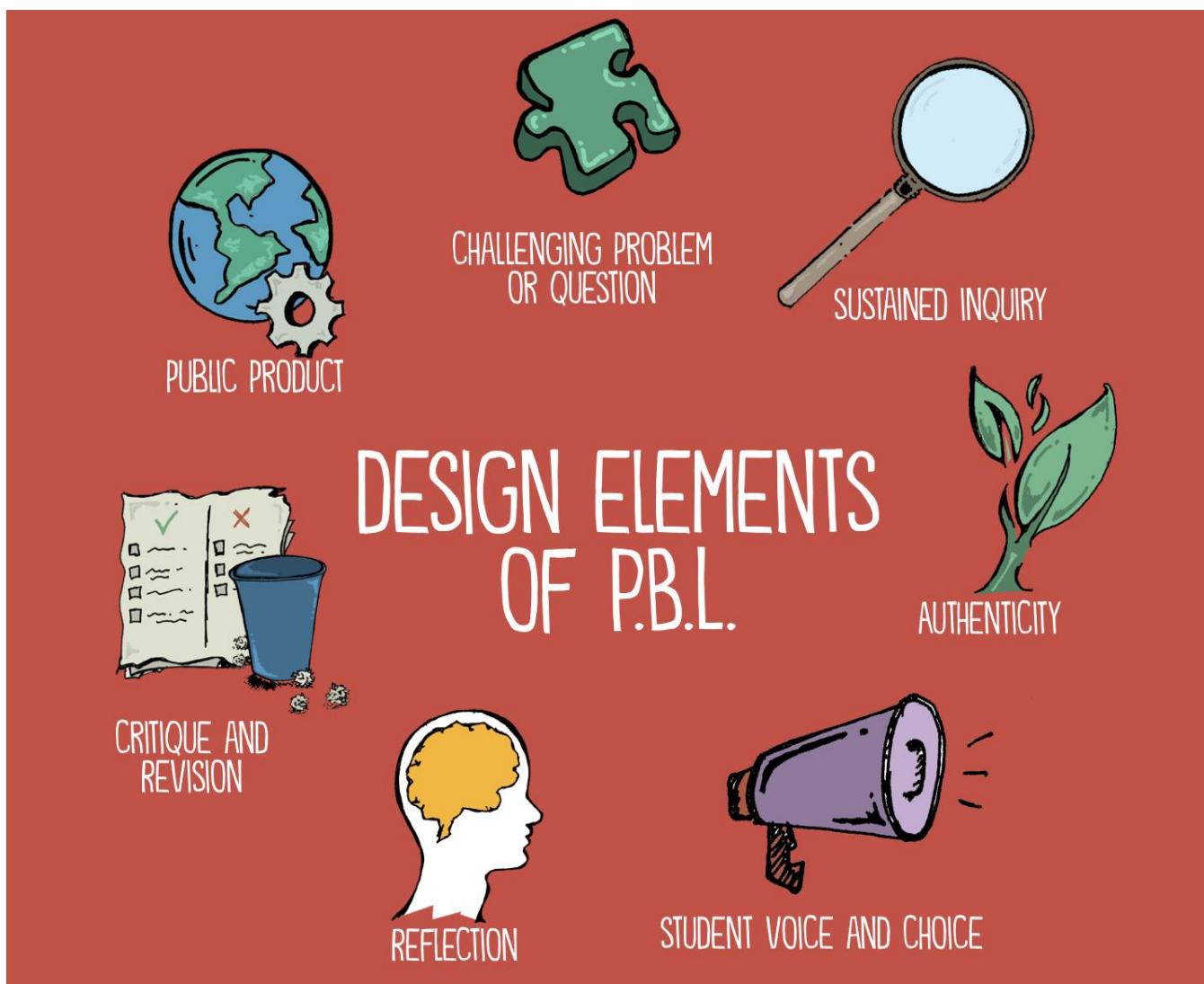




BMS INSTITUTE OF TECHNOLOGY AND MANAGEMENT
YELAHANKA BANGALORE-560064
DEPARTMENT OF CIVIL ENGINEERING

PROJECT BASED LEARNING (PBL) 2019-20 ODD



VISION

To be an Exemplary Centre, disseminating quality education and developing technically competent civil engineers with professional integrity for the betterment of society

MISSION

- 1. To impart technical proficiency through state of art infrastructure and committed faculty**
- 2. To provide practical exposure through research, industry- interaction and motivate entrepreneurship to cater societal needs.**
- 3. To inculcate leadership skills & professional ethics through curricular and co-curricular activities.**

PROGRAM OUTCOMES

- 1. Engineering Knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- 2. Problem Analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- 3. Design/development of Solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
- 4. Conduct Investigations of Complex Problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- 5. Modern Tool Usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and

modeling to complex engineering activities with an understanding of the limitations.

6. **The Engineer and Society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
7. **Environment and Sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
8. **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
9. **Individual and Teamwork:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
10. **Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
11. **Project Management and Finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
12. **Life-long Learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

PROGRAM SPECIFIC OUTCOMES

1. Identify & address the challenges in transportation, sanitation, waste management, and urban flooding in metropolitan cities.
2. Provide solutions related to civil engineering built environment through multidisciplinary approach.

Project Based Learning is a teaching method in which students gain knowledge and skills by working for an extended period to investigate and respond to an authentic, engaging and complex questioning, problem, or challenge.



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Year	Semester	Total PBL Projects
2019-20	ODD	30

2019-2020 ODD SEMESTER

Department of Civil proudly hosted 2019-2020 ODD SEMESTER Project Based Learning encompassing 30 projects in various fields of Civil Engineering

This edition of PBL focused on topics like:

- ❖ Special concrete,
- ❖ Earthquake resistant structures,
- ❖ Waste management,
- ❖ Smart devices.

Group No	Name of the Guide(s)	PBL Title	Students Name & USN	Sem	Student Batch	Any Other Achievements
1	Mrs. Shobha R	Bamboo roofing for parking area	VARUN PURAD ARUNKUMAR(1BY18CV058),YASHASWINI PRASAD(1BY18CV062),PRANAV JAIKANT(1BY18CV018),ANUSHA T G(1BY18CV009),	3	2018	No
2	Dr Sonali bhowmik	Pervious concrete	ADARSH SHUKLA(1BY18CV003),ROHINEESH SHARMA(1BY18CV037),PANKAJ KUMAR SUNGH(1BY18CV033),VARUNAN G S (1BY18CV057),SUYASH PIPARIYA(1BY18CV052)	3	2018	No
3	Mrs Prasanna G	Fire Distress signal @ a college campus	HRUSHIIKESH BABU M(1BY18CV017),K LAKSHMI SAI V NAVEEN(1BY18CV020),SUJAY B B(1BY18CV048),SHAIK MOHD M(1BY18CV039),SUNKARA CHETHAN(1BY18CV050)	3	2018	No
4	Mrs. Archana K	Peizo electric staircase	S RAKSHITH(1BY18CV038),MOUNESH BHIMANNA((1BY18CV026)),BHARATHESH T(1BY18CV026),BHARATHESH T(1BY18CV010),SURAJ KUMAR(1BY18CV051),AKSHY M N (1BY18CV006).	3	2018	No
5	Mrs Prasanna G	Use of solar energy for street lightening and water pumping system towards smart campus	SYED ABDUL RAHMAN(1BY18CV053),ABDUL WAHID B(1BY18CV001),UMAR FAROOQ V(1BY18CV055),SUHAS GOWDA J(1BY18CV046),KARTHIK PATIL(1BY18CV021)	3	2018	No
6	Dr Rajesh Gopinath	Study of Need for Elevated Shoulders in a smart city	D PRANAY REDDY(1BY17CV018),GURUDEEP G (1BY18CV016),SUHAS M GOWDA (1BY18CV047),MANOHAR B M(1BY18CV023)	3	2018	Second Prize in OPEN DAY
7	Mrs Shimna M	AURDINO and ultrasonic sensor based distance measurement for BMSIT&M parking	NAYAN M R(1BY18CV030),PANDURAANGA M K(1BY18CV032),RAHUL K(1BY18CV034),VEERABHADRA GOUDA(1BY18CV059),RISHAV BHOWMICK(1BY18CV035).	3	2018	No
8	Mrs Prasanna G	Soil Moisture controlling using ARDUINO BOARD	KAVYA K(1BY18CV022).MOUNICA B M(1BY18CV027),VARSHA R(1BY18CV056),SIRI K GATTIMANE(1BY18CV042),DISHA S(1BY18CV013),DISHA S(1BY18CV013)	3	2018	No
9	Mrs. Archana K	Smart Parking for campus	NAMITHA B M (1BY18CV029),SNEHA V P (1BY18CV043),SRUSHTI S (1BY18CV045),SHAANTANU T C (1BY18CV065)	3	2018	No
10	Mrs Prasanna G	BMSIT&M location finder	YERUVA RAVITEJA REDDY 1BY18CV064),RITHIKA RAJ(1BY18CV036),DIVYA N B(1BY18CV014),SHRASITI BAGHEL(1BY18CV040),ALEKHYA B(1BY18CV007)	3	2018	No
11	Dr Sonali bhowmik	Green Utopia	SHUBHAM KUMAR(1BY18CV041),ADARSH K R JHA(1BY18CV002),ADITYA KUMAR(1BY18CV004),NITISH SHARMA (1BY18CV031).	3	2018	No
12	Dr Sonali bhowmik	Production of biogas using kitchen waste from canteen and Hostel	VISMAYA S (1BY18CV061),SREERAG A 91BY18CV044),JOASH MAHESH KOSHY (1BY18CV019),DAKSHATA RAVIKUMAR (1BY18CV012).	3	2018	No
13	Dr Rajesh Gopinath	Fail Safe Urban flood management system	D PRANAY REDDY 91BY17CV018),SHAROM SHAIK (1BY18CV0660,AMMAR ANWAR (1BY17CV067),TAHA MISBA (1BY18CV054).	3	2018	First Prize in OPEN DAY

14	Mrs Shimna M	Low power wind turbines for green campus	ANMOL GARG (1BY17CV010),NARESH JANGID (1BY17CV030),AMAN KUMAR SINGH(1BY17CV007),SHARIQ FAYAZ(1BY17CV049)	5	2017	No
15	Mr. Manish S D	Sustainable glass fibre Sugarcane bagasse stabilized Soil blocks	ABHISHEK C HIREMATH (1BY17CV003),ABHISHEK D(1BY17CV004),ABHISHEK M S(1BY18CV400),ABHISHEK M S(1BY18CV400),MALAPPA(1BY18CV405)	5	2017	No
16	Mrs. Archana K	Soil stabilization of Parking lot Using Demolished Building Waste	ANUSHA P PRABHU 91BY17CV011),YAKSHA V 91BY17CV065),SHUBHASHREE G R (1BY17CV052),MEGHANA M S (1BY 17CV028)	5	2017	No
17	Mr. Vinod B R	Plastic Wall Dadoing With Fireproof	VIKAS C (1BY17CV061),PRAVEEN KUMAR D S(1BY18CV407),DARSHAN J (1BY18CV401)	5	2017	Second Prize in OPEN DAY
18	Mrs. Shobha R	Smart Parking plan for College Campus	JAGADISH SUTHAR B(1BY17CV0210,PAVAN BHATIA 91BY17CV034),VIVEK VEDANTH(1BY17CV063),JOEL BINU PANCHAMOOTTIL(1BY17CV0690	5	2017	No
19	Mrs. Lakshmi H S	Tuned Mass Damper	UTTAM CHAUDHARI (1BY17CV073),PURUSHOTAM SAH (1BY17CV070),SHALIK DHUNGANA (1BY17CV071),BHUVANESH (1BY16CV009)	5	2017	No
20	Mrs. Lakshmi H S	Optimal type of Bracing using Vibration sensors	AISHWARYA B(1BY17CV005),SANJANA S(1BY17CV076),SOUNDARYA TV(1BY17CV054),SUCHTRA G M(1BY18CV409)	5	2017	No
21	Mr. Manish S D	Development of SBSC Blocks-a step towards sustainability	SANJU SP (1BY17CV048),MOHAN KUMAR (1BY18CV406),R PAVAN REDDY(1BY17CV040),AKANKSHA (1BY16CV077)	5	2017	No
22	Mr. Manish S D	Green Building	BADDELA VENKATA RAM RAJITH 91BY17CV013),CHANDAN SAI N (1BY17CV015),NAMITH C J (1BY17CV029)	5	2017	No
23	Dr Sonali Bhowmik	Institutional solid waste management	VIKAS T C 91BY17CV062),SIDDESH A 91BY17CV053),UPAMANYU S URS (1BY17CV0600	5	2017	No
24	Dr Rajesh Gopinath	Performance study of fenugreek for its hydrogel properties for its futuristic role in enhancing expanse and efficiency of a green campus	PUNEETH B(1BY17CV039),AKASH M (1BY17CV006),RAKSHITH AE (1BY17CV043),BHUVAN PG (1BY17CV014)	5	2017	First Prize in OPEN DAY
25	Mrs Manish S Dharek	Intelligent building –Smart Security and Lighting System	R PRAJWAL (1BY17CV0410),SHEHBAZ MOHAMMED (1BY17CV050),SURYA KUMAR N A(1BY17CV0550,SURYAVAMSHI N A (1BY17CV056)	5	2017	No
26	Mrs. Shobha R	Bamboo Reinforced Beam	SANJAYA M (1BY18CV408),HARIPRAKASH S (1BY18CV404),DARSHANK KUMAR P R(1BY18CV402),NAGESH L 91BY17CV0750	5	2017	No
27	Mrs Shimna M	Recycled plastic piezoelectric tiles leading to generation of Electricity in BMSIT&M campus	LIKHITH M(1BY17CV025), P JAYA PRAKASH NARAYAN(1BY17CV033), RANUVA DATTA KAILASH(1BY17CV046), B LAKSHMI SHANKAR RAVITEJA(1BY17CV012)	5	2017	No
28	Mrs. Archana K	Natural fibre fog catcher for BMSIT Campus	HEMANTH N 91BY17CV020),JEEVAN S GOWDA (1BY17CV022),NARMADA D (1BY17CV031),PONNAVOLU PAVAN JHANAVI (1BY17CV036)	5	2017	No

29	Mr. Vinod B R	Implementation of Biowall in BMSIT Campus	RAGHAVENDRA G (1BY17CV0420),GAURAV B R (1BY17CV019),CJHANDANA N SWAMY (1BY17CV016),VINEETHA (1BY18CV410)	5	2017	No
30	Mrs. Lakshmi H S	Earthquake Analysis of Residential Building	ANANYA N B (1BY17CV009),MANJUSHA M (1BY17CV0270),RUPALI NIRANJAN(1BY17CV047),SUSHMITHA V (1BY17CV057)	5	2017	No

Open day project based learning exhibition at department of Civil Engineering was held on November 4th 2019. Totally 30 projects have been exhibited (17 of Vth semester and 13 of IIIrd semester). Two resource personnels (academic based and industry based) had judged the event.

The guest were Dr Raja Gopal Reddy **Chintakunta**, Professor, Department of Civil Engineering (MSRIT) and Mr. Praveenjith, Managing Director Paradigm Environmental Strategies (P) ltd. (Eco paradigm).

The criterion of evaluation included Presentation skills, relevance of project, Significance to Environment/Society, Weather patentable or Publishable or Presentable in Conference & Viva.

Out of 30 projects 2 best projects from each semester were awarded.

The projects **“FAIL SAFE URBAN FLOOD MANAGEMENT SYSTEM”** done by D Pranay Reddy, Sharom Shaik Ammar Anwar, Taha Misba under the guidance of Dr. Rajesh Gopinath and **“STUDY OF NEED FOR ELEVATED SHOULDERS IN A SMART CITY”** done by Gurudeep G, Manohar B M, Suhas M Gowda, Tanzil Ahmed R under the guidance of Dr. Rajesh Gopinath 3rd semester were awarded first and second prize respectively.

The projects **“PERFORMANCE STUDY OF FENUGREEK FOR ITS HYDROGEL PROPERTIES FOR ITS FUTURISTIC ROLE IN ENHANCING EXPANSE AND EFFICIENCY OF A GREEN CAMPUS”** done by Puneeth B, Akash N, Rakshith A E, Bhuvan P G, under the guidance of Dr. Rajesh Gopinath and **“PLASTIC WALL DADOING WITH FIREPROOF Analysis”** done by Vikas C, Praveen kumar D S, Darhsan J, under the guidance of Prof Vinod B R from 5th semester were awarded first and second prize respectively.

