

**RAO BAHADHUR Y.MAHABALESHWARAPPA ENGINEERING COLLEGE**

# **SELF ASSESSMENT REPORT (SAR)**

**UNDERGRADUATE ENGINEERING PROGRAM**

**IN**

**CIVIL ENGINEERING (TIER II)**

Submitted to



**NATIONAL BOARD OF ACCREDITATION  
(NBA)**



By

**Department of Civil Engineering**  
**Rao Bahadur Y.Mahabaleswarappa Engineering College**  
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(November 2019)

RAO BAHADUR Y.MAHABALESWARAPPA ENGINEERING COLLEGE,  
CANTONMENTM,BELLARY-583104.

Civil Engg.

## SAR Contents

[VIEW SAR](#)

Serial code	Item
<b>Part A</b>	Institutional Information
<b>Part B</b>	<b>Criteria Summary</b>
	<b>Program Level Criteria</b>
1	Vision, Mission and Program Educational Objectives
2	Program Curriculum and Teaching–Learning Processes
3	Course Outcomes and Program Outcomes
4	Students' Performance
5	Faculty Information and Contributions
6	Facilities and Technical Support
7	Continuous Improvement
	<b>Institute Level Criteria</b>
8	First Year Academics
9	Student Support Systems
10	Governance,Institutional Support and Financial Resources
<b>Annexure-I</b>	<b>ProgramOutcomes(POs) &amp; Program Specific Outcomes(PSOs)</b>
<b>PART C</b>	<b>Declaration by the Institution</b>

# RAO BAHADUR Y.MAHABALESWARAPPA ENGINEERING COLLEGE, CANTONMENTM,BELLARY-583104.

Civil Engg.

## Part A : Institutional Information

### 1 Name and Address of the Institution

RAO BAHADUR Y.MAHABALESWARAPPA ENGINEERING COLLEGE, CANTONMENTM,BELLARY-583104.,  
PRINCIPAL,RAO BAHADUR Y.MAHABLESWARAPPA ENGINEERING COLLEGE,CANTONMENT,BELLARY-583104

### 2 Name and Address of Affiliating University

VISVESWARAYA TECHNOLOGICAL UNIVERSITY, BELGAUM, KARNATAKA STATE-INDIA

### 3 Year of establishment of the Institution:

1980,1994

### 4 Type of the Institution:

<input type="checkbox"/> University	<input type="checkbox"/> Autonomous
<input type="checkbox"/> Deemed University	<input checked="" type="checkbox"/> Affiliated
<input type="checkbox"/> Government Aided	

### 5 Ownership Status:

<input type="checkbox"/> Central Government	<input type="checkbox"/> Trust
<input type="checkbox"/> State Government	<input type="checkbox"/> Society
<input type="checkbox"/> Government Aided	<input type="checkbox"/> Section 25 Company
<input checked="" type="checkbox"/> Self financing	<input type="checkbox"/> Any Other(Please Specify)

### 6 Other Academic Institutions of the Trust/Society/Company etc., if any:

Name of Institutions	Year of Establishment	Programs of Study	Location
Veerasaiva College,	1945	PUC, Degree	Bellary
Smt. Allum Sumangamma Memorial women's College	1969	PUC, Degree	Bellary
Vijayanagara College,	1964	PUC, Degree	Hospet
Kottureswara College,	1967	Degree	Kottur
Gangavathi Bhagyamma Rural College,	1970	Degree	Huvinahadagali
Ambli Dodda Bharamappa First Grade College,	1972	Degree	Harapanahalli
Rao Bhabadur Y Mhabaleswarappa Engg. College,	1980	Engineering	Bellary
Prodadevaraya Institute of Technology, TB Dam Rd,	1997	Engineering	Hospet
Hanagal Kumaraswamy Polytechnic,	1997	Diploma	Bellary
Allum Karibasappa Institute of Management	1998	(MBA)	Bellary
Vunki Sanna Rudrappa Law College,	1975	Law	Bellary
Togari Veeramallappa Memorial college of Pharmacy,	1985	Pharmacy	Bellary
Kotturswamy College of Education,	1963	TCH	Bellary
Sha Babulal Bhavarilal Nahar College, of Education,	2004	Degree	Hospet
Setra Gurushanthappa Pre University College ,	1942	High School, PUC	Bellary
Kittur Rani Channamma Girls High School, Bellary	1993	Primary and High School	Bellary
Haraginadoni Basavanagouda Pre University College, Kudithini	1963	Primary to PUC	Kuduthini
Vijayanagar Comp. Pre University T.B.P Munirabad	1963	PUC, Degree	Munirabad
Kinnalu Poramambe Gurusiddappa High School, Tambrahalli	1968	High School, PUC	Tambrahalli
Akki Basamma Thotappa Pre University College, Tambrahalli	1997	PUC	Tambrahalli
Sha Sheshaji Hastimal Jain Pre University College, Harapanahalli	1999	PUC	Harapanahalli
V.V.Sangha High School, Harapanahalli	2006	High School, PUC	Harapanahalli
Vivekananda Public School, Siruguppa	1993	Primary and High School	Siruguppa
Deshanur Sadashivareddy High School, Deshanuru	1999	Primary and High School	Deshanur
V.V.Sangha's Independent P U College, Bellary	2010	PUC	Bellary
Heerada Sugamma Higher Primary School , Bellary	1924	Primary and Higher Primary	Bellary
Silver Jubilee Memorial Higher Primary School, Bellary	2014	Nursery and Primary	Bellary
Vunki Marisiddamma Primary School, Bellary	1975	Nursery and Primary	Bellary
Gandharva Sangeetha Vidyalaya, Bellary	2006	Music	Bellary
S.K. Modi National School	2014	Nursery to High School	Bellary
Kinder's Garden School	2019	Nursery	Bellary
V V Sangha Public School	2018	Primary and High School	Hospet
V.V. Sangha Independent PU College	2015	PUC	Hagribommanahalli
V.V. Sangha Kindergarden Schhol	2014	Nursery and Primary	Hagribommanahalli
V.V. Sangha Kindergarden Schhol	2014	Nursery and Primary	Munirabad

**7 Details of all the programs being offered by the institution under consideration:**

Name of Program	Program Applied level	Start of year	Year of AICTE approval	Initial Intake	Intake Increase	Current Intake	Accreditation status	From	To	Program for consideration	Program for Duration
Civil Engineering	UG	1980	1980	60	Yes	120	Applying first time	--	--	Yes	4
<b>Sanctioned Intake for Last Five Years for the Civil Engineering</b>											
<b>Academic Year</b>							<b>Sanctioned Intake</b>				
2018-19							120				
2017-18							120				
2016-17							120				
2015-16							120				
2014-15							120				
2013-14							120				
STRUCTURAL ENGINEERING	PG	2014	2014	18	No	18	Eligible but not applied	--	--	No	2

**8 Programs to be considered for Accreditation vide this application:**

S No	Level	Discipline	Program
1	Under Graduate	Engineering & Technology	Civil Engg.
2	Under Graduate	Engineering & Technology	Electronics & Communication Engg.
3	Under Graduate	Engineering & Technology	Mechanical Engg.

**9 Total number of employees in the institution:**

**A. Regular\* Employees (Faculty and Staff):**

Items	2018-19		2017-18		2016-17	
	MIN	MAX	MIN	MAX	MIN	MAX
Faculty in Engineering (Male)	139	145	134	143	144	148
Faculty in Engineering (Female)	34	39	36	41	38	38
Faculty in Maths, Science & Humanities (Male)	11	11	11	11	11	11
Faculty in Maths, Science & Humanities (FeMale)	7	7	7	7	7	7
Non-teaching staff (Male)	145	149	144	149	142	149
Non-teaching staff (FeMale)	4	5	5	5	5	5

**B. Contractual\* Employees (Faculty and Staff):**

Items	2018-19		2017-18		2016-17	
	MIN	MAX	MIN	MAX	MIN	MAX
Faculty in Engineering (Male)	0	0	0	0	0	0
Faculty in Engineering (Female)	0	0	0	0	0	0
Faculty in Maths, Science & Humanities (Male)	0	0	0	0	0	0
Faculty in Maths, Science & Humanities (FeMale)	0	0	0	0	0	0
Non-teaching staff (Male)	8	8	8	8	5	5
Non-teaching staff (FeMale)	7	7	7	7	5	5

**10 Total number of Engineering Students:**

Engineering and Technology- UG	<input checked="" type="checkbox"/> Shift1	<input type="checkbox"/> Shift2
Engineering and Technology- PG	<input checked="" type="checkbox"/> Shift1	<input type="checkbox"/> Shift2
Engineering and Technology- Polytechnic	<input type="checkbox"/> Shift1	<input type="checkbox"/> Shift2
MBA	<input checked="" type="checkbox"/> Shift1	<input type="checkbox"/> Shift2
MCA	<input type="checkbox"/> Shift1	<input type="checkbox"/> Shift2

#### Engineering and Technology- UG Shift-1

Items	2018-19	2017-18	2016-17
Total no. of Boys	1388	1408	1673
Total no. of Girls	925	998	1110
<b>Total</b>	<b>2313</b>	<b>2406</b>	<b>2783</b>

#### Engineering and Technology- PG Shift-1

Items	2018-19	2017-18	2016-17
Total no. of Boys	47	52	61
Total no. of Girls	31	31	34
<b>Total</b>	<b>78</b>	<b>83</b>	<b>95</b>

#### Engineering and Technology- MBA Shift-1

Items	2018-19	2017-18	2016-17
Total no. of Boys	55	49	24
Total no. of Girls	54	33	27
<b>Total</b>	<b>109</b>	<b>82</b>	<b>51</b>

#### 11 Vision of the Institution:

To Produce Professionally Excellent, Knowledgeable, Globally Competitive, Socially Responsible Engineers and Entrepreneurs

#### 12 Mission of the Institution:

M1: To provide quality education in Engineering and Management.

M2: To establish a continuous Industry Institute interaction, Participation and Collaboration to contribute skilled Engineers.

M3: To develop human values, social values, entrepreneurship skills and professional ethics among the technocrats.

M4: To focus on innovation and development of technologies by engaging in cutting edge research areas.

#### 13 Contact Information of the Head of the Institution and NBA coordinator, if designated:

Head of the Institution	
Name	Dr.Kuppagal Veeresh
Designation	Professor & Principal
Mobile No.	9448043949
Email ID	principalrymec@gmail.com

**NBA Coordinator, If Designated**

Name	Dr.Hiregoudar Yerrannagoudar
Designation	Professor
Mobile No.	9449950342
Email ID	hiregoudar.yng@gmail.com

## PART B: Criteria Summary

Criteria No.	Criteria	Total Marks	Institute Marks
1	VISION, MISSION AND PROGRAM EDUCATIONAL OBJECTIVES	60	60.00
2	PROGRAM CURRICULUM AND TEACHING - LEARNING PROCESSES	120	120.00
3	COURSE OUTCOMES AND PROGRAM OUTCOMES	120	120.00
4	STUDENTS' PERFORMANCE	150	98.47
5	FACULTY INFORMATION AND CONTRIBUTIONS	200	175.27
6	FACILITIES AND TECHNICAL SUPPORT	80	80.00
7	CONTINUOUS IMPROVEMENT	50	50.00
8	FIRST YEAR ACADEMICS	50	40.38
9	STUDENT SUPPORT SYSTEMS	50	50.00
10	GOVERNANCE, INSTITUTIONAL SUPPORT AND FINANCIAL RESOURCES	120	117.00
	<b>Total</b>	<b>1000</b>	<b>910</b>

# Part B

## 1 VISION, MISSION AND PROGRAM EDUCATIONAL OBJECTIVES (60)

Total Marks 60.00

### 1.1 State the Vision and Mission of the Department and Institute (5)

Total Marks 5.00

Institute Marks : 5.00

Vision of the institute	To Produce Professionally Excellent, Knowledgeable, Globally Competitive, Socially Responsible Engineers and Entrepreneurs										
Mission of the institute	M1: To provide quality education in Engineering and Management. M2: To establish a continuous Industry Institute interaction, Participation and Collaboration to contribute skilled Engineers. M3: To develop human values, social values, entrepreneurship skills and professional ethics among the technocrats. M4: To focus on innovation and development of technologies by engaging in cutting edge research areas.										
Vision of the Department	To produce technically, professionally excellent, knowledgeable, socially responsible and globally Competitive Civil Engineers, committed for the sustainable development of the society.										
Mission of the Department	<table border="1"> <thead> <tr> <th>Mission No.</th> <th>Mission Statements</th> </tr> </thead> <tbody> <tr> <td>M1</td> <td>To provide quality education, globally, competitive for a successful career in civil engineering</td> </tr> <tr> <td>M2</td> <td>To encourage the students for pursuing higher education with the state of mind for continuous upgradation</td> </tr> <tr> <td>M3</td> <td>To provide service for society through consultancy, construction, protection and Preservation of environment and research in civil engineering field</td> </tr> <tr> <td>M4</td> <td>To produce exemplary professional Civil Engineers with Entrepreneurial skills</td> </tr> </tbody> </table>	Mission No.	Mission Statements	M1	To provide quality education, globally, competitive for a successful career in civil engineering	M2	To encourage the students for pursuing higher education with the state of mind for continuous upgradation	M3	To provide service for society through consultancy, construction, protection and Preservation of environment and research in civil engineering field	M4	To produce exemplary professional Civil Engineers with Entrepreneurial skills
Mission No.	Mission Statements										
M1	To provide quality education, globally, competitive for a successful career in civil engineering										
M2	To encourage the students for pursuing higher education with the state of mind for continuous upgradation										
M3	To provide service for society through consultancy, construction, protection and Preservation of environment and research in civil engineering field										
M4	To produce exemplary professional Civil Engineers with Entrepreneurial skills										

### 1.2 State the Program Educational Objectives (PEOs) (5)

Total Marks 5.00

Institute Marks : 5.00

PEO No.	Program Educational Objectives Statements
PEO1	Graduate would develop successful career in Civil engineering to attend the various issues with high moral and professional standards
PEO2	Graduate would be able to work and meet the needs of sustainable development
PEO3	Graduate would develop the ability to pursue higher education & research with Continuous engage in lifelong learning

### 1.3 Indicate where the Vision, Mission and PEOs are published and disseminated among stakeholders (10)

Total Marks 10.00



### Mission and Vision and PEOs are published on

- Institute web site (www.rymec.in)
- Laboratory Manuals
- Departmental News letter
- Internal Assessment (CIE) Books

### Vision, Mission and PEOs are disseminated in

- Class Room
- Faculty Room
- HOD's Room
- Departmental Corridor
- Teachers student Parent Meet
- Alumni meet

### Vision, Mission and PEOs are disseminated through

- The finalized Vision and Mission statements are made available in the Institution and department website so that any person can access the website will understand the vision and mission of the department and Institution.
- The vision and Mission are displayed in the HOD's room, class rooms, department corridors, faculty room. This will help in disseminating the vision and mission of the department to all stake holders.
- Alumni meet is conducted every year in the department, participant alumni will be made aware of the Vision and Mission.
- Parents Meeting is held once in a semester in the department, Vision and Mission statements of the Department are conveyed to the parents.

**1.4 State the process for defining the Vision and Mission of the Department, and PEOs of the program (25)**

Total Marks 25.00  
Institute Marks : 25.00

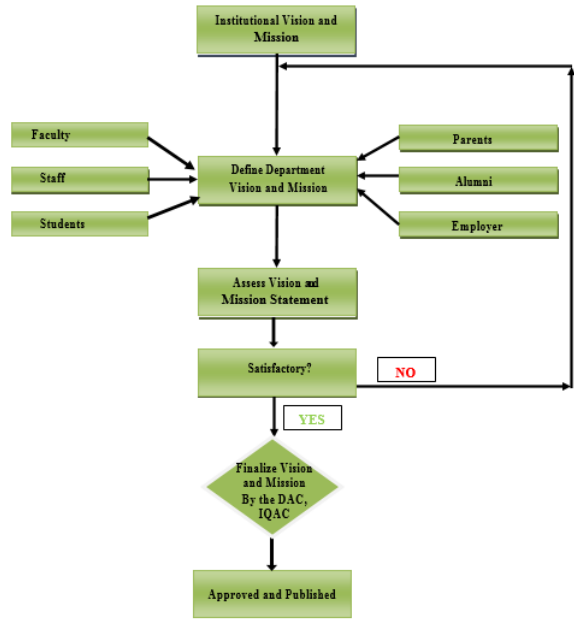


Fig 1.1 Flow Diagram showing the Process for Defining the Vision and Mission of the Department

Department Vision and Mission statements are defined in line with Institutional Vision & Mission statements and consultative process involving internal and external stakeholders, industrial requirements, future scope and the societal requirement. In defining Vision and Mission Statement of Department the following steps are followed and same as shown in fig 1.1

- Step 1:** Vision and Mission of the institute are taken as basis for defining Department Vision and Mission statements.
- Step 2:** Opinion were taken from Stakeholders of the Department. (Faculty, Staff, Students, Parents, Employer, Alumni) on most critical

areas to be addressed by the Department based on our expertise and available resources.

- Step 3:** Once the information was collected and summarized, the draft of the Vision and Mission of the Department are formed and the same was discussed by HOD with the Faculty in the Meeting.
- Step 4:** The same is communicated to the Alumni, Parents, Employers, students and the feedback is taken from these Stakeholders.
- Step 5:** If the same is accepted, Vision and Mission of the Department are finalized by Departmental Academic Committee or else the Process is repeated.
- Step 6:** Finalized Vision and Mission of the Department is approved in the Internal Quality Assurance Cell (IQAC).

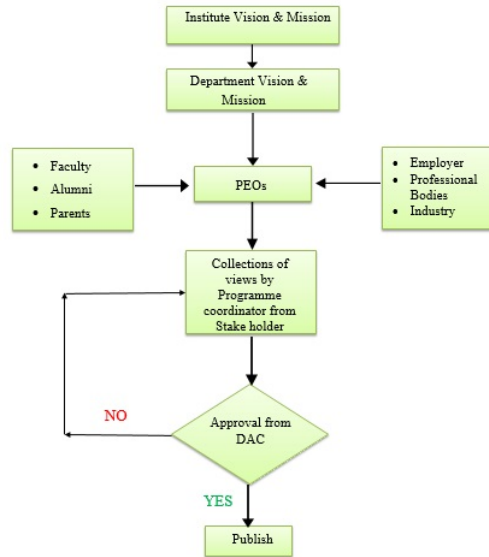


Fig 1.2 Flow Diagram showing the Process for Defining the PEOs of the Department

The Programme Educational Objectives are defined through a consultation with internal and external stakeholders (Faculty, Alumni, Employers, Parents, Professional bodies and Industry). In defining PEOs Statement of Department the following steps are followed and same as shown in fig 1.2

- Step 1:** The PEOs are done in line with Institute and Department’s Vision and Mission statements.
- Step 2:** The collaborative views are collected by the Programme coordinator for the formulation of PEOs with various stakeholders.
- Step 3:** The PEOs are developed by the team of faculty members of the Programme.
- Step 4:** The PEOs are presented in Department Academic Committee (DAC) for additional inputs required for any changes in the statements.
- Step 5:** Finalized Programme Educational Objectives (PEOs) are published.

**1.5 Establish consistency of PEOs with Mission of the Department (15)**

Total Marks 15.00  
Institute Marks : 15.00

**Justification for PEO to Mission**

PEO	MISSION	CORRELATION	JUSTIFICATION
PEO 1: Graduate Would develop successful career in Civil engineering to attend the various issues with high moral and professional Standards.	Mission 1-Quality Education	1- Slight (Low)	Students are trained through good class room teaching with very well- articulated Teaching Learning Process (TLP). Students are made to interact with industry through the professional body to enhance their knowledge.
	Mission-2:Higher Education	1- Slight (Low)	Students will be educated by the mentor about the higher studies and Its importance.

	Mission 3: Environment and Research	1- Slight (Low)	Electives are offered to the students in the Environmental fields such as Air Pollution and control, Solid Waste management, Water Resource and Management to enhance the knowledge and their importance to meet the Sustainable Development.
	Mission 4: Entrepreneurial skills	3- Substantial (High)	Students will be trained to focus on the Entrepreneur skills through Bootcamp
PEO 2: Graduate would be able to work and meet the needs of sustainable development	Mission 1- Quality Education	2- Moderate (Medium)	Students are updated about the industry through the invited talk from the industry person
	Mission 3: Environment and Research	3- Substantial (High)	Students will take the innovative project which is required in order to solve real life problems for the better society.
	Mission 4: Entrepreneurial skills	1- Slight (Low)	Students are encouraged to do internship during Semester break. This emphasizes upgradation of their knowledge and Entrepreneur Skills among them.
PEO 3 : Graduate would develop the ability to pursue higher education with continuous engage in lifelong learning	Mission 1- Quality Education	1- Slight (Low)	Providing skill & knowledge for continuous learning process motivates the students to indulge them in providing the Sustainable solution.
	Mission-2: Higher Education	3- Substantial (High)	Speakers are invited to educate students about the importance of taking examinations such as Graduate Aptitude Test For Engineering (GATE), Graduate Record Examination (GRE), TOEFL to pursue their higher studies.
	Mission 3: Environment and Research	2- Moderate (Medium)	Research work carried out by the faculty in the Department will motivate the student to inculcate their thinking towards research.
	Mission 4: Entrepreneurial skills	1- Slight (Low)	Students are updated about the Entrepreneur Skills through the Invited talks conducted by the Entrepreneurs.

PEO Statements	M1	M2	M3	M4
Graduate would develop successful career in Civil engineering to attend the various issues with high moral and professional standards	1	1	1	3
Graduate would be able to work and meet the needs of sustainable development	2	-	3	1
Graduate would develop the ability to pursue higher education & research with Continuous engage in lifelong learning	1	3	2	1

## 2.1 Program Curriculum (20)

Total Marks 20.00

2.1.1 State the process used to identify extent of compliance of the University curriculum for attaining the Program Outcomes and Program Specific Outcomes as mentioned in Annexurel. Also mention the identified curricular gaps, if any (10)

Institute Marks : 10.00

Rao Bahadur Y Mahabaleswarappa Engineering College is affiliated to VTU, Belagavi, Karnataka. The Curriculum for Civil Engineering program comprises of the Course content as prescribed by the University. The University maintains balance between various Disciplines such as Humanities, basic sciences, Environment sciences and core engineering courses. Hence the Civil Engineering program architecture follows the recommendations of the University time to time. Further the Civil Engineering curriculum is also modified continuously as per the directions from Board of Studies (BOS) of the University. The BOS conducts periodical meetings and sets guidelines and frame the syllabus based on the input received from Academicians, Professors working in various affiliated colleges and Construction Industry experts.

The details of the Course Structure is presented in the Table No. 2.1

Table No. 2.1: Course Structure Prescribed by VTU

Year		Humanities and Social Sciences (HS)	Basic Sciences (BS)	Engineering Sciences(ES)	Professional Subjects-Core (PC)	Professional Subjects Electives (PE)
I year	I Sem	1	3	4	-	-
	II Sem	-	3	5	-	-
II year	III Sem	-	1	1	6	-
	IV Sem	-	1	1	6	-
III year	V Sem	-	-	-	6	2
	VI Sem	1	-	-	5	2
IV year	VII Sem	-	-	-	6	2
	VIII Sem	-	-	-	5	1
Total Courses		2	8	11	34	7

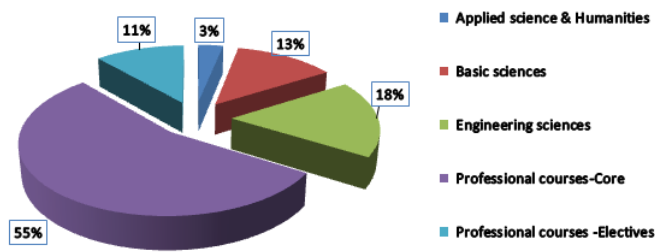
Table No. 2.2: Curriculum structure

Course component	Curriculum content (% of contribution )
1. Applied science & Humanities	2/62=3%
2. Basic sciences	8/62=13%
3. Engineering sciences	11/62=18%
4. Professional courses - Core	34/62=55%
5. Professional courses - Electives	7/62=11%

- a. Applied science & Humanities = 2 courses  
 b. Basic sciences = 8 courses  
 c. Engineering sciences = 11 courses  
 d. Professional courses-Core = 34 courses  
 e. Professional courses –Elective = 7 courses

**Total number of Courses in the curriculum (from semester 1 to 8) = a + b + c +d +e = 62**

**CURRICULUM CONTRIBUTION**



**Fig 2.1: Curriculum Contribution**

**Table No. 2.3: Contribution of Theory and Practical's**

Balance of Theory and Practical's	
Component	%Contribution of hours
Theory	80
Practical	20

- **Theory** : 4 hours per subject ( 6 subjects per semester) = 24 hrs/Week
- **Practical** : 3 hours per subject (2 subjects per semester) = 6 hrs/Week

**Total hours = 30 hrs/Week**

- Percentage contribution for Theory =  $(24/30) * 100 = 80\%$
- Percentage contribution for practical =  $(6/30) * 100 = 20\%$

The Program Outcomes are as Prescribed by NBA is shown in Table No. 2.4

**Table No. 2.4: Statement of Program Outcomes**

PO. No	Graduate Attributes
PO1	Engineering Knowledge
PO2	Problem Analysis
PO3	Design/ Development of Solutions
PO4	Conduct Investigations of Complex Problems
PO5	Modern Tool usage
PO6	The Engineer and Society
PO7	Environment and Sustainability
PO8	Ethics
PO9	Individual and team work
PO10	Communication
PO11	Project management and Finance
PO12	Lifelong learning

The Program Specific Outcomes (PSO's) are arrived based on the information/feedback collected from Stake holders (Alumni, Industry experts, employers).The Program Specific outcome statements are shown in Table no 2.5.

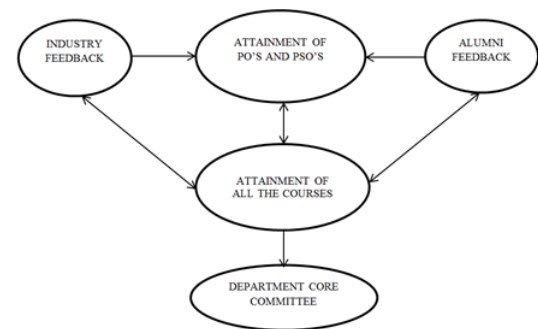
**Table No. 2.5: Statement of Program Specific Outcomes**

PSO	Statements
PSO1	Ability to plan, estimate and supervise construction activities of civil engineering Structures.
PSO2	Ability to identify the soils of different nature through the geotechnical investigations and provide suitable foundation to the structures.

<b>PSO3</b>	Ability to plan, analyze and design and to solve Environmental engineering related Problems.
-------------	--

**A. Process used to identify the Compliance of University Curriculum for Attainment of PO's and PSO's**

A meeting of construction industry experts, Alumni and other Faculty members was called in the Department and Deliberations were made on attainment of PO'S and PSO'S with regard to University curriculum. The inputs were received from all the attendees in the meeting and the PO's and PSO's which are either partially attained or not attained entirely are identified. The PO'S and PSO'S which are not attained are shown in Fig 2.4.



**Fig 2.2: Flow chart followed for Attainment of PO's and PSO's with University–Curriculum**

Table No.2.6 & Fig 2.3 shows the details of percent Compliance of PO's and PSO's as per University Curriculum.

**Table No. 2.6: The percent compliance of Courses with all the POs & PSOs for the Academic Year 2018-2019**

PO's	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2	PSO 3
<b>Percent compliance</b>	60.7	59.3	62.7	60.0	65.0	56.7	58.0	57.0	65.7	52.3	55.3	51.7	52.3	52.0	48.0



Fig 2.3: Bar Chart of Attainment Level v/s PO's and POS's for the year 2018-19

**B. List of curricular gaps for the Attainment of defined PO's and PSO's**

The following is the List of PO's and PSO's which are identified gaps.

1. Problem Analysis (PO2)
2. The Engineer and Society (PO6)
3. Environment and Sustainability (PO7)
4. Ethics (PO8)
5. Communication (PO10)
6. Project Management and Finance (PO11)
7. Life-long Learning (PO12)
8. Program Specific Outcome 1
9. Program Specific Outcome 2
10. Program Specific Outcome 3

To fulfill the Gaps in addition to the university Curriculum, the Department has conducted additional courses, invited talks, seminars, workshops & personality development programs as exhibited in Table No. 2.7 to 2.9.

PO's & PSO's

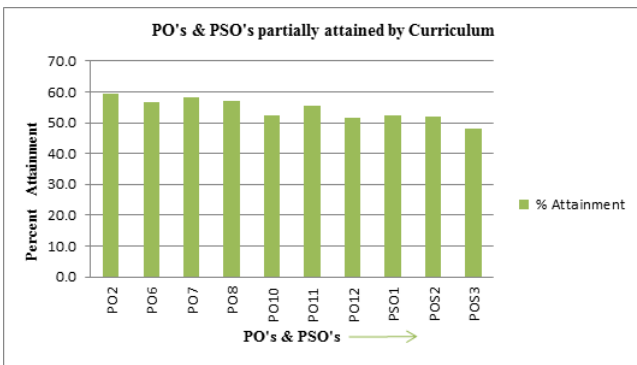


Fig 2.4: Bar chart of percent Attainment v/s PO's and PSO's

**2.1.2 State the delivery details of the content beyond the syllabus for the attainment of POs and PSOs (10)**

Institute Marks : 10.00

2018-19

S.No	Gap	Action Taken	Date-Month-Year	Resource Person with Designation	% of students	Relevance to POs, PSOs
1	Engineer and Society	Workshop On "Ready Mix Con-crete(ICI)"(For RMC 7thsem)	25/8/2018	UDAYA KUMAR S. G. Heidelberg Cement In-dia Limited, Bengaluru	75	PO6, PO12 PSO1
2	Hot Mix As-phal/Bituminous mix design	Field Visit to HMA mix plant	27/2/2019	Faculty Members of Civil Engg. Dept. and Site Engineer Chandrashaker M.	70	PO1, PO3, PO8, PO12

2017-18

S.No	Gap	Action Taken	Date-Month-Year	Resource Person with Designation	% of students	Relevance to POs, PSOs
1	Modern tool usage	Training Program on "Auto CADD"	09/10/2017	Siddiqee Shaik AutoCAD, Ballari	83	PO5,PSO1
2	Modern tool usage	Training Program on "E-TABS"	16/11/2018	Balamurlli Krishna AutoCAD, Ballari	75	PO5,PSO1

2016-17

S.No	Gap	Action Taken	Date-Month-Year	Resource Person with Designation	% of students	Relevance to POs, PSOs
1	Engineer and society, Environment & sustaina-bility, com-munication and life-long learning.	Workshop on "Solid Waste & Waste Water Management in Urban & Rural India-Present Scenario & Challenges".	26/08/2016	1.Dr. Govindaraju Guptha, Professor, GEC, Goa 2.Dr. C. Sadashivaiah, HOD & Professor, HMSIT, Tumkur 3.D.R.KumarSwamy, Chief Environmental Officer, KSPCB, Bengaluru 4.Dr. Basavaraj Manu, Assoc. Professor, NITK, Suratkal 5. Dr. G.P.Shivashankar, Professor, PES, Mandya 6.S.M.R.Prasad, Vice President, E.M. Dept. JSW 7. Dr. R.T. SrinivasRao, General Manager, Envi-ronment Management JSW Steel Ltd., Ballari.	90	PO6, PO7 ,PO12

## 2.2 Teaching - Learning Processes (100)

Total Marks 100.00

### 2.2.1 Describe processes followed to improve quality of Teaching & Learning (25)

Institute Marks : 25.00

#### A. Adherence to Academic Calendar.

Since the Institute is affiliated to VTU, Belagavi, hence all the program dates will adhere to the calendar of the University. The Department Calendar of events is prepared based on University and Institute calendar of events as mentioned above and is provided to all the students and faculties before commencement of the semester.

#### B. Use of various instructional methods and pedagogical initiatives.

Various Instructional methods and pedagogical initiates involved in teaching learning process are listed below:

1. Lecturing using Black board
2. Lecturing through Tutorials and Remedial classes
3. Power point presentation
4. NPTEL videos
5. Models
6. Industrial tours/Field demonstrations /Real World citations
7. Distribution of Handouts
8. Demonstrations in the class room
9. Debates and quiz

#### C. Methodologies to support weak students and encourage bright students.

##### Initiatives and Implementation details of Assisting Poor academic Performers:

The department process of monitoring, guiding and assisting slow learners is as below

- A separate list of students scored below 15 marks for Non CBCS Scheme/12marks for CBCS Scheme in the internals is identified and are given additional coaching by conducting Remedial classes.
- Additional coaching is given to slow learners through Remedial classes and is prepared to face the exams with confidence.
- A group of students are allocated to each Faculty who act as mentor to address the grievances of each student and after counseling, suitable suggestions/ advise is given and the Department will try to resolve the issues of mentee.

##### Impact analysis on the performance for Poor academic Performers

- Improvement in the Internal Assessment marks.
- Improved results and less number of failures in each subject.

##### Initiatives and implementation details of Encouraging Meritorious Students

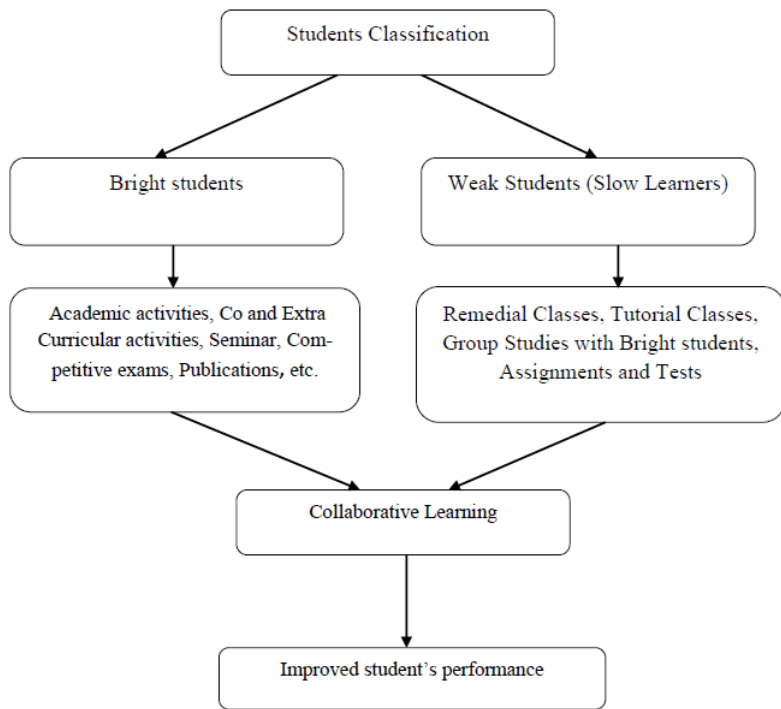
- The Department has made subscription for life Membership of Indian Concrete Institute (ICI) [Member Number: LM-11253 on October-2015]
- ICI Student Chapter was conducted On 16<sup>th</sup> April 2016 and Two day seminar on "Seminar and Deminar on construction materials".
- The Department has established a student's forum "SHILPI" to organize different programs like model making, quiz, paper presentation and celebrate National days.
- The bright students are identified based on their overall performance and their orientation towards Academics.
- Encouraged to present seminar on content beyond syllabus
- Encouraged to attend conferences, workshops and publish papers.
- Encouraged to take up innovative projects and apply for funding of the KSCST.
- Encouraged to participate in various competitive exams/quest/quiz.
- The bright students having high academic track record are encouraged to bag university ranks & also encouraged to take up competitive examinations like GATE, PG CET etc.,
- The Department honors meritorious students through Academic excellence Award function and present certificates with cash prize.

##### Impact analysis for Outstanding & brilliant Students:

Table No. 2.7: Students qualified in Competitive exams

Registration No	Name of Student	Year of passing	Competitive exams
CE200702146	KIRAN KUMAR L JANADRI	2014	GATE
CE11013S7109	APOORVA	2015	GATE
GA068	GANESH H	2016	PGCET
GA048	MAHAMMAD SAMEER	2016	PGCET





**Figure 2.6: Flow diagram showing process followed to improve student performance**

**D. Quality of Class room Teaching.**

All classrooms are provided with blackboard, LCD projectors and Audio facility. All the theory courses are delivered through lectures, NPTEL and NITTR recorded videos using these facilities. Students are encouraged to interact and discuss with the faculty during lecture and get their doubts cleared. For the courses involving numericals and designs, problems from the University question papers are solved in the class. Numerical examples with twist in the data or solutions are also discussed or given as assignment. A minimum of 85% attendance is to be attained by the student to appear for the University examination. The University stipulates maximum number of four heads as backlogs in first and second semester to enter third semester and these eligibility criteria depends on the prevailing scheme. The Students attendance is monitored every week and the list of the students with low attendance is displayed in the notice board. All these regulations prompt the students to be regular and serious in their studies.

Based on the request from the Faculty and considering the importance of the subject, additional teaching hours are allotted in the Time table as tutorial classes.

**E. Conduct of experiments.**

**Initiatives and implementation details of improving Laboratory Experience in Conducting Experiments:**

- Student Batches for each experiment are made depending on the type of experiment, laboratory and availability of equipment.
- The faculty provides instruction elaborately to each experiment and also illustrates using recorded videos like NPTEL and NITTR.
- The faculty will monitor the progress of experiments carried out by each batch of students.
- The faculty checks/verifies the observations recorded in the observation book with calculations until the results and conclusions are drawn by the students.
- The students will enter all the observations in observation book and submit the record in the subsequent week with all the information related to the test/experiment.
- Viva questions/question bank is provided to students prior to the University examinations.
- At the end of the semester an internal practical test is conducted in line with university practical examination and marks are awarded.
- The performance of Students in the Laboratories are evaluated by the faculties for 20/40 marks is presented in the Table No. 2.11 and 2.12.

**Table No.2.8: Division of marks followed for evaluating student's performance. (CBCS 2015 Scheme)**

Level	Evaluation Type
-------	-----------------

1.	Continuous Evaluation for each experiment.	7marks
2.	Laboratory Internal Test and Record submission.	10marks
3.	Attendance.	03 marks
Total		20 marks

**Table No. 2.9: Division of marks followed for evaluating student's performance. (CBCS 2017 Scheme)**

Level	Evaluation Type	
1.	Continuous Evaluation for each experiment.	12marks
2.	Laboratory Internal Test, and Record submission	25 marks
3.	Attendance	03 marks
Total		40 marks

#### **F. Continuous assessment in the laboratory.**

##### **Implementing Quality procedures in conducting Laboratory Experiments:**

Quality of conducting experiments is improved in the Laboratory by adopting the following procedures;

- Providing Do's and Don'ts (Display Board)
- Methodology to conduct experiments is as per the prevailing I.S. Code procedures.
- Providing Laboratory manual
- Maintaining log book for every laboratory
- Presentation through Videos (recorded NPTEL and NITTR videos)
- Demonstration of experiments in the laboratory
- Continuous monitoring the students through evaluation of the observation book and record regularly
- An Extra laboratory class is arranged for students who remained absent for regular classes.
- Providing the question Bank
- Good results in laboratory university examination.

##### **Impact analysis for improved Teaching Learning Process:**

**The following are the positive outcomes observed after adopting the innovative Teaching learning processes:**

- Improved Performance in internal assessment tests
- Improved performance in external examinations
- New view points and new project ideas derived from the students.
- Better bondage between students and faculty.
- Better employment opportunities after graduation.

#### **G. Student feedback of teaching learning process and action taken.**

Feedback on faculty from students will be collected once in every semester at the Institute level.

#### **2.2.2 Quality of internal semester Question papers, Assignments and Evaluation (20)**

Institute Marks : 20.00

##### **A. Process for internal semester question paper setting & evaluation and effective process implementation.**

##### **Process followed to monitor quality of internal assessment test question papers:**

The Department follows guidelines of VTU to conduct IA test and award the marks as per the guidelines of affiliated university. VTU gives compendium that contains rules and regulation to be followed for conducting IA tests.

##### **Awarding of Internal Assessment Marks:**

The following procedure is maintained to award IA marks

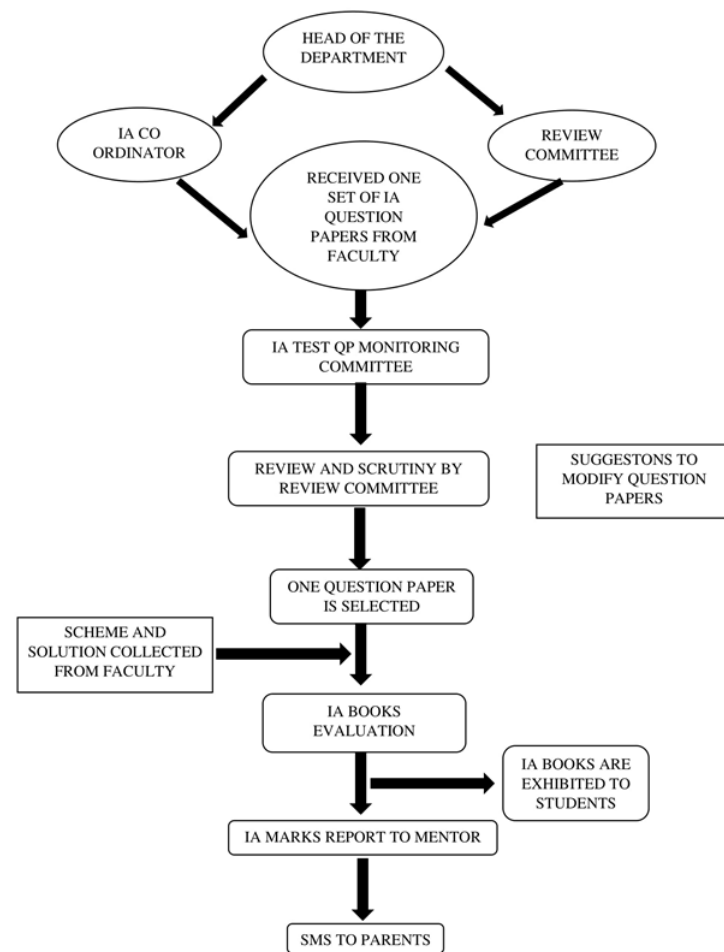
The Internal Assessment test is conducted as per the prevailing schemes of the University in the respective academic years.

- For 2015 CBCS, the IA test is conducted for 30 marks and reduced to 15 marks as per VTU evaluation norms and 5 marks is allotted for assignment, and the final marks are declared as average of best of two IA tests.
- For 2017 and 2018 CBCS, the IA test is conducted for 50 marks and reduced to 30 marks as per VTU evaluation norms and 10 marks is allotted for assignment, and the Final marks are declared as average of three IA tests.
- The Assignment marks are awarded based on the performance of the student in writing assignment, seminar, and others as prescribed in the syllabus.

**Department Internal Assessment Test Process:**

HOD will nominate a Faculty as an internal assessment test coordinator to monitor the whole process and he will constitute a committee, which will oversee the process of monitoring the quality of question paper, scheme of evaluation and reviews the evaluation of IA books.

Three set of question papers will be submitted by each faculty to the Committee where one among of the three set of question papers will be selected for the test after the scrutiny. If any modifications are required the Committee recommends the same to the respective Faculty. The committee gives guidelines for IA Question paper preparation. The committee will look after and ensure that the IA marks are dispatched to the parents through SMS.



**Fig 2.7: Flowchart Process followed for conducting Internal Assessment Test**

**Awarding of Internal Marks:**

Based on the performance of students in Three IA Tests, final IA marks is computed as Average of the three IA tests. The above procedure of awarding the IA marks is based on the VTU Regulations. Practical classes have one Internal Assessment test.

**Makeup Internal Assessment Test:**

Makeup Internal Assessment test is allowed for those Students who have scored low Average marks, not attended internals due medical and other related issues.

**B. Process to ensure questions from outcomes/learning levels perspective**

In setting the internal assessment question paper Blooms Taxonomy is adopted as prescribed by the learning objectives of University and attainment of PO's and PSO's. Mapping of PO's and PSO's is verified before finalizing the Question paper. The scrutiny of the question papers is made by DAC.

**C. Evidence of CO's coverage in class test/mid-term tests**

**D. Quality of Assignment and its relevance to CO's**

A minimum of three assignments is to be written by a student. Questions for assignments are prepared in-line with CO's, PO's and PSO's. The students are encouraged to refer contents from various sources to complete the assignments and this promotes self-learning.

**2.2.3 Quality of student projects (25)**

Institute Marks : 25.00

**A. Identification of projects and allocation methodology to Faculty Members**

The following Committee/Committee Members are constituted to make the regulations and to evaluate the Projects:

1. HOD
2. Project Review Committee
3. Project Guide
4. Project Co-ordinator

A **Project Review Committee (PRC)** is constituted by Head of the Department, along with the Project Coordinator comprising of senior Faculty members representing all specializations. The HOD nominates one of the Faculty as Project Coordinator to monitor all Project related activities. An external subject expert evaluates all projects and declare best and average project based on the rubrics of the project .

Selection of Project Field:

- The students are given option to choose their field of interest from different streams/fields.
- Project Batch Formation:
- Project batches are formed based on area of interest and considering their individual grades of previous semester and overall academic background.

The process of initiating and offering projects for the students is made by keeping the following views and perspectives:

- The Projects in the Department are so chosen so as to benefit the society and have direct application in the field of Civil Engineering and also that helps students to prospective thinking about their higher studies and career after graduation.
- The students are guided to select projects so that, current Civil Engineering issues or burning problems faced by construction industry are selected as Projects. Considering the possibilities of choosing fields with a view of innovative ideas and focusing on thrust areas such as energy, environment, and use of alternative building materials.
- The Project fields are also chosen, so as to strengthen the Attainment of Program outcomes and Program Specific outcomes which are identified as Gaps as per the table No 2.9 and also in line with the Department Mission and Vision.

**B. Types and relevance of the projects and their contribution towards attainment of PO's & PSO's****Table No. 2.10: Mapping of Project Fields with POs and PSOs**

SL. NO	TYPES OF PROJECT	In line with POs	PSO's
1	STRUCTURAL ENGINEERING	PO1,PO2,,PO8,PO11&PO12	PSO1
2	CONSTRUCTION TECHNOLOGY	PO1,PO2,PO6,PO7,PO8,PO10,PO11&PO12	PSO1
3	TRANSPORTAION ENGINEERING	PO1,PO2,PO11&PO12	-
4	ENVIRONMENTAL ENGINEERING	PO1,PO6,PO7,PO8 , PO9 ,PO10,PO11&PO12	PSO3
5	CONCRETE TECHNOLOGY	PO1,PO2,PO3,PO4,PO6 ,PO8 , PO9 ,PO10,PO11&PO12	-
6	IRRIGATION ENGINEERING	PO1, PO6 &PO12	-
7	GEOTECHNOLOGICAL ENGINEERING	PO1,PO8,PO11& PO12	PSO2

**C. Process of monitoring and evaluation**

**Project Evaluation is divided into two or four phases as per the prevailing VTU guidelines:**

**Phase I:** Under this phase Literature Survey and problem identification for the project is made.

**Phase II: Preliminary studies and progress:**

Under this phase synopsis and methodology of the project is submitted by the students.

**Phase III: Evaluation of Projects and Publishing the Papers:**

All the Projects are continuously monitored/ evaluated by the respective Committee.

- Student's attendance is monitored by the respective Guides regularly.
- Students are instructed to maintain observation book to record all their experimental findings and observations for which the guide signature is obtained regularly.
- Also the students maintain photographs and videos as an evidence of their work.
- The students are also encouraged to publish/present their findings in National, International journals or Conferences.
- The evaluation of the projects is made as per the Rubrics as shown in the Table 2.2.1.

**Phase IV: Submission of the final Project report:**

Before Internal examination the students are asked to present project findings before PEC. After presentation to PEC, the PEC will suggest any additional work to be carried out to so as to improve the results, or any such modifications that will give overall enhancement in the output of the project work.

After the completion of the project work, reports are submitted to the Department before the stipulated date. The students have to prepare the project report in line with the University guide lines for font size, style, color of the report etc. Total of Two copies, one to Department Library and one copy to the Guide are submitted.

**Table No. 2.11: Phases in the Execution of Project work**

SL. No	Phases in Project work	Date	Activities to be covered
1	Phase-I	Sixth week (VII semester)	1. Literature survey and identify the problem. 2. Tentative title of the Project is decided.
2	Phase-II	Tenth week (VII semester)	1. Submission of Synopsis. 2. Methodology of the Project.
3.	Phase-III	Fourth week (VIII semester)	1. Progress of the project. 2. Final results and Conclusions of the project.
4.	Phase-IV	Tenth week (VIII semester)	1. Submission of the final project report. 2. Publishing/presenting a paper in a journal/conference.

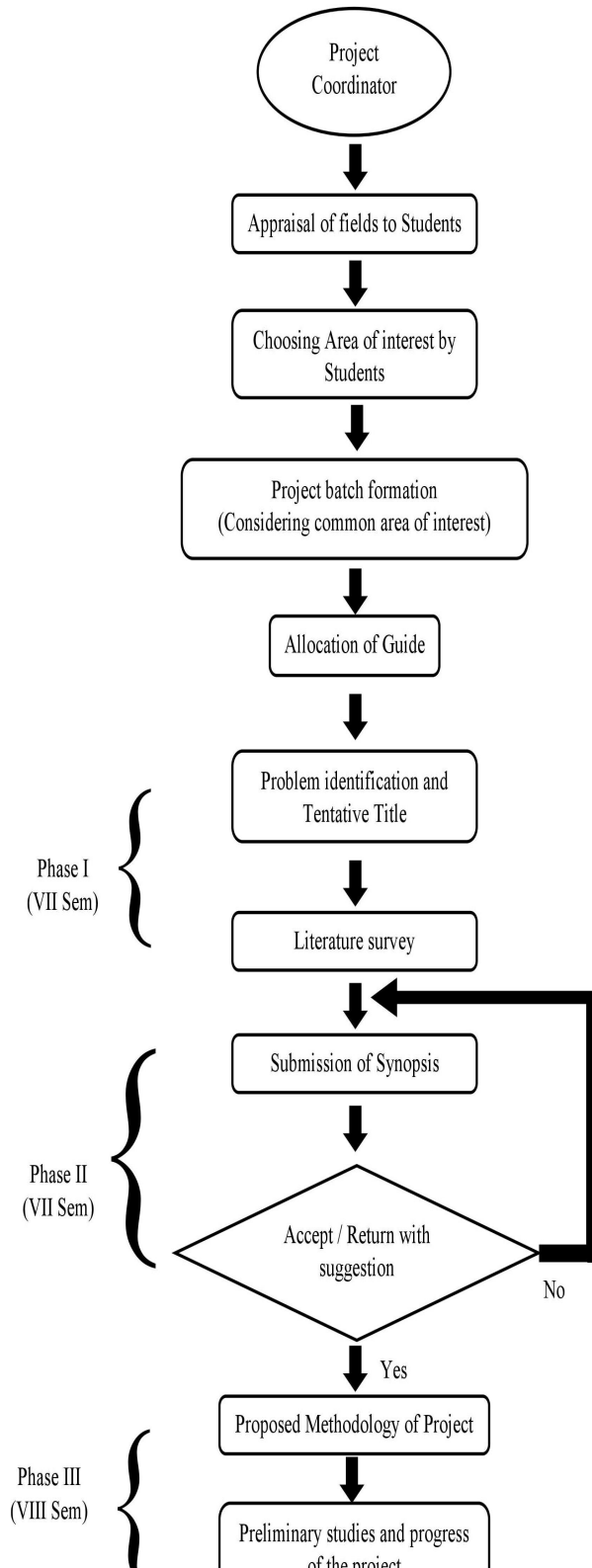


Figure No: 2.8: Process Followed for Project Execution.

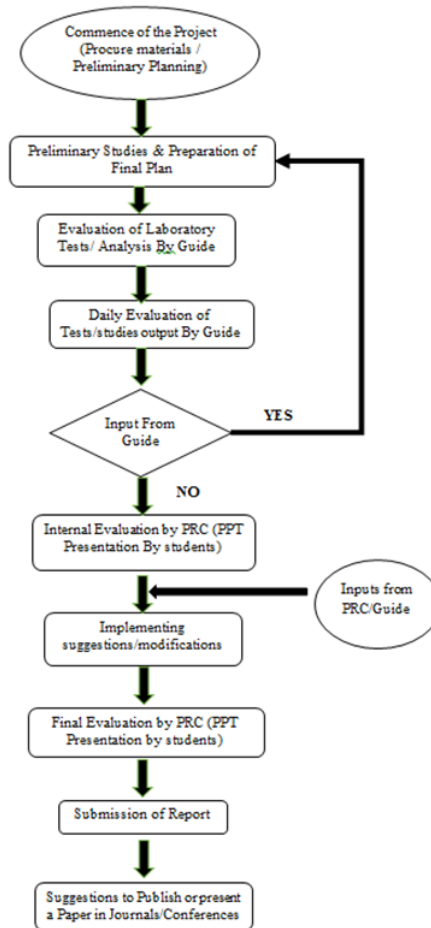
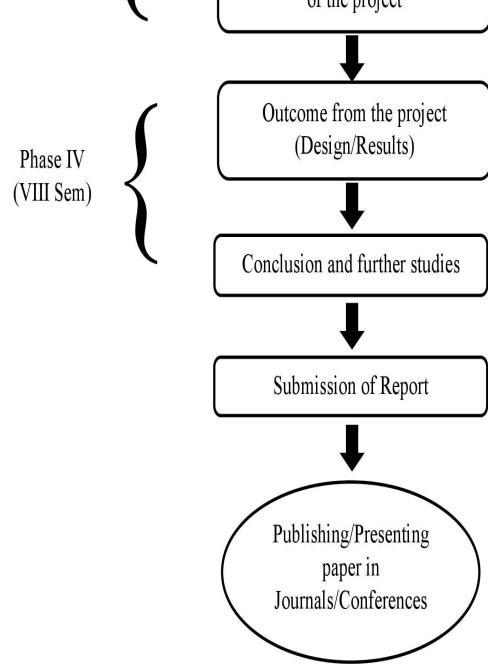


Figure No: 2.9: Process Followed for Project Evaluation.

#### D. Process to assess individual and team performance

The following key factors are considered for evaluating student's individual and team coordination or harmony during the execution of a project is listed below:

#### Rubrics for individual performance

- Display of skills/capabilities

- Ready to shoulder responsibilities
- Exhibiting confidence level in the project field
- Communication abilities of students during presentations
- Individual contribution to the project work

**Rubrics for team performance**

- Coordination and harmony
- Involvement in the project work
- Preparation of Power point presentation
- Preparation of the project work report

**E. Quality of complete projects/working prototypes**

**CRITERIA TO DEFINE BEST PROJECTS**

Guidelines for selection of Best Projects:

**Best Projects:**

1. Project work is strictly based on Rubrics adopted in the Department.
2. Project work is based on adhering to basics and fundamentals in the related field.
3. Mapping of Course outcomes of project with Program Outcomes and Program Specific Outcomes is strong.
4. Projects are funded by agencies and Paper is published in National/International journal and conferences.
5. Objective/Aim of the Project addresses current burning issues in the field of Civil Engineering.
6. The evaluation of best project award is made by one external Guest Professor.

**Table No. 2.12: List of best projects for the Academic year 2018-19**

Sl. No	Project batch	Name of the Guide	Title of the Project
1	Amaranth B V & Group	Sunil U	Application of reed bed technology in sewage treatment plant for the treatment of domestic waste water.
2	Sannappa Gouda R H & Group	Ganesh H	Development of Synthetic Unit Hydrograph for Bhadra catchment at outlet point of Bhadra Dam.

**Table No. 2.13: Rubrics for best and average project:**

Sl. No.	Performance Indicator	Maximum Marks	Best Project	Average Project
1.	Innovativeness and addressing current burning issues	30	More than 85% of maximum marks	Between 70 - 85% of maximum marks
2.	Literature Survey and Previous studies	25		
3.	Defining the problem and adhering to basics and fundamentals	50		
4.	Execution, results and, attainment of project objectives and PO's & PSO's	70		
5.	Individual performance	25		
	<b>Total</b>	<b>200</b>		

**Table no. 2.14: Rubrics for the BEST projects followed in the department.**

Performance Indicator	Marks (Maximum)	Criteria	Exceptionally Well Executed (Best projects Rubrics)[M>85%]	Average projects Rubrics [M70%-85%]	BTL Mapping	POs
Innovativeness and addressing current burning issues	30	Emphasis is given to Bright ideas from students & Project work involves current problems in Civil Engineering	Ideas & bright views are received from students also focusing on current issues in civil Engineering as observed in real world.	The project work focuses on topics which have been done routinely & doesn't include real life problems.	L5, L6	PO1, PO2, PO3, PO9, PO12,

F. Evidence of papers published/awards received by projects etc  
Tabl

Impact analysis for implementing best practices in project work





3	Mr. Pradeep& group	Prof. M.R.VIJAYA KUMAR, mrvk.rymcc@gmail.comph:9886893258	STUDY OF LIGHT WETGHT CONCRETE AND MAKING OF PANELS AND BLOCKS USING LOCALLY AVAILABLE INDUSTRIAL BY PRODUCTS		KSCST	YES(Seminar)	Conference	5500
4	Mr. I. Karthik & group	Prof. M.R.VIJAYA KUMAR, mrvk.rymcc@gmail.comph:9886893258	SOLID WASTE MANAGEMENT AND SEARCH FOR ALTERNATE PROCEDURES FOR WASTE TREATMENT, RECYCLING AND MANAGEMENT.	2014	KSCST	YES(Seminar)		5500
5	Mr. Mahamadali & group	Prof. T H Patel and Prof J M Srishaila	The Student project “ IMPACT OF MINING ACTIVITIES ON GROUND WATERQUATITY IN SANDUR TOWN,BALLARI DISTRICT	2015	KSCST	YES(Seminar)		5000
6	Miss. Shabhana & Group	Mr. Anilkumar S Katageri Asst. Professor	The Student project “ ANALYSIS OF FLOURIDE CONTENT IN GROUND WATER OF MOLKALMURU TOWN, CHITRADURGA DISTRICT, KARNATAKA	2015	KSCST	YES(Seminar)		6000
7	Mr. Yerriswamy G and group	Prof. M.R.VIJAYA KUMAR mrvk.rymcc@gmail.com ph:9886893258	TO INVESTIGATE ON THE VERMICOMPOSTING PROCESS BY USING VARIOUS NATURAL AND AGRICULTURAL PRODUCTS BY EMPLOYING DIFFERENT EARTHWORK SPECIES	2017-18	KSCST			5000
8	Mr. Shivkumar B and group	Mr. SUNIL UMACHAGI Asst. Professor	DESIGN AND DEVELOPMENT OF ANAEROBIC BIODIGESTER FOR INDIVIDUAL HOUSE IN KOLAGALLY VILLAGE, BALLARI USING THE AVAILABLE DOMESTIC BIODEGRADABLE WASTE	2017-18	KSCST		Journal	5000
9	J R SANDHYASHREE and group	Mr. SUNIL UMACHAGI Asst. Professor	A NEW PATHWAY TO SUSTAINABLE DEVELOPMENT OF AQUACULTURE AND AGRICULTURE IN AN AQUAPONICS SYSTEM COUPLED WITH MICRO BIEAL FUEL CELL	2018-19	KSCST			4500
10	Diwakar Reddy U and group	Dr. J M Shrishila Asst. Professor	EXPERIMENTAL INVESTIGATION ON FLEXURAL BEHAVIOR OF NATURAL FIBRES REINFORCED CONCRETE BEAMA(M20)	2018-19	KSCST		Conference	6000

2.2.4 Initiative related to industry interaction (15)

Institute Marks : 15.00

**Initiatives for industry interaction**

The Department has signed Memorandum of Understanding (MoU) with some of the industries/construction firms/technical consultants to share and inculcate technical knowledge to the students. The students from the department are sent to the enlisted companies to gain exposure about the construction industry through internship training.

**Table No. 2.16: MOUs signed by the Department with reputed Industries / Companies /Firm**

Sl.NO	Name of the company/firm/industry	Commencement of MoU	Activity	Outcome (implementations) of the MOU
1	Sri Sharana Constructions Iip., Ballari	20/02/2019	Internship	Students will attend Internship training
2	Sri Srinivasa Constructions India pvt. Ltd.	25/02/2019	Internship	Students will attend Internship training
3	KITS Bangaluru	24/01/2019	Internship	Students will attend Internship training

**A. Industry supported laboratories**

M/s BKG M Sand & Aggregates private Limited, Sandur have agreed to sign a MoU and are willing to extend financial and technical support to Department of Civil Engineering. The Funds received will be utilized to upgrade Concrete and Highway Materials Testing Laboratory. Steps are initiated to procure modern equipments viz Incubation Tank, Acceleration curing tank, concrete pan mixer to the same laboratory etc.

**B. Industry involvement in the program design and partial delivery of any regular courses for students**

To enhance the knowledge of students related to field projects or live projects eminent people from surrounding industries were invited to the department and technical talks were arranged.

**C. Impact analysis of industry institute interaction and action taken thereof**

Impact analysis of industry institute interaction was done based on the feedback obtained from the students. Some of the students also got placed in the same company where they have done internship.

**2.2.5 Initiative related to industry internship/summer training (15)**

Institute Marks : 15.00

**A. Industrial training/tour for students**

Students undergo internship in a live Construction Project as per VTU guidelines for 30 to 45 days (Four weeks) to be accomplished between seventh and eight semesters. Education tour for students is arranged once in a semester and visit is made to nearby dams, water treatment plants, sewage treatment plants, RMC plant, HMA plant, bridge and concreting sites etc.

**B. Industrial/Internship/summer training of more than two weeks and post training assessment**

The process of internship organized in the department is explained in flow diagram below.

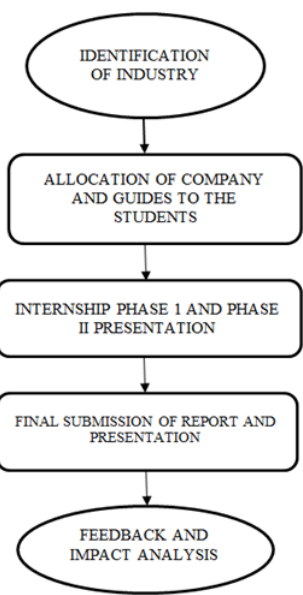


Fig 2.10: Process followed for internship

**Initiation**

- Students & Department together identify any construction company/firm/consultant wherein they will undergo internship for the stipulated period as per the guidelines laid by the university
- The Internship coordinator allocates a faculty as internal guide for each intern.
- Student corresponds with their respective company through the guide and Head of the Department.

**Implementation**

- The guide and the mentor for the internship in the company will be in continuous touch to know the progress of the internship training.
- Once the students complete the internship training, a detailed report is submitted to the department.

**Evaluation**

- Student will present a power point presentation about the internship training in front of a panel of senior professors along with the guide.
- Based on the performance the evaluation process is carried out by a panel of senior professors along with the guide and marks are awarded as per the rubrics shown in table below.

Table No. 2.17: Rubrics for the Internship Program

Evaluation Component	Marks Allocation	PO's
<b>Domain Knowledge:</b> Engineering Knowledge/Problem analysis/Design/development of solutions/Conduct Investigations of Complex Problems/Modern Tool usage	<b>25 Marks</b>	PO1,PO2,PO3,PO4,PO5
<b>Soft Skills:</b> Communication/Individual and Team work Project and Resource management Including finance /Engineer and Society Environment and Sustainability	<b>10 Marks</b>	PO6,PO7,PO9,PO10,PO11
<b>Discipline and Behavior</b>	<b>05 Marks</b>	PO8
<b>Report writing</b>	<b>10 Marks</b>	PO10
<b>TOTAL</b>	<b>50 Marks</b>	

**Table No. 2.18: Students participated in Internship for the Academic year 2018-2019**

ACADEMIC YEAR 2018-19				
Sl No.	USN	Name	Month/year	Organization
1	3VC15CV025 3VC14CV047	Gavisiddappa G and Krishna S Laxmi	July 2018 –Aug 2018	Karkala Construction Company Private Limited, Hyderabad
2	3VC16CV420 3VC15CV006 3VC16CV407	Mahesh G, Mounika Y and C H Veeresh	July10-August10/2018	Premiere Technical Consultants, Bellary

**Table No. 2.19: Students participated in Internship for the Academic year 2017-2018**

ACADEMIC YEAR 2017-18				
Sl No.	USN	Name	Month/year	Organization
1	3VC14CV045	Keerthana	January 10 –February 10/2018	National Academy OF Construction (NAC), NAC campus Hyderabad
2	3VC14CV011	Anusha T		
3	3VC14CV010	Anusha B H M		
4	3VC14CV059	Meghana M		
5	3VC14CV009	Ankitha G		

**Table No. 2.20: Students participated in Internship for the Academic year 2016-2017**

ACADEMIC YEAR 2017-18				
Sl No.	USN	Name	Duration of Internship	Organization
1	3VC14CV419	SaiRajnjeetha G S	2 Weeks	JSW Steel Limited Vidyanagar (Po), Toranagallu, Bellary(Dist) 583275
2	3VC14CV414	Kavitha P		
3	3VC14CV406	Chethan K T		
4	3VC14CV413	Naveenchandra K B		
5	3VC14CV432	Thippesha D		

**C. Impact analysis of industrial training**

1. Internships helped students to understand the site conditions practical construction problems which can't be explained in the class.
2. Some of the students also got placed in the same company where they have done internship.

**D. Student feedback on initiative**

Students submit a brief report along with structural drawing, if any; on the information they have gained through any sort of training program/visit. Students reported that Internship created awareness on real life problems in the field and equipped them to face the challenges confidently.

**3 COURSE OUTCOMES AND PROGRAM OUTCOMES (120)**

Total Marks 120.00

**Define the Program specific outcomes****3.1 Establish the correlation between the courses and the Program Outcomes (POs) and Program Specific Outcomes (PSOs) (20)**

Total Marks 20.00

<b>PSO1</b>	Ability to Develop the skills required for planning, analyzing & designing, estimating & executing the civil engineering structures
<b>PSO2</b>	Ability to identify the soils of different nature through the geo technical investigations and providing the suitable foundation to the structures.
<b>PSO3</b>	Ability to plan, analyze, design and to solve environmental engineering related problems.

**3.1.1 Course Outcomes(COs)(SAR should include course outcomes of one course from each semester of study, however, should be prepared for all courses and made available as evidence, if asked) (5)**

Institute Marks : 5.00

**Note : Number of Outcomes for a Course is expected to be around 6.**

<b>Course Name :</b>	<b>C2 02</b>	<b>Course Year :</b>	<b>2016-2017</b>
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<b>Items</b>	<b>2018-19</b>
C2 02.1	Identify different materials, their properties and calculate stress, strain, elongation of unique and composite materials.
C2 02.2	Identify two dimensional principle stress system, calculate compound stresses, its components on inclined planes, Construct B.M. and S.F diagrams for beams.
C2 02.3	Calculate bending and shear stress, and construct bending and shear stress diagrams for beams subjected to point load, UDL and couple.
C2 02.4	Calculate torsion and power transmitted by hollow and circular shaft, Distinguish between long and short columns and solve analytical problems for columns subjected to different end conditions.

<b>Course Name :</b>	<b>C2 10</b>	<b>Course Year :</b>	<b>2016-2017</b>
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<b>Items</b>	<b>2018-19</b>
C2 10.1	Apply knowledge of mathematics and engineering in analysing determinate trusses to calculate forces in the members and also in analysing beams to calculate slope and deflections in beams.
C2 10.2	Identify, formulate and solve engineering problems to determine deflection of beams and trusses using energy theorems.
C2 10.3	Analyse structural systems and interpret data to determine normal thrust, radial shear and bending moment in case of Arches and cables.
C2 10.4	Analyse beams and trusses using concepts of influence line diagram to determine reactions, Shear force and Bending moment.

<b>Course Name :</b>	<b>C3 04</b>	<b>Course Year :</b>	<b>2017-2018</b>
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<b>Items</b>	<b>2018-19</b>
C3 04.1	Gain a broad understanding of planning and designing of buildings.
C3 04.2	Prepare, read and interpret the drawings in a professional set up.
C3 04.3	Know the procedures of submission of drawings and Develop working and submission drawings for building.
C3 04.4	Plan and design a residential or public building as per the given requirements

<b>Course Name :</b>	<b>C3 14</b>	<b>Course Year :</b>	<b>2017-2018</b>
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<b>Items</b>	<b>2018-19</b>
C3 14.1	Assess the potential of groundwater and surface water resources.
C3 14.2	Address the issues related to planning and management of water resources.
C3 14.3	Know how to implement IWRM in different regions
C3 14.4	Understand the legal issues of water policy & Select the method for water harvesting

<b>Course Name :</b>	<b>C4 02</b>	<b>Course Year :</b>	<b>2018-2019</b>
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<b>Items</b>	<b>2018-19</b>
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## 4 . course name : C314

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C314.1	- ▾	- ▾	- ▾	- ▾	- ▾	1 ▾	2 ▾	- ▾	- ▾	- ▾	- ▾	- ▾
C314.2	- ▾	- ▾	- ▾	- ▾	- ▾	2 ▾	2 ▾	- ▾	- ▾	- ▾	- ▾	2 ▾
C314.3	- ▾	- ▾	- ▾	- ▾	- ▾	1 ▾	2 ▾	- ▾	- ▾	- ▾	- ▾	2 ▾
C314.4	- ▾	- ▾	- ▾	- ▾	- ▾	1 ▾	2 ▾	- ▾	- ▾	- ▾	- ▾	2 ▾
<b>Average</b>						<b>1.25</b>	<b>2</b>					<b>2</b>

## 5 . course name : C402

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C402.1	2 ▾	2 ▾	3 ▾	2 ▾	- ▾	- ▾	- ▾	- ▾	- ▾	- ▾	- ▾	- ▾
C402.2	2 ▾	2 ▾	3 ▾	2 ▾	- ▾	- ▾	- ▾	- ▾	- ▾	- ▾	- ▾	- ▾
C402.3	2 ▾	2 ▾	3 ▾	2 ▾	- ▾	- ▾	- ▾	- ▾	- ▾	- ▾	- ▾	- ▾
C402.4	2 ▾	2 ▾	3 ▾	2 ▾	- ▾	- ▾	- ▾	- ▾	- ▾	- ▾	- ▾	- ▾
<b>Average</b>	<b>2</b>	<b>2</b>	<b>3</b>	<b>2</b>								

## 6 . course name : C409

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C409.1	3 ▾	3 ▾	- ▾	- ▾	- ▾	- ▾	- ▾	- ▾	- ▾	- ▾	- ▾	2 ▾
C409.2	3 ▾	3 ▾	- ▾	- ▾	- ▾	- ▾	- ▾	- ▾	- ▾	- ▾	- ▾	2 ▾
C409.3	3 ▾	3 ▾	- ▾	- ▾	- ▾	- ▾	- ▾	- ▾	- ▾	- ▾	- ▾	2 ▾
C409.4	3 ▾	3 ▾	- ▾	- ▾	- ▾	- ▾	- ▾	- ▾	- ▾	- ▾	- ▾	2 ▾
<b>Average</b>	<b>3</b>	<b>3</b>										<b>2</b>

## 1 . Course Name : C202

Course	PSO1	PSO2	PSO3
C202.1	1 ▾	- ▾	- ▾
C202.2	1 ▾	- ▾	- ▾
C202.3	1 ▾	- ▾	- ▾
C202.4	1 ▾	- ▾	- ▾
<b>Average</b>	<b>1</b>		

## 2 . Course Name : C210

Course	PSO1	PSO2	PSO3
C210.1	1 ▾	- ▾	- ▾
C210.2	1 ▾	- ▾	- ▾
C210.3	1 ▾	- ▾	- ▾
C210.4	1 ▾	- ▾	- ▾



<b>Average</b>	<b>1</b>		
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**3 . Course Name : C304**

Course	PSO1	PSO2	PSO3
C304.1	2 ▾	- ▾	- ▾
C304.2	2 ▾	- ▾	- ▾
C304.3	2 ▾	- ▾	- ▾
C304.4	2 ▾	- ▾	- ▾
<b>Average</b>	<b>2</b>		

**4 . Course Name : C314**

Course	PSO1	PSO2	PSO3
C314.1	- ▾	- ▾	1 ▾
C314.2	- ▾	- ▾	1 ▾
C314.3	- ▾	- ▾	1 ▾
C314.4	- ▾	- ▾	1 ▾
<b>Average</b>			<b>1</b>

**5 . Course Name : C402**

Course	PSO1	PSO2	PSO3
C402.1	2 ▾	- ▾	- ▾
C402.2	2 ▾	- ▾	- ▾
C402.3	2 ▾	- ▾	- ▾
C402.4	2 ▾	- ▾	- ▾
<b>Average</b>	<b>2</b>		

**6 . Course Name : C409**

Course	PSO1	PSO2	PSO3
C409.1	3 ▾	- ▾	- ▾
C409.2	3 ▾	- ▾	- ▾
C409.3	3 ▾	- ▾	- ▾
C409.4	3 ▾	- ▾	- ▾
<b>Average</b>	<b>3</b>		

**3.1.3 - A Program level Course-PO matrix of all courses INCLUDING first year courses (10)**

Institute Marks : 10.00

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C103	2	2.4	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C201	2	2.5	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C202	1.75	2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	2

C203	1.75	1	1	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C204	2	2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	1
C205	2	2	2	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	2
C206	2	1	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	1
C207	3	PO2	PO3	3	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C208	2	2	2	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	2
C209	2	2.5	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C210	3	2	2.25	1.5	PO5	PO6	PO7	PO8	PO9	PO10	PO11	2
C211	2	2	2	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C212	2	2	2	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	2
C213	2	2	1	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	1
C214	1.50	1.50	2	2	2	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C215	2	2	2	1	PO5	PO6	PO7	PO8	PO9	PO10	PO11	1
C216	1	PO2	PO3	1	PO5	PO6	PO7	PO8	PO9	PO10	PO11	1
C301	1.75	2	2	PO4	PO5	PO6	PO7	2	PO9	PO10	PO11	2
C302	3	2	2.30	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	2
C303	2	1.67	2	PO4	PO5	PO6	PO7	1.8	PO9	PO10	PO11	1.8
C304	1	2	PO3	2	2	PO6	PO7	PO8	PO9	PO10	PO11	2
C305	2	2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C306	2	2	2	2	PO5	PO6	PO7	PO8	PO9	PO10	PO11	2
C307	2	PO2	PO3	2	PO5	PO6	PO7	2	2	PO10	PO11	PO12
C308	3	3	3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	2
C309	PO1	PO2	PO3	PO4	PO5	1.75	1.75	1.75	PO9	1	2	1
C310	2	3	3	PO4	PO5	PO6	PO7	2	PO9	PO10	PO11	2
C311	2	2	2	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	2
C312	1	PO2	2	PO4	PO5	PO6	1.5	PO8	PO9	PO10	PO11	PO12
C313	2	PO2	2	PO4	PO5	PO6	1.5	PO8	PO9	PO10	PO11	1
C314	2	PO2	PO3	PO4	PO5	1.25	2	PO8	PO9	PO10	PO11	2
C315	2	PO2	2	PO4	2	PO6	PO7	2	PO9	PO10	PO11	2
C316	2	1	PO3	PO4	PO5	2	2	PO8	2	PO10	PO11	1
C401	2	PO2	PO3	PO4	PO5	PO6	2	PO8	PO9	PO10	PO11	2
C402	3	2	3	2	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C403	3	3	2	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C404	2	1	2	PO4	PO5	PO6	PO7	PO8	PO9	PO10	1	PO12
C405	2	2	2	2.50	PO5	PO6	PO7	PO8	PO9	PO10	2	2
C406	2	PO2	PO3	PO4	PO5	PO6	2	PO8	PO9	PO10	PO11	2
C407	2	2	2.50	2	3	PO6	PO7	PO8	PO9	PO10	2	2
C408	2.46	2.45	2.44	2.33	1.85	2	2.25	2.37	2.62	1.70	2	2.07
C409	3	3	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	2
C410	2	2	2	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12

C411.1	2	2	2	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	2
C411.2	2	2	2	PO4	PO5	2	PO7	1	PO9	PO10	PO11	PO12
C412	2.12	1.78	1.70	2	2	2.5	2	2	1.95	2.15	1.95	2.15
C413	2.46	2.45	2.44	2.33	1.85	2	2.25	2.33	2.62	1.70	2	2.07
C414	2	1.90	2.5	2	2	2	2.5	2	1.95	1.95	1.95	1.95

**3.1.3 - B Program level Course-PSO matrix of all courses INCLUDING first year courses**

Course	PSO1	PSO2	PSO3
C103	PSO1	PSO2	PSO3
C201	PSO1	PSO2	PSO3
C202	1	PSO2	PSO3
C203	1	PSO2	PSO3
C204	PSO1	PSO2	PSO3
C205	PSO1	2	PSO3
C206	1	PSO2	PSO3
C207	1	PSO2	PSO3
C208	2	PSO2	PSO3
C209	PSO1	PSO2	PSO3
C210	1	PSO2	PSO3
C211	PSO1	PSO2	PSO3
C212	PSO1	PSO2	PSO3
C213	PSO1	2	PSO3
C214	PSO1	PSO2	PSO3
C215	PSO1	PSO2	PSO3
C216	PSO1	PSO2	PSO3
C301	2	PSO2	PSO3
C302	2	PSO2	PSO3
C303	1	1	PSO3
C304	2	PSO2	PSO3
C305	PSO1	PSO2	PSO3
C306	PSO1	PSO2	PSO3
C307	PSO1	2	PSO3
C308	PSO1	PSO2	PSO3
C309	PSO1	PSO2	PSO3
C310	2	PSO2	PSO3
C311	PSO1	2	PSO3
C312	PSO1	PSO2	1
C313	PSO1	PSO2	1.5
C314	PSO1	PSO2	1
C315	2	PSO2	PSO3

C316	PSO1	PSO2	2
C401	PSO1	PSO2	2
C402	2	PSO2	PSO3
C403	2	PSO2	PSO3
C404	2	PSO2	PSO3
C405	2	PSO2	PSO3
C406	PSO1	PSO2	2
C407	2	PSO2	PSO3
C408	2.25	2	2
C409	3	PSO2	PSO3
C410	1.5	PSO2	PSO3
C411.1	PSO1	PSO2	PSO3
C411.2	PSO1	PSO2	PSO3
C412	1.85	1	1
C413	2.25	2	2
C414	2	1	1

**3.2 Attainment of Course Outcomes (50)**

Total Marks 50.00

**3.2.1 Describe the assessment processes used to gather the data upon which the evaluation of Course Outcome is based (10)**

Institute Marks : 10.00

(Examples of data collection processes may include, but are not limited to, specific exam/tutorial questions, assignments, laboratory tests, project evaluation, student portfolios (A portfolio is a collection of artifacts that demonstrate skills, personal characteristics and accomplishments created by the student during study period), internally developed assessment exams, project presentations, oral exams etc.)

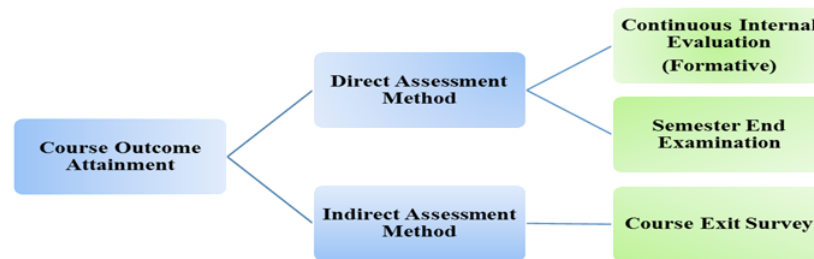
In the Outcome Based Education (OBE) system, assessment is made through more than one process to identify and collect data to evaluate level of attainment of the course.

Tools used are:

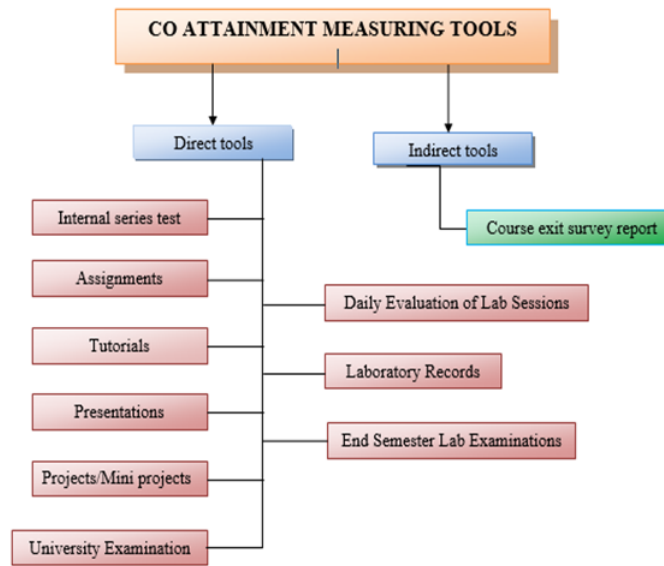
- Direct methods
- Indirect methods.

Direct methods display the student's knowledge and skills from their performance in the continuous internal assessment tests, class rooms, laboratory assignments, seminars and semester end examinations. These methods provide information about students knowledge and provide evidence of student learning performance.

Indirect methods adopted to assess PO are course exit survey, program exit survey, alumni surveys, internship training, student's participation in workshops and seminars.



Flow chart. 3.2.1a: Assessment Processes for CO attainment.



Flow chart.3.2.1b: Assessment tools for CO attainment

Table 3.2.1: Direct and Indirect Assessment Methods

Direct Assessment Methods		
Sl no	Direct Assessment Method	Description
1	Internal Assessment Test	It is a measure to continuously assess the attainment of course outcomes, student's learning domains and thus improve the teaching – learning process. The Internal Assessment marks in a theory paper shall be based on any two tests out of three, generally conducted at the end of 6th, 10th and 15th week of each semester. An additional test may be conducted for the students who desirous before the end of the semsester. Average marks are awarded based on the scheme.
2	Lab Assessment Test	Lab Assessment is a measure to mainly assess student's practical knowledge with their designing capabilities. In the case of a Practical, the IA marks shall be based on the laboratory journals/reports, conduction of experiments and one practical test.
3	Semester End Examination	Semester theory examinations are the measure to assess whether all the course outcomes are attained w.r.t course objectives framed by the instructor. Semester Examination is more focused on attainment of course outcomes and uses a descriptive exam. Practical semester examination focuses on conduction of experiments and viva-voce.
4	Seminar and Project	The IA marks in the case of projects and seminars in the final year shall be based on the evaluation at the end of 8th semester by a committee headed by Head of the Department, senior faculty members, one of whom shall be the project / seminar guide.
5	Project Work Viva-voce	Viva-voce examination in project work will be conducted batch-wise in presence of external and internal examiner.
6	Assignment	Assignment is a measure to mainly assess student's knowledge/skills/attitude with their designing capabilities.
Indirect Assessment Methods		

7	Course Exit Survey	Collect information from the students to assess the learning outcomes of the course at the end of the semester.
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**Table 3.2.2: Course Outcome Assessment**

Sl No	Assessment Method	Assessment frequency	Assessment Tool	In charge	Reviewer
1	Internal Assessment Test	At the end of 6 <sup>th</sup> , 10 <sup>th</sup> , and 15 <sup>th</sup> week of each semester.	Student's performance in internal assessment booklets.	Course owner	PAC/PC/HOD
2	Lab Assessment Test	At the end of the semester	Student's performance in conducting experiments and record submission.	Course owner	PAC/PC/HOD
3	Theory Semester Examination	At the end of the semester	Student's performance in university exams.	University Exam Evaluators	
4	Practical Semester Examination	At the end of the semester	Student's performance in conducting experiments during university exams.	University Exam Evaluators	
5	Seminar	During the 8 <sup>th</sup> semester	Rubrics	Seminar Guide/Seminar Coordinator	PAC/PC/HOD
6	Project	During the 8 <sup>th</sup> semester	Rubrics	Project Guide/Project Coordinator	PAC/PC/HOD
7	Project Work Viva-voce	At the end of the 8 <sup>th</sup> semester	Student's performance in university exams	University Exam Evaluators	
8	Course Exit Survey	Semester end	Student survey	Course Owner	CC PAC PC

**3.2.2 Record the attainment of Course Outcome of all courses with respect to set attainment levels (40)**

Institute Marks : 40.00

The description of the attainment levels is as explained below.

- Attainment Level 1: 60% students scoring more than 60% marks out of the relevant maximum marks.
- Attainment Level 2: 70% students scoring more than 60% marks out of the relevant maximum marks.
- Attainment Level 3: 80% students scoring more than 60% marks out of the relevant maximum marks.

SUBJECT	SUBJECT CODE	INDEX	C01	C02	C03	C04	AVERAGE
Engineering Mathematics-III	15CV31	C201	65.36	64.19	67.16	41.70	59.60
Strength Of Materials	15CV32	C202	38.3	43.6	33.5	32.3	36.92
Fluids Mechanics	15CV33	C203	20.17	27.15	29.05	30.59	26.74
Basic Surveying	15CV34	C204	37.68	38.03	38.94	38.66	38.32
Engineering Geology	15CV35	C205	84.51	88.35	91.06	91.49	88.85

Building Materials And Construction	15CV36	C206	56.12	38.15	49.82	52.32	49.10
Building Materials Testing Laboratory	15CVL37	C207	81.1	81.1	69.51	81.1	78.20
Basic Surveying Practice	15CVL38	C208	97.45	91.00	89.53	95.08	93.26
Engineering Mathematics – IV	15CV41	C209	56.35	48.62	63.17	62.74	57.72
Analysis of Determinate Structures	15CV42	C210	50.52	37.82	72.82	71.88	58.26
Applied Hydraulics	15CV43	C211	81.71	78.38	78.98	80.11	79.80
Concrete Technology	15CV44	C212	52.43	53.86	54.26	54.15	53.68
Basic Geotechnical Engineering	15CV45	C213	61.84	63.48	63.38	62.53	62.81
Advanced Surveying	15CV46	C214	56.28	50.19	50.53	50.16	51.79
Fluid Mechanics And Hydraulic Machines Laboratory	15CVL47	C215	88.8	88.8	88.8	88.8	88.8
Engineering Geology Laboratory	15CVL48	C216	33.33	33.33	33.33	33.33	33.33
Design Of RC Structural Elements	15CV51	C301	72.93	82.2	82.3	77.5	78.73
Analysis Of In Determinate Structures	15CV52	C302	62.5	69.6	64.2	62.7	64.75
Applied Geo Technical Engineering	15CV53	C303	42.1	44	55.9	60.8	50.70
Computer Aided Building Planning And Drawing	15CV54	C304	87.48	89.1	87.48	89.1	88.29
Railways, Harbors, Tunneling And Airports (Professional Elective-1)	15CV552	C305	64.5	65.5	63.9	63.7	64.40
Traffic Engineering (Open Elective-1)	15CV561	C306	75	72.4	73.9	74.1	73.85
Geotechnical Engineering Lab	15CVL57	C307	61.47	61.47	61.147	61.47	61.39
Concrete And Highway Materials Laboratory	15CVL58	C308	72.41	81.44	76.24	70.66	75.18
CONSTRUCTION MANAGEMENT AND ENTREPRENEURSHIP	15CV61	C309	71.55	45.86	71.44	43.84	58.17
DESIGN OF STEEL STRUCTURAL ELEMENTS	15CV62	C310	56.52	56.1	52.52	55.5	55.16
HIGHWAY ENGINEERING	15CV63	C311	89.7	94.03	90.35	93.55	91.91
WATER SUPPLY AND TREATMENT ENGINEERING	15CV64	C312	82.21	72.74	68.65	77.48	75.27
SOLID WASTE MANAGEMENT	15CV651	C313	73.8	67.63	70.1	48.78	65.08
WATER RESOURCE MANAGEMENT	15CV661	C314	32.63	41.46	37.31	37.36	37.19
SOFTWARE APPLICATION LAB	15CVL67	C315	66.2	66.2	66.2	66.2	66.20
EXTENSIVE SURVEY Project /Camp	15CVP68	C316	73.72	78.63	78.00	68.58	74.73
MUNICIPAL AND INDUSTRIAL WASTE WATER ENGINEERING	15CV71	C401	96.50	95.1	95.1	90.00	94.18
DESIGN OF RCC AND STEEL STRUCTURES	15CV72	C402	74.85	74.96	74.85	74.69	74.84
HYDROLOGY AND IRRIGATION ENGINEERING	15CV73	C403	84.71	80.47	83.77	78.54	81.87

DESIGN OF BRIDGES	15CV741	C404	49.77	52.77	51.34	47.97	50.46
URBAN TRANSPORTATION AND PLANNING	15CV751	C405	92.64	90.49	67.4	93.14	85.92
ENVIRONMENTAL ENGINEERING LABORATORY	15CVL76	C406	32.24	68.67	54.49	61.76	54.29
COMPUTER AIDED DETAILING OF STRUCTURES	15CVL77	C407	93.56	82.02	97.82	--	91.13
PROJECT PHASE I +PROJECT SEMINAR	15CVP78	C408	68.00	90	85.65	34.24	69.47
QUANTITY SURVEYING AND CONTRACTS MANAGEMENT	15CV81	C409	88.10	89.72	87.99	96.54	90.59
DESIGN OF PRE STRESSED CONCRETE ELEMENTS	15CV82	C410	89.4	86.79	58.11	76.01	77.58
PAVEMENT DESIGN	15CV833	C411.1	98.2	96.6	94.5	97.1	96.60
ADVANCED FOUNDATION DESIGN	15CV834	C411.2	51.35	71.65	70.65	72.05	66.43
INTERNSHIP/PROFESSIONAL PRACTICE	15CV84	C412	55.00	58.12	47.92	36.02	49.27
PROJECT WORK	15CVP85	C413	55.34	56.00	85.00	58.02	63.59
SEMINAR ON CURRENT TRENDS IN ENGINEERING AND TECHNOLOGY	15CVS86	C414	65.00	43.00	68.02	56.02	58.01

### 3.3 Attainment of Program Outcomes and Program Specific Outcomes (50)

Total Marks 50.00

#### 3.3.1 Describe the assessment tools and processes used for measuring the attainment of each of the Program Outcomes and Program Specific Outcomes (10)

Institute Marks : 10.00

##### PO Assessment Tools

Assessment tools are categorized into Direct and Indirect methods to assess the programme educational objectives, program outcomes and course outcomes.

Direct methods display the students knowledge and skills from their performance in the continuous assessment tests, semester end examinations, presentations, and classroom assignments etc. these methods provide evidence of student learning performance.

Indirect methods: A survey is conducted including alumni, students performance in interviews, industrialists opinions and other stakeholders to know graduation knowledge & skills .

**Table 3.3.1: PO Direct Assessment Methods**

PO Direct Assessment Methods		
Sl no	Direct Assessment Method	Description
1	Internal Assessment Test	It is a measure to continuously assess the attainment of course outcomes, student's learning domains and thus improve the teaching – learning process. The Internal Assessment marks in a theory paper shall be based on any two tests out of three, generally conducted at the end of 6th, 10th and 15th week of each semester. An additional test may be conducted for the students who desirous before the end of the semsester. Average marks are awarded based on the scheme.
2	Lab Assessment Test	Lab Assessment is a measure to mainly assess student's practical knowledge with their designing capabilities .In the case of a Practical, the IA marks shall be based on the laboratory journals/reports, conduction of experiments and one practical test.



3	Semester End Examination	Semester theory examinations are the measure to assess whether all the course outcomes are attained w.r.t course objectives framed by the instructor. Semester Examination is more focused on attainment of course outcomes and uses a descriptive exam. Practical semester examination focuses on conduction of experiments and viva-voce.
4	Seminar and Project	The IA marks in the case of projects and seminars in the final year shall be based on the evaluation at the end of 8th semester by a committee consisting of the Head of the concerned Department and two senior faculty members of the Department, one of whom shall be the project / seminar guide.
5	Project Work Viva-voce	Viva-voce examination in project work shall be conducted batch-wise.
6	Assignment	Assignment is a metric to mainly assess student's knowledge/skills/attitude with their designing capabilities.
<b>PO Indirect Assessment Methods</b>		
7	Course Exit Survey	Collect information from the students to assess the learning outcomes of the course at the end of the semester.

**Table 3.3.2: PO Indirect Assessment Methods**

<b>PO Indirect Assessment Methods</b>		
SI no	Indirect Assessment Method	Description
1.	Course Exit Survey	The attainment is indirectly measured based on the course exit survey at every course exit and PO attainment is the summation of all course exit surveys.

Program Outcome Assessment methodology, tools and frequency of use for direct and indirect method is described in the table below

**Table 3.3.3: PO Assessment Methodology, tools and frequency of use for direct and indirect methods**

SI No	Assessment Method	Assessment frequency	Assessment Tool	Incharge	Reviewer
1.	Internal Assessment Test	At the end of 6 <sup>th</sup> , 10 <sup>th</sup> and 15 <sup>th</sup> weeks of each semester.	Student's performance in internal assessment booklets.	Course owner	PAC PC/HOD
2.	Lab Assessment Test	At the end of the semester	Student's performance in conducting experiments and record writing.	Course owner	PAC PC/HOD
3.	Theory Semester Examination	At the end of the semester	Student's performance in university exams.	University Evaluators	
4.	Practical Semester Examination	At the end of the semester	Student's performance in conducting experiments during university exams.	University Evaluators	
5.	Seminar	During the 8 <sup>th</sup> semester	Rubrics	Seminar Guide/Seminar Coordinator	PAC PC/HOD

6.	Project	During the 8 <sup>th</sup> semester	Rubrics	Project Guide/ Project Coordinator	PAC PC/HOD
7.	Project Work Viva-voce	At the end of the 8 <sup>th</sup> semester	Student's performance in university exams	University Evaluators	
8	Course Exit Survey	Semester end	Student survey	Course Owner	CC PAC PC

### 3.3.2 Provide results of evaluation of PO&PSO (40)

Institute Marks : 40.00

#### PO Attainment

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C103	1.67	2.02	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C201	1.71	2.14	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C202	1.13	1.32	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	1.32
C203	1.15	0.65	0.70	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C204	1.45	1.45	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	0.73
C205	1.78	1.78	1.78	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	1.83
C206	1.67	0.85	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	0.83
C207	2.92	PO2	PO3	2.92	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C208	1.58	1.80	1.80	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	1.89
C209	1.74	2.14	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C210	1.70	1.13	1.26	0.91	PO5	PO6	PO7	PO8	PO9	PO10	PO11	1.13
C211	1.60	1.60	1.60	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C212	1.61	1.61	1.61	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	1.61
C213	1.46	1.46	0.73	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	0.73
C214	1.34	1.34	1.80	1.88	1.88	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C215	1.94	1.94	1.94	0.97	PO5	PO6	PO7	PO8	PO9	PO10	PO11	0.97
C216	1	PO2	PO3	1	PO5	PO6	PO7	PO8	PO9	PO10	PO11	1
C301	1.42	1.64	1.65	PO4	PO5	PO6	PO7	1.63	PO9	PO10	PO11	1.63
C302	2.59	1.73	1.94	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	1.73
C303	1.43	1.17	1.46	PO4	PO5	PO6	PO7	1.29	PO9	PO10	PO11	1.29
C304	0.97	1.94	PO3	1.94	1.94	PO6	PO7	PO8	PO9	PO10	PO11	1.94
C305	1.29	1.29	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C306	1.48	1.46	1.48	1.48	PO5	PO6	PO7	PO8	PO9	PO10	PO11	1.48
C307	1.84	PO2	PO3	1.84	PO5	PO6	PO7	1.84	1.84	PO10	PO11	PO12
C308	2.68	2.68	2.68	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	1.95
C309	PO1	PO2	PO3	PO4	PO5	1.52	PO7	1.52	1.39	0.85	1.59	0.89
C310	1.41	2.11	2.11	PO4	PO5	PO6	PO7	1.41	PO9	PO10	PO11	1.41
C311	1.84	1.84	1.84	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	1.84
C312	0.80	PO2	1.85	PO4	PO5	PO6	1.22	PO8	PO9	PO10	PO11	PO12
C313	1.70	PO2	1.76	PO4	PO5	PO6	1.29	PO8	PO9	PO10	PO11	0.87

C314	0.79	PO2	PO3	PO4	PO5	0.98	1.58	PO8	PO9	PO10	PO11	1.58
C315	1.99	PO2	1.99	PO4	1.99	PO6	PO7	1.99	PO9	PO10	PO11	1.99
C316	1.94	0.86	PO3	PO4	PO5	1.50	1.32	PO8	1.86	PO10	PO11	0.86
C401	1.95	PO2	PO3	PO4	PO5	PO6	1.91	PO8	PO9	PO10	PO11	1.91
C402	2.59	1.73	2.59	1.73	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C403	2.88	2.88	1.96	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C404	1.90	0.95	1.90	PO4	PO5	PO6	PO7	PO8	PO9	PO10	0.95	PO12
C405	1.92	1.92	1.92	2.40	PO5	PO6	PO7	PO8	PO9	PO10	1.93	1.92
C406	1.70	PO2	PO3	PO4	PO5	PO6	1.70	PO8	PO9	PO10	PO11	1.70
C407	1.60	1.40	2.20	1.40	2.55	PO6	PO7	PO8	PO9	PO10	1.40	1.70
C408	2.11	2.07	2.27	2.20	1.75	1.70	2.11	2.01	2.37	1.54	1.85	1.75
C409	2.79	2.79	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	1.93
C410	1.81	1.81	1.88	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C411.1	1.95	1.93	1.95	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	1.95
C411.2	1.95	1.93	1.95	PO4	PO5	1.88	PO7	0.95	PO9	PO10	PO11	PO12
C412	2.03	1.67	1.60	1.94	1.93	2.19	1.93	1.99	1.89	2.05	1.85	2.03
C413	2.11	2.07	2.27	2.20	1.75	1.70	2.11	2.01	2.37	1.54	1.85	1.75
C414	1.71	1.52	1.75	1.83	1.75	1.75	1.76	1.78	1.85	1.70	1.63	1.50

**PO Attainment Level**

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO Attainment	1.82	1.78	1.88	1.80	1.95	1.70	1.74	1.71	1.97	1.57	1.66	1.55
Direct Attainment	1.76	1.70	1.81	1.78	1.94	1.65	1.69	1.67	1.94	1.54	1.63	1.50
InDirect Attainment	2.07	2.09	2.16	1.90	2	1.90	1.96	1.88	2.08	1.68	1.79	1.75

**PSO Attainment**

Course	PSO1	PSO2	PSO3
C103	PSO1	PSO2	PSO3
C201	PSO1	PSO2	PSO3
C202	0.66	PSO2	PSO3
C203	0.65	PSO2	PSO3
C204	PSO1	PSO2	PSO3
C205	PSO1	1.78	PSO3
C206	0.83	PSO2	PSO3
C207	0.90	PSO2	PSO3
C208	1.89	PSO2	PSO3
C209	PSO1	PSO2	PSO3
C210	0.57	PSO2	PSO3
C211	PSO1	PSO2	PSO3
C212	PSO1	PSO2	PSO3
C213	PSO1	1.46	PSO3
C214	PSO1	PSO2	PSO3
C215	PSO1	PSO2	PSO3

C216	PSO1	PSO2	PSO3
C301	1.63	PSO2	PSO3
C302	1.73	PSO2	PSO3
C303	0.95	0.71	PSO3
C304	1.94	PSO2	PSO3
C305	PSO1	PSO2	PSO3
C306	PSO1	PSO2	PSO3
C307	PSO1	1.84	PSO3
C308	PSO1	PSO2	PSO3
C309	PSO1	PSO2	PSO3
C310	1.41	PSO2	PSO3
C311	PSO1	1.84	PSO3
C312	PSO1	PSO2	0.84
C313	PSO1	PSO2	1.31
C314	PSO1	PSO2	0.79
C315	1.99	PSO2	PSO3
C316	PSO1	PSO2	1.96
C401	PSO1	PSO2	1.91
C402	1.73	PSO2	PSO3
C403	1.92	PSO2	PSO3
C404	1.90	PSO2	PSO3
C405	1.92	PSO2	PSO3
C406	PSO1	PSO2	1.70
C407	1.40	PSO2	PSO3
C408	1.87	1.98	1.90
C409	2.79	PSO2	PSO3
C410	1.36	PSO2	PSO3
C411.1	PSO1	PSO2	PSO3
C411.2	PSO1	PSO2	PSO3
C412	1.82	0.98	0.92
C413	1.87	1.98	1.98
C414	1.92	0.84	0.92

**PSO Attainment Level**

Course	PSO1	PSO2	PSO3
CO Attainment	1.57	1.56	1.44
Direct Attainment	1.55	1.49	1.42
InDirect Attainment	1.67	1.84	1.52

4 STUDENTS' PERFORMANCE (150)

Total Marks 98.47

**Table 4.1**

Item (Information to be provided cumulatively for all the shifts with explicit headings, wherever applicable)	2018-19 (CAY)	2017-18 (CAYm1)	2016-17(CAYm2)	2015-16(CAYm3)	2014-15(CAYm4)	2013-14 (CAYm5)	2012-13 (CAYm6)
Sanctioned intake of the program(N)	120	120	120	120	120	120	120
Total number of students admitted in first year minus number of students migrated to other programs/ institutions plus No. of students migrated to this program (N1)	110	98	113	113	113	126	117
Number of students admitted in 2nd year in the same batch via lateral entry (N2)	0	46	30	45	41	35	36
Separate division students, If applicable (N3)	5	5	6	6	6	6	6
Total number of students admitted in the programme(N1 + N2 + N3)	115	149	149	164	160	167	159

**Table 4.2**

Year of entry	Total No of students admitted in the program (N1 + N2 + N3)	Number of students who have successfully graduated without backlogs in any semester/ year of study (Without Backlog means no compartment or failures in any semester/ year of study)			
		I year	II year	III year	IV year
2018-19 (CAY)	115	0	0	0	0
2017-18 (CAYm1)	149	47	0	0	0
2016-17 (CAYm2)	149	51	47	0	0
2015-16 (CAYm3)	164	43	35	34	0
2014-15 (LYG)	160	47	67	67	66
2013-14 (LYGm1)	167	71	87	82	82
2012-13 (LYGm2)	159	70	72	64	63

**Table 4.3**

Year of entry	Total No of students admitted in the program (N1 + N2 + N3)	Number of students who have successfully graduated in stipulated period of study) [Total of with Backlog + without Backlog]			
		I year	II year	III year	IV year
2018-19 (CAY)	115	0	0	0	0
2017-18 (CAYm1)	149	72	0	0	0
2016-17 (CAYm2)	149	106	135	0	0
2015-16 (CAYm3)	164	81	111	110	0
2014-15 (LYG)	160	81	110	109	104
2013-14 (LYGm1)	167	111	131	130	119
2012-13 (LYGm2)	159	104	135	126	119

**4.1 Enrolment Ratio (20)**

Total Marks 18.00

Institute Marks : 18.00

	N (From Table 4.1)	N1 (From Table 4.1)	Enrollment Ratio [(N1/N)*100]
2018-19 (CAY)	120	110	91.67
2017-18 (CAYm1)	120	98	81.67
2016-17 (CAYm2)	120	113	94.17

Average [ (ER1 + ER2 + ER3) / 3 ] : 89.17

Assessment : 18.00

4.2.1 Success rate without backlogs in any semester / year of study (25)

Item	Latest Year of Graduation, LYG (2014-15)	Latest Year of Graduation minus 1, LYGm1 (2013-14)	Latest Year of Graduation minus 2 LYGm2 (2012-13)
X Number of students admitted in the corresponding First year + admitted in 2nd year via lateral entry and seperated division, if applicable	160.00	167.00	159.00
Y Number of students who have graduated without backlogs in the stipulated period	66.00	82.00	63.00
Success Index [ SI = Y / X ]	0.41	0.49	0.40

Average SI [ (SI1 + SI2 + SI3) / 3 ] : 0.43

Assessment [25 \* Average SI] : 10.75

4.2.2 Success rate in stipulated period (15)

Item	Latest Year of Graduation, LYG (2014-15)	Latest Year of Graduation minus 1, LYGm1 (2013-14)	Latest Year of Graduation minus 2 LYGm2 (2012-13)
X Number of students admitted in the corresponding First year + admitted in 2nd year via lateral entry and seperated division, if applicable	160.00	167.00	159.00
Y Number of students who have graduated in the stipulated period	104.00	119.00	119.00
Success Index [ SI = Y / X ]	0.65	0.71	0.75

Average SI [ ( SI1 + SI2 + SI3) / 3 ] : 0.70

Assessment [15 \* Average SI] : 10.55

**Note** : If 100% students clear without any backlog then also total marks scored will be 40 as both 4.2.1 & 4.2.2 will be applicable simultaneously.

4.3 Academic Performance in Third Year (15)

Academic Performance	CAYm3 (2015-16)	LYG (2014-15)	LYGm1 (2013-14)
Mean of CGPA or mean percentage of all successful students(X)	6.97	6.99	6.77
Total number of successful students(Y)	110.00	109.00	130.00
Total number of students appeared in the examination(Z)	111.00	110.00	131.00
API [ X*(Y/Z) ]:	6.91	6.93	6.72

Average API [ (AP1 + AP2 + AP3)/3 ] : 6.85

Assessment [1.5 \* AverageAPI] : 10.28

4.4 Academic Performance in Second Year (15)

Academic Performance	CAYm2 (2016-17)	CAYm3 (2015-16)	LYG (2014-15)
Mean of CGPA or mean percentage of all successful students(X)	5.99	5.49	6.83
Total number of successful students (Y)	135.00	111.00	110.00
Total number of students appeared in the examination (Z)	142.00	132.00	128.00
API [ X * (Y/Z) ]	5.69	4.62	5.87

Average API [ (AP1 + AP2 + AP3)/3 ] : 5.39

Assessment [ 1.5 \* AverageAPI ] : 8.09

4.5 Placement, Higher Studies and Entrepreneurship (40)

Item	LYG (2014-15)	LYGm1 (2013-14)	LYGm2 (2012-13)
Total No of Final Year Students(N)	109.00	130.00	126.00
No of students placed in the companies or government sector(X)	48.00	29.00	40.00
No of students admitted to higher studies with valid qualifying scores(GATE or equivalent State or National Level tests, GRE, GMAT etc.) (Y)	17.00	25.00	19.00
No of students turned entrepreneur in engineering/technology (Z)	0.00	4.00	4.00
x + y + z =	66.00	58.00	63.00
Placement Index [ (X+Y+Z)/N ] :	0.61	0.45	0.50

Average Placement [ (P1 + P2 + P3)/3 ] : 0.52

Assessment [ 40 \* Average Placement ] : 20.80

**Program Name :**

**Assessment Year Name : CAYm1**

S.No	Student Name	Enrollment No	Employee Name	Appointment No
1	A RAJASHEKAR	3vc14cv001	Sri Siddarameshwara Constructions.	14072018
2	ALEKHYA M	3vc14cv005	I-Construction, Ballari.	21082018
3	AMIT N KULKARNI	3vc14cv008	SP Associates	20180820
4	BASAVARAJ B	3vc14cv018	Sri Siddarameshwara Constructions.	29092018
5	CHAITRA S	3vc14cv023	Premiere Technical Consultancy, Ballari.	02082018
6	DIVYASHREE C D	3vc14cv029	MSG Construction, Ballari.	25072018
7	GOLLA PUNITH	3vc14cv033	Bellary Construction, Ballari.	14092018
8	GOURI T K	3vc14cv035	e-Construct, Bengaluru	EDBPL-03-20180307
9	GURUPRASAD H M	3vc14cv038	RAAGA Construction, Bangalore.	25102018
10	KARUNESHA K	3vc14cv042	Sobha Ltd, Bangalore.	SL/HR/SS/589
11	KEERTHANA G	3vc14cv045	Team Lease Services Ltd.	TR10194409
12	M A SYED SHEKSHAVALI	3vc14cv048	I-Construction, Ballari.	18012019
13	MADIVALAPPA	3vc14cv050	Premiere Technical Consultancy, Ballari.	16092018
14	MALLIKARJUNA H K	3vc14cv052	Contractor Firm	02102018
15	MANJUNATH T	3vc14cv055	Premiere Technical Consultancy, Ballari.	05072018
16	MUGAPPA ONAKI	3vc14cv061	NASHANTO	07112018
17	N NARENDRA	3vc14cv063	PINCLICK	30052018
18	OM SHIVA REDDY	3vc14cv067	DSR Infrastructure	100377
19	POOJA	3vc14cv071	Bellary-Construction, Ballari	10112018
20	R KOUSHIK SHARMA	3vc14cv073	NASHANTO	07112018
21	RAKESH	3vc14cv075	NASHANTO	07112018
22	RAMYA B	3vc14cv077	PINCLICK	30052018
23	RAVALI N	3vc14cv080	MSG Construction, Ballari.	25072018
24	S M SURESH GOUD	3vc14cv081	Contractor Firm	03102018
25	SANDEEP KUMAR M B	3vc14cv086	Premiere Technical Consultancy, Ballari	05072018
26	SEEMALU MOHAN REDDY	3vc14cv090	Sri Siddarameshwara Constructions.	31122018
27	SUNILKUMAR M SALIMATH	3vc14cv100	Contractor Firm	02092018
28	SYED AMER ALI	3vc14cv102	I-Construction, Ballari.	28112018

29	UDAYAKUMAR T	3vc14cv105	Sri Siddarameshwara Constructions..	05092018
30	VANKAI ANJINEYA	3vc14cv112	Sri Siddarameshwara Constructions.	21102018
31	VEERESH	3vc14cv114	Sri Siddarameshwara Constructions.	08112018
32	VINAY H S	3vc14cv117	MSG Construction, Ballari.	25072018
33	ANILKUMAR V	3vc15cv405	Bellary Construction, Ballari.	25092018
34	GIREESH H	3vc15cv409	Contractor Firm	13122018
35	GOVINDA N	3vc15cv410	Sri Siddarameshwara Constructions.	26082018
36	HANUMANTAGOUDA MA PA	3vc15cv411	Contractor Firm	06092018
37	KOTRESHA B	3vc15cv414	I-Construction, Ballari.	03122018
38	KUMARA NAIK B	3vc15cv415	MSG Construction, Ballari.	25072018
39	MANJUNATHA MAL	3vc15cv417	I-Construction, Ballari.	05092018
40	NAGARAJA M H	3vc15cv421	Sri Siddarameshwara Constructions.	21092018
41	PAMPAPATHI V	3vc15cv423	RAAGA Construction, Bangalore.	21122018
42	R KARTHIK	3vc15cv424	Sri Siddarameshwara Constructions.	20082018
43	RICKY EMMANUEL D	3vc15cv426	Bellary Construction, Ballari.	25092018
44	SUDHAKARA V	3vc15cv430	Junior Engineer, Karnataka Govt. sector.	1105857
45	VASANTAKUMAR B	3vc15cv434	Bellary Construction, Ballari.	25092018
46	VENKATESHA S	3vc15cv438	Sri Siddarameshwara Constructions	20122018
47	VIRUPAKSHIGOUDA M	3vc15cv439	MSG Construction, Ballari.	25072018
48	YERRISWAMY G	3vc15cv440	MARVEL Properties, Bellary.	01062019

Assessment Year Name : CAYm2



S.No	Student Name	Enrollment No	Employee Name	Appointment No
1	A VARUN	3vc13cv001	MSG Construction, Ballari.	15102017
2	ABDUL RAZAK	3vc13cv002	EBACO India Pvt. Ltd.	05032019
3	AISHWARYA R C	3vc13cv005	I-Construction, Ballari.	10122017
4	AKSHAY CHOUHAN M J	3vc13cv006	MARVEL Properties, Bellary.	01102018
5	AMITH KUMAR B	3vc13cv007	AKRUTHI Technical Consultants, Bellary.	15082018
6	BASAVANAGOUD PATIL	3vc13cv014	NASHANTO	21112017
7	BHAVANI N	3vc13cv017	Home Interiors Designs E-Commerce Pvt. Ltd	09102019
8	CHETAN KUMAR Y	3vc13cv020	RRB	3140030642
9	DHANANJAYA GURAJARAPU	3vc13cv030	Premiere Technical Consultancy, Ballari.	15062017
10	GOWDARA RAVIKUMAR	3vc13cv035	STI Pvt. Ltd.	25022019
11	JAGADESH NAREGADH	3vc13cv040	MSG Construction, Ballari.	15102017
12	JAYASIMHA P	3vc13cv042	Premiere Technical Consultancy, Ballari.	17062017
13	KAVYA P M	3vc13cv048	CADD CENTRE Training Services,Bengaluru	VJNR0028
14	M VINITHA	3vc13cv055	Contractor Firm	01102018
15	MANJUNATHA CHOWDARI.T.R	3vc13cv060	NASHANTO	03092017
16	MD NAVEED	3vc13cv063	MSG Construction, Ballari.	15102017
17	MEHABOOB	3vc13cv065	Premiere Technical Consultancy, Ballari.	01072017
18	MELASIME CHENNABASANNA	3vc13cv066	PPR Consultancy	246/2015
19	MOUNESH	3vc13cv071	NASHANTO	03092017
20	NISHA SINGH	3vc13cv076	MSG Construction, Ballari.	15102017
21	PAMPAPATHI G S	3vc13cv077	Contractor Firm	10112017
22	PRADEEP KUMAR B	3vc13cv079	I Construction, Ballari.	14112017
23	RAKSHITH REDDY B	3vc13cv089	MARVEL Properties, Bellary.	01062019
24	RUDRAMUNI	3vc13cv091	I-Construction, Ballari.	14092017
25	SIDDAPPAGOUDA B BIRADAR	3vc13cv106	MSG Construction, Ballari.	15102017
26	T RAVITEJA	3vc13cv114	Premiere Technical Consultancy, Ballari.	01072017
27	MAHANTESH M	3vc14cv410	I-Construction, Ballari.	16082017
28	MALLIKARJUNAPPA U PARADDI	3vc14cv411	Steel Engineering Technology.	12092019
29	PRABHUGOUDA	3vc14cv416	MEDHA Servo Drives Pvt. Ltd.	12032019

Assessment Year Name : CAYm3

S.No	Student Name	Enrollment No	Employee Name	Appointment No
1	ABHISHEK H	3vc12cv001	MSG Construction, Ballari.	20072016
2	AKBAR BASHA P	3vc12cv003	I-Construction, Ballari.	09112016
3	BHARAT RAJ	3vc12cv012	MSG Construction, Ballari.	20072016
4	CHETAN H	3vc12cv016	I-Construction, Ballari.	09112016
5	E B VENKATESH	3vc12cv018	Bellary-Construction, Ballari	12072016
6	SUSHMITHA J H	3vc12cv031	SAR PRO Consulting Engineers, Bengaluru.	01072016
7	MD NADEEMULLAH HUSSAIN	3vc12cv054	MSG Construction, Ballari.	20072016
8	MOHAMMED ASIF B	3vc12cv056	Bengaluru Metro Rail Corporation Ltd.	11061
9	SANTOSH KUMAR REDDY B	3vc12cv083	KVR Constructions, Bellary.	20052016
10	SANTHOSHA	3vc12cv084	KVR Constructions, Bellary.	20052016
11	SHASHARANABASAVA KATAMBLI	3vc12cv088	I-Construction, Ballari.	09112016
12	SARAGU KARTHIK	3vc12cv085	KVR Constructions, Bellary	20052016
13	SHREYAS H R	3vc12cv095	Bellary Construction, Ballari	12072016
14	SUPRIYA H M	3vc12cv098	KVR Constructions, Bellary.	10082016
15	SURYA PRATHAP REDDY V	3vc12cv099	KVR Constructions, Bellary.	10082016
16	SWATHI S	3vc12cv100	KVR Constructions, Bellary	10082016
17	TADELU SIVASAI KUMAR	3vc12cv102	KVR Constructions, Bellary.	10082016
18	TEJASWINI C T	3vc12cv103	KVR Constructions, Bellary.	10082016
19	VIKAS M WADDATTI	3vc12cv109	Bellary Construction, Ballari.	10092016
20	VINAY	3vc12cv110	AARRKE CEMENT BANK, Bellary.	15042017
21	VINOD	3vc12cv111	AARRKE CEMENT BANK, Bellary	15042017
22	VINOD P	3vc12cv112	MSG Construction, Ballari.	20072016
23	VISHAL KUMAR M H	3vc12cv114	AARRKE CEMENT BANK, Bellary.	15042017
24	CHANDRASHEKHAR H	3vc13cv404	Bellary Construction, Ballari	21082016
25	HEMANTHARAJ K	3vc13cv407	Premiere Technical Consultancy, Ballari.	05072016
26	K.JADIYAPPA	3vc13cv408	Bellary Construction, Ballari	21082016
27	KIRAN KUMAR	3vc13cv410	JSW Cement Ltd, Karnool.	30032017
28	M YOGANAND	3vc13cv413	Premiere Technical Consultancy, Ballari	02082016
29	MAHESH TAVARAGERA	3vc13cv414	Bellary Construction, Ballari	25102016
30	MARUTI	3vc13cv418	MSG Construction, Ballari	20072016
31	MOHAMMED ALI S A	3vc13cv419	AARRKE CEMENT BANK, Bellary.	10012017
32	PARASHURAMAPPA B	3vc13cv421	AARRKE CEMENT BANK, Bellary.	10012017
33	RAJASEKHAR T	3vc13cv422	Lecturer, Hanagal Sri Kumareshwara Polytechnic, Bellary.	05122016
34	SANTOSH VEERAPUR	3vc13cv425	AARRKE CEMENT BANK, Bellary	10012017
35	SHANMUKA NAIK N K	3vc13cv426	AARRKE CEMENT BANK, Bellary	10012017
36	SUDHAKAR K	3vc13cv428	SAISUDHIR Infrastructures Limited	18032017
37	VEERABASIAH SWAMI M V	3vc13cv429	AARRKE CEMENT BANK, Bellary.	10012017
38	VEERANA GOUDA R	3vc13cv430	Lecturer, Sanjay Gandhi Polytechnic, Bellary.	01072016
39	VINAYAKA K M	3vc13cv435	Bellary-Construction, Ballari.	05102016
40	P.RAJESH REDDY	3vc13cv436	Premiere Technical Consultancy, Ballari	24082016

**Details of Professional society / chapters orgnized in the Department**

SL.No	Event	Event Name	Date
1	ICI Student Chapter Seminar and Deminar	Student Chapter Two days "Seminar and Deminar on construction Materials"	16/04/2016 & 17/04/2016
2	ICI Student Chapter Technical talk	ICI Student Chapter Technical talk on "Impact Of Micro Fine Materials"	08/08/2016
3	ICI Student Chapter Technical talk	ICI Student Chapter on "Sustainable Development In Construction"	19/8/2017
4	ICI Student Chapter Technical talk	ICI Student Chapter on "Ready Mix Concrete"	25/8/2018

**4.6.2 Publication of technical magazines, newsletters, etc. (5)**

The Department publishing a newsletter under the name "ABHIYANTHA" from the year 2016-17 and the newsletter will be published yearly.

**4.6.3 Participation in inter-institute events by students of the program of study (10)**

Details of Department students participated in inter-Institute events and co-curricular activities

Sl. No	Participants	Name of the Event	Year
1	Shiva Prashanth	Nirmaanices 2016, International Civil engineering Students's Symposium, BMS College of Engineering,Bangalore	24 <sup>th</sup> & 25 <sup>th</sup> October 2016
2	Rakshith Reddy B	Nirmaanices 2016 International Civil engineering Students's Symposium	24 <sup>th</sup> & 25 <sup>th</sup> October 2016
3	Chethan.K.T	Nirmaanices 2016, International Civil engineering Students's Symposium, BMS College of Engineering,Bangalore	24 <sup>th</sup> & 25 <sup>th</sup> October 2016
4	Shomashekhar G	Nirmaanices 2016, International Civil engineering Students's Symposium, BMS College of Engineering,Bangalore	24 <sup>th</sup> & 25 <sup>th</sup> October 2016
5	Govindaraju K	Nirmaanices 2016, International Civil engineering Students's Symposium, BMS College of Engineering,Bangalore	24 <sup>th</sup> & 25 <sup>th</sup> October 2016
6	Chandrappa E	Nirmaanices 2016, International Civil engineering Students's Symposium, BMS College of Engineering,Bangalore	24 <sup>th</sup> & 25 <sup>th</sup> October 2016
7	Suresh Naik	Nirmaanices 2016, International Civil engineering Students's Symposium, BMS College of Engineering,Bangalore	24 <sup>th</sup> & 25 <sup>th</sup> October 2016
8	Shivaraj G	Nirmaanices 2016, International Civil engineering Students's Symposium, BMS College of Engineering,Bangalore	24 <sup>th</sup> & 25 <sup>th</sup> October 2016
9	Prakruthi	Nirmaanices 2016, International Civil engineering Students's Symposium, BMS College of Engineering,Bangalore	24 <sup>th</sup> & 25 <sup>th</sup> October 2016
10	Ramya Madagiri	Nirmaanices 2016 International Civil Engineering Students's Symposium	24 <sup>th</sup> & 25 <sup>th</sup> October 2016
11	Melasime Chennabasava	Nirmaanices 2016 International Civil Engineering Students's Symposium	24 <sup>th</sup> & 25 <sup>th</sup> October 2016
12	Sandeep Varma N	Nirmaanices 2016 International Civil Engineering Students's Symposium	24 <sup>th</sup> & 25 <sup>th</sup> October 2016
13	Shiva Prashanth	National Academy of construction A society of Government of Telangana, NAC Campus, Hyderabad, Telangana, India	31 <sup>st</sup> July 2016
14	Shiva Prashanth	CADD CENTRE, Ballari	29 <sup>TH</sup> March 2016
15	Sandeep Varma N	ICI Student Chapter, RVCE Bangalore	24 <sup>th</sup> & 25 <sup>th</sup> October 2016
16	Shiva Prashanth	ICI Student Chapter, RVCE Bangalore	24 <sup>th</sup> & 25 <sup>th</sup> October 2016
17	Rakshith Reddy B	ICI Student Chapter, RVCE Bangalore	24 <sup>th</sup> & 25 <sup>th</sup> October 2016
18	Chethan.K.T	Nirmaanices 2016, International Civil engineering Students's Symposium, BMS College of Engineering,Bangalore	24 <sup>th</sup> & 25 <sup>th</sup> October 2016

5 FACULTY INFORMATION AND CONTRIBUTIONS (200)

Total Marks 175.27

Institute Marks :

Name	PAN No.	University Degree	Date of Receiving Degree	Area of Specialization	Research Paper Publications	Ph.D Guidance	Faculty receiving Ph.D during the assessment year	Current Designation	Date (Designated as Prof/Assoc. Prof.).	Initial Date of Joining	Association Type	At present working with the Institution(Yes/No)	In case of NO, Date of Leaving	IS HOD?
Dr.H M Somasekariah	AJBPS1520M	ME/M. Tech and PhD	27/12/2012	CONCRETE TECHNOLOGY	9	6	0	Professor	01/08/2015	01/02/1986	Regular	Yes		No

Dr. H M Mallikarjuna	AHNPM8941J	ME/M. Tech and PhD	07/12/2013	GEO TECHNOLOGY	2	1	0	Professor	07/12/2013	04/09/1995	Regular	Yes		Yes
Dr. M.S. Shobha	APXPS8542M	ME/M. Tech and PhD	21/01/2017	CONCRETE TECHNOLOGY	4	0	0	Professor	01/02/2017	19/01/1998	Regular	Yes		No
T.H.Patel	ADNPP6370Q	M.E/M.Tech	23/09/1989	ENVIRONMENTAL ENGINEERING	5	0	0	Associate Professor	01/12/2012	08/02/1986	Regular	No	30/06/2018	No
H.M Nagabhushan	AAQPN8970J	M.Sc	07/01/1982	GEOLOGY	0	0	0	Associate Professor	01/12/2012	21/03/1983	Regular	Yes		No
M.R.Vijaya kumar	ABAPV8383L	M.E/M.Tech	22/01/1990	ENVIRONMENTAL ENGINEERING	6	0	0	Assistant Professor		25/09/1989	Regular	Yes		No
Pushpalatha R Gadag	AOYPG2856E	M.E/M.Tech	28/02/1996	INDUSTRIAL STRUCTURES	3	0	0	Assistant Professor		01/11/2007	Regular	Yes		No
Dr.J.M.Srishaila	BKIPS6236B	ME/M. Tech and PhD	18/07/2018	CONCRETE TECHNOLOGY	8	0	0	Associate Professor	01/12/2018	16/07/2015	Regular	Yes		No
Adana Gouda	AQMPA3232E	M.E/M.Tech	07/01/2010	STRUCTURAL ENGINEERING	12	0	0	Assistant Professor		16/08/2010	Regular	Yes		No
Mahesh Sajjan	ATGPM0901R	M.E/M.Tech	03/08/2010	STRUCTURAL ENGINEERING	2	0	0	Assistant Professor		20/08/2018	Regular	Yes		No
Basavaprabhu M.S	BIJPB3473L	M.E/M.Tech	28/09/2011	STRUCTURAL ENGINEERING	4	0	0	Assistant Professor		02/09/2013	Regular	Yes		No
Basavalingana Gowda M I	BDRPM1100J	M.E/M.Tech	09/04/2012	STRUCTURAL ENGINEERING	2	0	0	Assistant Professor		24/12/2012	Regular	Yes		No
Sachin Patil	EATPS6457J	M.E/M.Tech	16/08/2014	STRUCTURAL ENGINEERING	22	0	0	Assistant Professor		14/05/2014	Regular	Yes		No
Basvalingappa	AQWPB8097L	M.E/M.Tech	03/05/2014	STRUCTURAL ENGINEERING	6	0	0	Assistant Professor		25/01/2014	Regular	Yes		No
Pavan Kumar M	CQTPK9318J	M.E/M.Tech	05/05/2016	STRUCTURAL ENGINEERING	6	0	0	Assistant Professor		02/11/2012	Regular	Yes		No
Vinay Kumar M R	AVXPV6571F	M.E/M.Tech	06/11/2014	STRUCTURAL ENGINEERING	3	0	0	Assistant Professor		23/02/2015	Regular	No	14/05/2019	No
Anil Kumar S Katageri	CUOPK7045K	M.E/M.Tech	09/05/2015	STRUCTURAL ENGINEERING	1	0	0	Assistant Professor		27/07/2015	Regular	No	08/05/2018	No
T Naga Anusha	ASZPA7618M	M.E/M.Tech	05/05/2016	STRUCTUAL ENGINEERING	0	0	0	Assistant Professor		04/08/2015	Regular	No	01/05/2018	No
Shadakshari M	FCIPS1171K	M.E/M.Tech	05/05/2016	STRUCTURAL ENGINEERING	0	0	0	Assistant Professor		08/01/2016	Regular	No	11/05/2018	No
Zameer K	OQWPB8097L	M.E/M.Tech	14/01/2016	STRUCTURAL ENGINEERING	3	0	0	Assistant Professor		01/08/2016	Regular	Yes		No
Lilly Monica	Exempted	M.E/M.Tech	28/05/2015	STRUCTURAL ENGINEERING	0	0	0	Assistant Professor		11/01/2016	Regular	No	14/05/2018	No
Mantheswari S Bhavikatti	BBQPB2365H	M.E/M.Tech	05/05/2016	STRUCTURAL ENGINEERING	0	0	0	Assistant Professor		02/02/2016	Regular	No	17/05/2018	No
VinayaShekhar T E	AAUPE5085B	M.E/M.Tech	05/05/2016	STRUCTURAL ENGINEERING	0	0	0	Assistant Professor		08/02/2016	Regular	Yes		No
Anil Kumar H M	APVPA0849K	M.E/M.Tech	03/05/2014	COSTRUCTION TECHNOLOGY	0	0	0	Assistant Professor		01/08/2016	Regular	No	15/05/2018	No
Jagadeesh V M	CBLPM7745J	M.E/M.Tech	21/01/2017	CONSTRUCTION TECHNOLOGY	0	0	0	Assistant Professor		01/08/2016	Regular	No	30/05/2018	No
Ashwini R	BBKPA1678J	M.E/M.Tech	09/05/2015	ENVIRONMENTAL ENGINEERING	0	0	0	Assistant Professor		08/08/2016	Regular	No	19/05/2018	No

Karthik I	EPKPK0668R	M.E/M.Tech	05/11/2016	ENVIRONMENTAL ENGINEERING	0	0	0	Assistant Professor		23/08/2016	Regular	No		15/05/2018	No
Rajendra Kumar K M	CQXPR0612J	M.E/M.Tech	06/10/2016	STRUCTURAL ENGINEERING	4	0	0	Assistant Professor		26/08/2016	Regular	No		14/05/2019	No
Veerashaiah H M	AYZPV4153E	M.E/M.Tech	09/05/2015	COMPUTER AIDED DESIGN OF STRUCTURES	4	0	0	Assistant Professor		26/08/2016	Regular	Yes			No
Neeraja S	EFSPS3489J	M.E/M.Tech	30/01/2015	STRUCTURAL ENGINEERING	0	0	0	Assistant Professor		22/08/2016	Regular	No		19/05/2018	No
Prasad S	CLPPP5681L	M.E/M.Tech	21/01/2017	HIGHWAY ENGINEERING	0	0	0	Assistant Professor		18/08/2016	Regular	No		08/08/2018	No
Nagraj B	ARCPN7074J	M.E/M.Tech	21/01/2017	STRUCTURAL ENGINEERING	0	0	0	Assistant Professor		23/08/2017	Regular	No		10/05/2018	No
Monika Bhutada	CNBPB9046H	M.E/M.Tech	04/08/2016	COMPUTER AIDED STRUCTURAL ENGINEERING	0	0	0	Assistant Professor		23/08/2017	Regular	No		06/05/2019	No
Sagar	EEIPS8675P	M.E/M.Tech	02/08/2017	TRANSPORTATION ENGINEERING AND MANAGEMENT	13	0	0	Assistant Professor		15/08/2016	Regular	Yes			No
Apoorva Arlur	CKCPA1479F	M.E/M.Tech	11/11/2017	HEALTH SCIENCES AND WATER ENGINEERING	0	0	0	Assistant Professor		29/08/2017	Regular	No		06/05/2019	No
Karthik M O	DRRPK1145P	M.E/M.Tech	02/08/2017	COMPUTER AIDED STRUCTURAL ENGINEERING	1	0	0	Assistant Professor		29/08/2017	Regular	Yes			No
Sunil Umachagi	AFOPU9620F	M.E/M.Tech	17/08/2017	ENVIRONMENTAL ENGINEERING	4	0	0	Assistant Professor		29/08/2017	Regular	Yes			No
Mubarak Mohammadia	CHCPM7552G	M.E/M.Tech	02/01/2018	STRUCTURAL ENGINEERING	1	0	0	Assistant Professor		02/04/2018	Regular	No		13/05/2019	No
Basavaraj R	CSPPB8463H	M.E/M.Tech	12/07/2018	STRUCTURAL ENGINEERING	0	0	0	Assistant Professor		23/07/2018	Regular	No		29/06/2019	No
Nayana B S	BKZPN2473A	M.E/M.Tech	09/01/2018	STRUCTURAL ENGINEERING	1	0	0	Assistant Professor		01/08/2018	Regular	No		15/06/2019	No
Ganesh H	BVFPG3494K	M.E/M.Tech	18/08/2018	HYDRAULICS	0	0	0	Assistant Professor		20/08/2018	Regular	Yes			No
Gurupada Swamy	BPSPG4402G	M.E/M.Tech	13/11/2018	STRUCTURAL ENGINEERING	3	0	0	Assistant Professor		20/08/2018	Regular	Yes			No
Manohar P	BXCPM2007H	M.E/M.Tech	27/07/2018	ENVIRONMNTAL ENGINEERING	0	0	0	Assistant Professor		20/08/2018	Regular	Yes			No
Karthik K B	FSMPK7761K	M.E/M.Tech	27/11/2018	TRANSPORTATION ENGINEERING AND MANAGEMENT	1	0	0	Assistant Professor		25/08/2018	Regular	Yes			No
Sharon Rankitha Paul	CAQPP0808K	M.E/M.Tech	03/09/2018	ENVIRONMENTAL ENGINEERING	1	0	0	Assistant Professor		20/08/2018	Regular	Yes			No
Shiva Malashree	BABPM8403R	M.E/M.Tech	09/05/2015	STRUCTURAL ENGINEERING	2	0	0	Assistant Professor		06/07/2015	Regular	Yes			No
Priyanka	FAYPP5164D	M.E/M.Tech	27/10/2018	STRUCTURAL ENGINEERING	1	0	0	Assistant Professor		20/08/2018	Regular	Yes			No
Parimala C	DRPPP2223B	M.E/M.Tech	01/06/2016	Water Resource Engineering	0	0	0	Assistant Professor		03/08/2016	Regular	No		29/05/2017	No
Jeelan Pasha	BSSPP5419D	M.E/M.Tech	09/07/2015	EARTHQUAKE ENGINEERING	0	0	0	Assistant Professor		04/01/2016	Regular	No		24/05/2017	No
Vijaya Kalyani I	CVAPK7099A	M.E/M.Tech	11/05/2016	STRUCTURAL ENGINEERING	0	0	0	Assistant Professor		02/02/2016	Regular	No		08/05/2017	No
Manohar P R	CEQPM6767N	M.E/M.Tech	14/01/2016	STRUCTURAL ENGINEERING	0	0	0	Assistant Professor		08/01/2016	Regular	No		22/05/2017	No

Sharana Basava G	ASPPB1302H	M.E/M.Tech	09/05/2015	STRUCTURAL ENGINEERING	1	0	0	Assistant Professor		22/08/2016	Regular	No	22/05/2017	No
PARVEEZ AHMED P	CETPP8671P	M.E/M.Tech	16/08/2014	Structural Engineering	0	0	0	Assistant Professor		23/02/2015	Regular	No	02/09/2017	No
C B SREENIVASA REDDY	AHHP8779G	M.E/M.Tech	28/03/1989	Structural Engineering	0	0	0	Associate Professor	01/12/2012	01/05/1989	Regular	No	02/09/2017	No
Swetha M L	DOIPS2578G	M.E/M.Tech	16/05/2014	ENVIRONMENTAL ENGINEERING	0	0	0	Assistant Professor		01/08/2014	Regular	No	01/09/2017	No
Chennaveer	BFOPC1471B	M.E/M.Tech	02/01/2016	Structural Engineering	0	0	0	Assistant Professor		08/01/2016	Regular	No	21/09/2017	No
P Shiva Keshava Kumar	AJXPP7656E	ME/M. Tech and PhD	22/05/2013	ENVIRONMENTAL ENGINEERING	0	0	0	Professor	22/05/2015	22/05/2015	Contractual	Yes		No

5.1 Student-Faculty Ratio (20)

Total Marks 18.00  
Institute Marks : 18.00

## UG

No. of UG Programs in the Department 1

Civil Engineering						
Year of Study	CAY		CAYm1		CAYm2	
	(2018-19)		(2017-18)		(2016-17)	
	Sanction Intake	Actual admitted through lateral entry students	Sanction Intake	Actual admitted through lateral entry students	Sanction Intake	Actual admitted through lateral entry students
2nd Year	120	46	120	30	120	45
3rd Year	120	30	120	45	120	41
4th Year	120	45	120	41	120	35
<b>Sub-Total</b>	<b>360</b>	<b>121</b>	<b>360</b>	<b>116</b>	<b>360</b>	<b>121</b>
<b>Total</b>	<b>481</b>		<b>476</b>		<b>481</b>	
Grand Total	<input type="text" value="481"/>		<input type="text" value="476"/>		<input type="text" value="481"/>	

## PG

No. of PG Programs in the Department 1

STRUCTURAL ENGINEERING				
Year of Study	CAY(2018-19)		CAYm1(2017-18)	
	Sanction Intake		Sanction Intake	
1st Year	18		18	
2nd Year	18		18	
<b>Total</b>	<b>36</b>		<b>36</b>	
Grand Total	<input type="text" value="36"/>		<input type="text" value="36"/>	

## SFR

No. of UG Programs in the Department 1

No. of PG Programs in the Department 1

Description	CAY(2018-19)	CAYm1 (2017-18)	CAYm2 (2016-17)
Total No. of Students in the Department(S)	517 <b>Sum total of all (UG+PG) students</b>	512 <b>Sum total of all (UG+PG) students</b>	517 <b>Sum total of all (UG+PG) students</b>
No. of Faculty in the Department(F)	30 <b>F1</b>	36 <b>F2</b>	36 <b>F3</b>
Student Faculty Ratio(SFR)	17.23 <b>SFR1=S1/F1</b>	14.22 <b>SFR2=S2/F2</b>	14.36 <b>SFR3=S3/F3</b>
Average SFR	15.27 <b>SFR=(SFR1+SFR2+SFR3)/3</b>		
<b>F=Total Number of Faculty Members in the Department (excluding first year faculty)</b>			

**Note:** 75% should be Regular/full time faculty and the remaining shall be Contractual Faculty/Adjust Faculty/Resource persons from industry as per AICTE norms and standards. The contractual faculty will be considered for assessment only if a faculty is drawing a salary as prescribed by the concerned State Government for the contractual faculty in the respective cadre.

### 5.1.1. Provide the information about the regular and contractual faculty as per the format mentioned below:

	Total number of regular faculty in the department	Total number of contractual faculty in the department
CAY(2018-19)	29	1
CAYm1(2017-18)	35	1
CAYm2(2016-17)	35	1

Average SFR for three assessment years : 15.27

Assessment SFR : 18

### 5.2 Faculty Cadre Proportion (25)

Total Marks 21.00

Institute Marks : 21.00

Year	Professors		Associate Professors		Assistant Professors	
	Required F1	Available	Required F2	Available	Required F3	Available
CAY(2018-19)	2.00	3.00	5.00	0.00	17.00	26.00
CAYm1(2017-18)	2.00	3.00	5.00	0.00	17.00	32.00
CAYm2(2016-17)	2.00	2.00	5.00	0.00	17.00	33.00
Average Numbers	2.00	2.67	5.00	0.00	17.00	30.33

Cadre Ratio Marks [ (AF1 / RF1) + [(AF2 / RF2) \* 0.6] + [ (AF3 / RF3) \* 0.4] ] \* 12.5 : 21.00

### 5.3 Faculty Qualification (25)

Total Marks 16.27

Institute Marks : 16.27

	X	Y	F	FQ = 2.5 x [(10X + 4Y) / F ]
2018-19(CAY)	5	25	25.00	15.00
2017-18(CAYm1)	4	32	25.00	16.80
2016-17(CAYm2)	3	35	25.00	17.00

Average Assessment : 16.27

### 5.4 Faculty Retention (25)

Total Marks 15.00



Description	2017-18	2018-19
No of Faculty Retained	26	17
Total No of Faculty	35	35
% of Faculty Retained	74	49

Average : 61.00

Assessment Marks : 15.00

**5.5 Innovations by the Faculty in Teaching and Learning (20)**

Total Marks 20.00

Institute Marks : 20.00

Teaching and learning innovative practices are introduced to raise the curiosity of a student in wide domain to encourage the students to question the obvious and to increase the interaction in the class. Rapid advancement in technology is one of the major issues that affect the teaching/learning process. The facilitators find it difficult to keep pace with the techno-savvy learners. Further there is rapid change taking place in technology which aggravates the problem. Keeping the audience captivated throughout the lecture is another challenge. The facilitator is required to use a variety of tools to keep the learner engaged in the learning process since access to a variety of tools all the time may not be possible. Today knowledge is just a click away to the learner; a challenge faced by facilitators is to keep pace with the latest news and happenings. The teaching/learning process is given immense importance in the institute. The institute trains their facilitators continuously to help them enhance their teaching abilities. The evidence of success is visible, qualitatively as well as quantitatively. The qualitative factor improves etiquettes and desire to understand. Also, it changes the overall perspective towards life. The quantitative factor improves academic performance and motivates participation in co-curricular activities. Students who have graduated are performing extremely well in the corporate world. Some students have put their learning into application by starting their own businesses.

Following are the best and innovative practices undertaken by the faculty members for improving teaching and learning experience.

### 1. Power Point Presentations

#### Objectives

To enhance the overall comprehension of students and allow teachers to present their lessons in a more dynamic way

#### Outcomes

It provides the ability to equip presentations with different types of media - including images, sounds, animations, and much more. This enhances the students abilities to retain what is being taught, especially to those who are visual learners. Teachers can focus on the class and interact with the students instead of writing on a board.

### 2. Student Seminars

#### Objectives

To enhance the overall comprehension of students and allow students to present their lessons in a more dynamic way

#### Outcomes

This best practice enhances the Listening ability. Working in a team Leadership quality of students builds up. Team building of students grows as they work in a Team. Communication skill builds up by Oral Communication in seminars. Student takes responsibility while working in a team. Sharing of Knowledge uplifts while preparing. Students learn Time Management skill. Students learn to deal with conflicting opinions. For delivering seminars students Prepare, Produce and use visual aids for presentation.

### 3. Industrial Visits

#### Objectives

To provide students an insight regarding internal working of companies and industries.

#### Outcomes

Industrial visit is considered as one of the tactical methods of teaching. The main reason behind this is to help student to know things practically through interaction, working methods and employment practices. It also provides a good opportunity for students to gain awareness about industrial practices. Through industrial visit students get awareness about new technologies.

### 4. Online NPTEL / IITBX Courses

#### Objectives

It's a learning platform designed to provide educators, administrators and learners with a single robust, secure and integrated system to create personalized learning environments.

#### Outcomes

Moodle is used for blended learning, distance education and other e-learning projects in institute. With customized management features, it is used to create private websites with online courses for educators and trainers to achieve learning goals.

### 5. NPTEL Videos

#### Objectives

To enhance the quality of engineering education, on tip compatibility & resources for beyond curriculum.

#### Outcomes

online course contents and interactions between faculty members in science and engineering using the best academics practices About 70 courses offered by faculty in various departments and to students at all technical levels are given here. Setting up internal resources for implementing virtual online certification programmes in science and engineering.

### 5.6 Faculty as participants in Faculty development/training activities/STTPs (15)

Total Marks 15.00

Institute Marks : 15.00

Name of the faculty	Max 5 Per Faculty		
	2017-18 (CAYm1)	2016-17 (CAYm2)	2015-16 (CAYm3)
Dr. H M.Mallikarjuna	3.00	5.00	0.00
Dr. M.S.Shobha	5.00	3.00	3.00
T.H.Patel	3.00	3.00	5.00
H.M Nagabhushan	5.00	3.00	5.00
M.R.Vijaya kumar	3.00	3.00	5.00
Pushpalatha R Gadag	5.00	3.00	5.00
Dr.J.M.Srishaila	5.00	3.00	5.00
Adana Gouda	5.00	3.00	5.00
Maresh Sajjan	0.00	0.00	3.00
Basavaprabhu M.S	5.00	3.00	5.00
Basavalingana Gowda M I	0.00	3.00	5.00
Sachin Patil	5.00	3.00	5.00
Basvalingappa	5.00	3.00	5.00
Pavan Kumar M	5.00	5.00	5.00
Vinay Kumar M R	0.00	3.00	5.00
Zameer K	0.00	3.00	5.00
VinayaShekhar T E	3.00	5.00	5.00
Rajendra Kumar K M	3.00	0.00	0.00
Veerashaiah H M	5.00	0.00	0.00
Shiva Malashree	0.00	0.00	3.00
P Shiva Keshava Kumar	0.00	3.00	0.00
Sum	65.00	57.00	79.00
RF = Number of Faculty required to comply with 20:1 Student Faculty Ratios per 5.1	25.85	25.60	25.85
Assessment [3*(Sum / 0.5RF)]	15.09	13.36	18.34

Average assessment over 3 years: 15.60

**5.7 Research and Development (30)**

**5.7.1 Academic Research (10)**

Total Marks 30.00

Institute Marks : 10.00

**Details of Research Publications**

Type of Journals / Publications	Number of Papers/Publications				Total
	2018-19	2017-18	2016-17	2015-16	
SCOPUS Indexed International Journals	1	0	0	0	1
UGC Approved International Journals	59	28	28	9	124
International Conference Papers	0	4	1	0	5
National Conference Papers	1	0	0	0	1
<b>Total Year Wise</b>	<b>61</b>	<b>32</b>	<b>29</b>	<b>9</b>	

**Details of SCOPUS Indexed International Journal**

2018-19						
Sl. No	Name of the faculty	Title	National / International	Citation	Month & Year	Impact Factor
1	Dr. J. M. Srishaila	Combined Effect Of GGBS And Fly Ash On Mechanical Properties Of M25 Grade Concrete Made With Recycled Fine Aggregate	International	IJCIET Volume 9, Issue 10, ISSN Print: 0976-6308	October 2018	10.35

**Details of UGC Approved International Journals**

2018-19						
Sl. No	Name of the faculty	Title	National / International	Citation	Month & Year	Impact Factor
1	Dr.H M. Somasekariah	Experimental Investigation On Strength And Durability Properties Of Composite Fiber Reinforced High Performance Concrete With Fly Ash	International	IJRAR Volume 5, Issue 3 E-ISSN 2348-1269, P-ISSN 2349-5138	August 2018	5.75
		Study On Mechanical Properties And Impact Strength Of Composite Fiber Reinforced High Performance Concrete With Metakaolin	International	IJRAR Volume 5 Issue 3 E-ISSN 2348-1269, P-ISSN 2349-5138	August 2018	5.75
		Experimental Study On Compressive, Split Tensile And Flexural Strength Of Composite Fiber Reinforced Concrete With Metakaolin As Admixture	International	IJCER Volume, 08 Issue, 9 ISSN (e): 2250 – 3005	September 2018	6.41
2	Dr.M. S. Shobha	Fresh And Hardened Properties Of Fibers Geopolymer Concrete By Replacing River Sand With M-Sand	International	JETIR Volume 6, Issue 6, (ISSN-2349-5162)	June 2019	5.87
		Study On Workability And Compressive Strength Properties Of Jute Fibre Composite Concrete	International	JETIR Volume 5, Issue 8 (ISSN-2349-5162)	August 2018	5.87
		Analysis And Design Of Junction House By Using Response Spectrum Method	International	IJRDT Volume-9, Issue-3 ISSN (O) :- 2349-3585	March 2018	6.88
5	Dr. J. M. Srishaila	Combined Effect Of Flyash & GGBS On Workability And Mechanical Properties Of Self Compacting Geopolymer Concrete	International	IJPAM Volume 119 No. 15, ISSN: 1314-3395	2018	5.75
		Mechanical Properties Of Recycled Coarse Aggregate Concrete With Mineral Admixture	International	SSRG - IJCE Volume 6 Issue 2, ISSN: 2348 – 8352	February 2019	2.21
4	Pushpalatha R Gadag	Durability Study Of High Performance Concrete With Partial Replacement Of Cement With Ultrafine Flyash And Nanosilica	International	IJRAR Volume 05, Issue 03, ISSN-2348-4289	September 2018	5.75
5	Adana Gouda	Experimental Investigation On Strength And Durability Properties Of Composite Fiber Reinforced High Performance Concrete With Fly Ash	International	IJRAR Volume 5, Issue 3 E-ISSN 2348-1269, P-ISSN 2349-5138	August 2018	5.75
		Study On Mechanical Properties And Impact Strength Of Composite Fiber Reinforced High Performance Concrete With Metakaolin	International	IJRAR Volume 5 Issue 3 E-ISSN 2348-1269, P-ISSN 2349-5138	August 2018,	5.75
		Experimental Study On Compressive, Split Tensile And Flexural Strength Of Composite Fiber Reinforced Concrete With Metakaolin As Admixture	International	IJCER Volume, 08 Issue, 9 ISSN (e): 2250 – 3005	September 2018	6.41
		Comparative Analysis Of RC Structures With And Without Base Isolation Using Time History Analysis	International	IJRAR Volume 5, Issue 3, E-ISSN 2348-1269, P- ISSN 2349-5138	September 2018	5.75
		Study On Strength Properties Of Geo-Polymer Concrete With Sisal And Polypropylene Fibers	International	JETIR Volume 5 Issue 9, (ISSN-2349-5162)	September 2018	5.87

		Experimental Study On Partial Replacement Of Coarse Aggregate By Coconut Shells In Concrete	International	IRJET Volume: 06 Issue: 06, p-ISSN: 2395-0072	June 2019	7.34
6	Mahesh Sajjan	An Experimental Study On Strength Characteristics Of Hybrid Fiber Reinforced High Performance Concrete With Multiple Mineral Admixtures	International	JETIR Volume: 05 Issue: 09, p-ISSN: 2349-5162	September 2018	5.87
		Effect Of Multiple Fibre And Mineral Admixture On Compressive Strength Of Concrete	International	IJRAR Volume: 05 Issue: 03, p-ISSN: 2348-1269	September 2018	5.75
7	Basavaprabhu M S	Study On Effect Of Multi Admixtures And Composite Fibers On Compressive Strength Of Concrete	International	IJRAR Volume 5, Issue 3 (E-ISSN 2348-1269, P- ISSN 2349-5138)	August 2018,	5.75
		Seismic Effect In Severe Zones On Octagonal And Rectangular Shape Structures	International	JETIR Volume 5, Issue 9, (ISSN-2349-5162)	September 2018	5.87
8	Basavalingana Gowda M. I.	Seismic Analysis Of Multistoried Building With And Without Shear Wall Using Etabs	International	IRJET Volume: 06 Issue: 06, e-ISSN: 2395-0056, p-ISSN: 2395-0072	June 2019	7.34
		Experimental Study On Compressive, Split Tensile And Flexural Strength Of Composite Fiber Reinforced Concrete With Metakaolin As Admixture	International	IJCER Volume, 08 Issue, 9 ISSN (e): 2250 – 3005	September 2018	6.41
9	Sachin Patil	Maximum Power Point Tracking Based Solar Charge Controller	International	JETIR Volume 5 Issue 7, (ISSN : 2349-5162)	July 2018	5.87
		Effect Of Composite Fibers On Flexural Strength Of High Performance Concrete	International	JETIR Volume 5 Issue 8, (ISSN : 2349-5162)	August 2018	5.87
		Effect Of Composite Fibers On Compressive Strength Of High-Performance Concrete	International	IJCER Volume 08, Issue-8, ISSN (e): 2250 – 3005	August 2018	6.41
		Effect Of depth Of reinforcement On bearing Capacity Of coir Mat Reinforced Sand	International	IJCER Volume-08, Issue-8 ISSN (e): 2250 – 3005	August 2018	6.41
		A Review Of NBA Accreditation For Undergraduate Engineering Programmes (Tier-II)	International	IJREAM Vol-04, Issue-06, ISSN : 2454-9150	September 2018	5.834
		Flexural Strength Of GGBS, Metakaolin And Glass Fibers Based High Performance Concrete	International	IJCER Volume - 09, Issue-6, ISSN (e): 2250 – 3005	June 2019	6.41
		The Influence Of GGBS And Glass Fibers On Flexural Strength Of Concrete Pavement	International	IJCER Volume, 09, Issue - 8, ISSN (e): 2250 – 3005	August 2018	6.41
		Flexural Strength Of Flyash, GGBS And M-Sand Based Concrete Pavement	International	IJCER Volume - 09, Issue - 6, ISSN (e): 2250 – 3005	June 2019	6.41
10	Basavalingappa	Performance And Characterization Of Geo-Polymer Concrete Reinforced With Short Steel Fiber	International	JETIR Volume 6, Issue 6, (ISSN-2349-5162)	June 2019	5.87
		Seismic Effect In Severe Zones On Octagonal And Rectangular Shape Structures	International	JETIR Volume 5, Issue 9, (ISSN-2349-5162)	September 2018	5.87
		Experimental Investigation On Strength Properties Of Concrete By Partial Replacement Of Coarse Aggregate By Ceramic Waste In Concrete Pavement	International	JETIR Volume-5, Issue-8, (ISSN-2349-5162)	August 2018	5.87
11	Pavankumar M	Comparative Analysis Of RC Structures With And Without Base Isolation Using Time History Analysis	International	IJRAR Volume 5, Issue 3, E-ISSN 2348-1269, P- ISSN 2349-5138)	September 2018	5.75
		A Comparative Study On Pre Engineered Building By Using Staad Pro	International	IRJET Volume: 06 Issue: 06 , e-ISSN: 2395-0056, p-ISSN: 2395-0072	June 2019	7.34
		An Experimental Investigation On Workability And Mechanical Properties Of M20 Grade Concrete Made With Egg Shell	International	IRJET Volume: 06 Issue: 06, e-ISSN: 2395-0056, p-ISSN: 2395-0072	June 2019	7.34
		Seismic Effect In Severe Zones On Octagonal And Rectangular Shape Structures	International	JETIR Volume 5, Issue 9, (ISSN-2349-5162)	September 2018	5.87
12	VinayKumar M. R	Study On Mechanical Properties And Impact Strength Of Composite Fiber Reinforced High Performance Concrete With Metakaolin	International	IJRAR Volume 5 Issue 3 E-ISSN 2348-1269, P-ISSN 2349-5138	August 2018	5.75
		Study On Strength Properties Of Geo-Polymer Concrete With Sisal And Polypropylene Fibers	International	JETIR Volume 5 Issue 9, (ISSN-2349-5162)	September 2018	5.87
13	Zameer K.	Effect Of Multiple Fibre And Mineral Admixture On Compressive Strength Of Concrete	International	IJRAR Volume: 05 Issue: 03, p-ISSN: 2348-1269	September 2018	5.75

14	Vinayshekar T. E	Progressive Collapse Analysis Of RC Structures	International	IJRAR Volume: 05 Issue: 04, p-ISSN: 2349-5138, E-ISSN: 2348-1269,	October 2018	5.75
		Seismic Effect In Severe Zones On Octagonal And Rectangular Shape Structures	International	JETIR Volume 5, Issue 9, (ISSN-2349-5162)	September 2018	5.87
15	Rajendra Kumar M	Study On Strength Properties Of Geo-Polymer Concrete With Sisal And Polypropylene Fibers	International	JETIR Volume 5 Issue 9, (ISSN-2349-5162)	September-2018	5.87
16	Veerashaiah H. M.	Regular & Irregular Shape Of Multi Storey Building In Severe Seismic Zone	International	JETIR Volume 5 Issue 9, (ISSN-2349-5162)	September 2019	5.87
17	Sagar H	Flexural Strength Of Flyash, GGBS And M-Sand Based Concrete Pavement	International	IJCER Volume - 09, Issue - 6, ISSN (e): 2250 – 3005	June 2019	6.41
		The Influence Of GGBS And Glass Fibers On Flexural Strength Of Concrete Pavement	International	IJCER Volume, 09, Issue - 8, ISSN (e): 2250 – 3005	June 2019	6.41
		Flexural Strength Of GGBS, Metakaolin And Glass Fibers Based High Performance Concrete	International	IJCER Volume - 09, Issue-6, ISSN (e): 2250 – 3005	June 2019	6.41
		Hydraulic Performance And Physical Properties Of ICBP By Partial Replacement Of Cement With GGBS And Fine Aggregate With M-Sand	International	IJCER Volume - 09, Issue-6, ISSN (e): 2250 – 3005	June 2019	6.41
18	Karthick M O	Analysis And Design Of Multi-Storied Building Of Different Plan Configuration Sung Etabs	International	IRJET Volume - 06, Issue-6, ISSN (e): 2395 – 0056	June 2019	7.2
19	Sunil Umachagi	Application Of Reed Bed Technology In Sewage Treatment Plant For The Treatment Of Domestic Wastewater	International	JETIR Volume - 06, Issue-6, ISSN (e): 2394 – 5162	June 2019	5.87
		Generation Of Electricity From Kitchen Waste Using Single Chambered Microbial Fuel Cell With Candle Wax Salt Bridge	International	IJRSET Volume - 06, Issue-6, ISSN (e): 2319 – 8753	March 2018	7.089
		Comparative Analysis Of RC Structures With And Without Base Isolation Using Time History Analysis	International	IJRAR Volume 5, Issue 3, E-ISSN 2348-1269, P- ISSN 2349-5138)	September 2018	5.75
20	Nayana B S	Probabilistic Study Of Compressive Strength Of Coir Fiber Reinforced Concrete	International	IRJET Volume 5, Issue 10, E-ISSN 2395-0056, P- ISSN 2395-0072	October 2018	7.2
21	Gurupada Swamy	The Study On Strength Parameter Of M35 Grade Concrete Mad With Partial Replacement Of Glass Powder	International	JETIR Volume 6, Issue 6, ISSN 2349-5162	June 2019	5.87
		Study On Effect Of Multi Admixtures And Composite Fibers On Compressive Strength Of Concrete	International	IJRAR Volume 5, Issue 3 (E-ISSN 2348-1269, P- ISSN 2349-5138)	August 2018	5.75
		A Comparative Study On Pre Engineered Building By Using Staad Pro	International	IRJET Volume: 06 Issue: 06 , e-ISSN: 2395-0056, p-ISSN: 2395-0072	June 2019	7.34
22	Karthik K. B.	Experimental Analysis Of Partial Replacement Of Natural Aggregates With Recycled Concrete Aggregates	International	IRJET Volume: 06 Issue: 05 , e-ISSN: 2395-0056, p-ISSN: 2395-0072	May 2019	7.34
23	Sharon Ranjitha Paul	Solidification And Stabilization Of Expired Chemicals	International	IJATEE Vol 5, Issue 44 , ISSN (Print): 2394-5443 ISSN (Online): 2394-7454	July 2018	7
24	Shiva Malashree	Comparative Study Of High Rise Building Subjected To Seismic And Wind Loading Using Cypecad And Etabs	International	IRJET Volume 06, Issue 06, ISSN (Print): 2395-00 ISSN (Online): 2395-0056	June 2019	7.211

### 2017-18

Sl. No	Name of the faculty	Title	National / International	Citation	Month & Year	Impact Factor
1	Dr.H M. Somasekariah	Resistance Of Fly Ash And Silica Fume Based Glass Fiber Reinforced High-Performance Concrete Subjected To Acid Attack	International	IJRSI Volume 04, Issue 07, ISSN 2321–2705	July 2017	3.171
		Experimental Study On Various Strength Of High Performance Concrete By Using Metakaolin And Nano-Silica	International	IRJET Volume 4 Issue 11, E-ISSN 2395-0056, P-ISSN 2395-0072	November 2017	7.2
2	Dr. H. M. Mallikarjuna	Stabilization Of Clay Subgrade Soils For Pavements Using Ground Granulated Blast Furnace Slag	International	IJEDR Volume-05, Issue- 04, ISSN: 2321-9939	November 2017	4.98
3	Dr.M. S. Shobha	Analysis And Design Of Junction House By Using Response Spectrum Method	International	IJRDT Volume 9, Issue 3, (ISSN-2349-3585)	March 2018	6.88
4	Pushpalatha R. G.	Durability Study Of High Performance Concrete With Partial Replacement Of Cement With Ultrafine Ash And Nano Silica	International	IRJET Volume 5, Issue 3 (ISSN-2348-5138)	September 2018	5.75

		Experimental Study On Various Strength Of High Performance Concrete By Using Metakaolin And Nano-Silica	International	IRJET Volume 4 Issue 11, E-ISSN 2395-0056, P-ISSN 2395-0072	November 2017	7.2
5	Adana Gouda	Experimental Study On Fly Ash Based Geopolymer Concrete With Replacement Of Sand By GGBS	International	IJERA Vol. 7, Issue 7, ( Part -2) ISSN : 2248-9622	July 2017	5.197
		Strength And Durability Properties Of Geopolymer Concrete Made With GGBS	International	IJCRT Volume 5 Issue 4 E-ISSN 2320-2882	December 2017	5.97
6	Sachin Patil	Resistance Of Fly Ash And Silica Fume Based Glass Fiber Reinforced High Performance Concrete Subjected To Acid Attack	International	IJRSI Volume 04, Issue 07, ISSN 2321-2705	July 2017	5.87
		Effect Of Partially Replaced Rice Husk Ash On Compressive Strength Of M Sand Concrete	International	JETIR Volume 5, Issue 6, (ISSN-2349-5162)	June 2018	5.87
		Evaluation Of Flexural Property Of Cement Concrete Pavement Containing M Sand As Fine Aggregate And Rice Husk Ash As Partial Replacement Of Cement	International	JETIR Volume 5, Issue 6, (ISSN-2349-5162)	June 2018	5.87
		Experimental Investigation On Previous Concrete With Optimum Utilization Of GGBS As A Partial Replacement Of Cement	International	JETIR Volume 5, Issue 6, (ISSN-2349-5162)	June 2018	5.87
		Structural Analysis Of Residential Building Using Etabs	International	JETIR Volume 5, Issue 6, (ISSN-2349-5162)	June 2018	5.87
7	Basavalingappa	Study Of Sheet Glass Powder And Metakaolin In Conventional Concrete	International	IJEDR Volume 6, Issue 1, ISSN: 2321-9939	Janary 2018	5.67
8	Pavankumar M	Generation Of Biogas From Different Proportion Of Biodegradable Kitchen Waste And Cowdung Using Anaerobic Biodigester	International	IJRSET Vol. 7, Issue 6,ISSN(Online): 2319-8753 ISSN (Print) : 2347-6710	June 2018	7.089
9	VinayKumar M. R.	Generation Of Biogas From Different Proportion Of Biodegradable Kitchen Waste And Cowdung Using Anaerobic Biodigester	International	IJRSET Vol. 7, Issue 6,ISSN(Online): 2319-8753 ISSN (Print) : 2347-6710	June 2018	7.089
10	Zameer k	Study On Strength Characteristics Of Self Curing Concrete Incorporated With Fly Ash	International	IRJET Volume: 05 Issue: 05, p-ISSN: 2395-0072, e-ISSN: 2395-0056	May 2018	7.2
		Analysis, Design And Estimation Of Multi Storied Residential Building Using Etabs Software	International	IRJET Volume: 05 Issue: 05, p-ISSN: 2395-0072, e-ISSN: 2395-0056	May 2018	7.2
11	Rajendra K. M.	Generation Of Biogas From Different Proportion Of Biodegradable Kitchen Waste And Cowdung Using Anaerobic Biodigester	International	IJRSET Vol. 7, Issue 6,ISSN(Online): 2319-8753 ISSN (Print) : 2347-6710	June 2018	7.089
12	Veereshaih H. M.	Seismic Behavior Of Multi Storey Building With And Without Floating Column	International	IRJET Vol. 5, Issue 2,ISSN(Online): 2395-0056 ISSN (Print) : 2396-0072.	February 2018	7.2
13	Sagar	Effect Of Partially Replaced Rice Husk Ash On Compressive Strength Of M Sand Concrete	International	JETIR Volume 5, Issue 6, (ISSN-2349-5162)	June 2018	5.87
		Evaluation Of Mechanical Properties Of Concrete With Addition Of Coconut Fiber	International	JETIR Volume 5, Issue 6, (ISSN-2349-5162)	June 2018	5.87
		Evaluation Of Flexural Property Of Cement Concrete Pavement Containing M Sand As Fine Aggregate And Rice Husk Ash As Partial Replacement Of Cement	International	JETIR Volume 5, Issue 6, (ISSN-2349-5162)	June 2018	5.87
14	Sunil Umachagi	Impact Of Electrode Configurations On Hydraulic Retention Time (HRT) In Treatment Of Sugar Mill Wastewater Using Microbial Fuel Cell	International	IJRSET Volume 6, Issue 7, ISSN (Online) : 2319 – 8753, ISSN (Print) : 2347 - 6710	July 2017	6.209
		Design And Development Of Anaerobic Biodigester For Individual House In Kolagallu Village, Ballari District Using Available Biodegradable Domestic Waste	International	IJERT Volume. 7, Issue. 6 , ISSN : 2278-0181	June - 2018	7.86
		Generation Of Biogas From Different Proportion Of Biodegradable Kitchen Waste And Cowdung Using Anaerobic Biodigester	International	IJRSET Vol. 7, Issue 6,ISSN(Online): 2319-8753 ISSN (Print) : 2347-6710	June 2018	7.089
15	Mubarak Mohammadia	Stabilization Of Clay Subgrade Soils For Pavements Using Ground Granulated Blast Furnace Slag	International	IJEDR Volume-05, Issue-04,ISSN: 2321-9939	November 2017	4.98
16	Priyanka	Effect Of Surface Blast Loads On The RC Structures	International	IRJET Volume-05, Issue- 06, ISSN: 2395-0056, P-ISSN - 2395-0072	June 2018	7.211

### 2016-17

Sl. No	Name of the faculty	Title	National / International	Citation	Month & Year	Impact Factor
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1	Dr.H M. Somasekariah	Study On Strength Properties Of High Performance Concrete Using Meta Kaolin And Nano Silica As Admixture	International	IRJET Volume 03, Issue 08, ISSN(E) 2395-0056, ISSN(P)0 2395-0072	August 2016	7.2
		An Experimental Investigation On Strength Properties Of Concrete Replacing Natural Sand By M-Sand Using Silica Fume As An Admixture	International	IRJET Volume: 03 Issue: 08, e-ISSN: 2395 -0056, p-ISSN: 2395-0072	August 2016	4.45
		Experimental Investigation On The Strength Properties Of High Performance Concrete Using M-Sand And Metakaolin	International	IRJET Volume: 03 Issue: 09, e-ISSN: 2395 -0056, p-ISSN: 2395-0072	August 2016	7.2
		Experimental Investigation On Strength Characteristics Of Composite Fibre High-Performance Concrete With Combination Of Three Mineral Admixtures	International	IRJET Volume: 03 Issue: 08, e-ISSN: 2395 -0056, p-ISSN: 2395-0072	August 2016	4.45
		Effect Of Surface Treatment On Settlement Of Randomly Distributed Coir Fiber Reinforced Sand	International	IJRSI Volume IV, Issue VIS, ISSN 2321-2705	June 2017	3.171
2	T. H. Patel	Impact Of Iron And Steel Industry On Ground Water Quality Of Tungabhadra River Water In Bellary District	International	IJARIIIT Volume-03, Issue- 01, ISSN: 2454-132X	January 2017	4.295
		Impact From Mining & Associated Industrial Activities On Air Quality Of Ballari Region	International	IJITEE Volume-6, Issue-10, ISSN-2278-3075	June 2017	5.54
		Environmental Impact Assessment From Mining & Associated Industrial Activities On Environmental Quality Of Ballari Region	International	IJAERS Volume-4, Issue-5, ISSN-2349-6495	May 2017	4.2
		Experimental Study On Durability Properties Of High Performance Self Compacting Concrete	International	IJRSET Volume-05, Issue- 08, (E)ISSN: 2319-8753, (P)ISSN: 2347-6710	August 2016	7.089
		Effect Of Surface Treatment On Settlement Of Randomly Distributed Coir Fiber Reinforced Sand	International	IJRSI Volume IV, Issue VIS, ISSN 2321-2705	June 2017	3.171
3	Pushpalatha R. G.	Study On Strength Properties Of High Performance Concrete Using Meta Kaolin And Nano Silica As Admixture	International	IRJET Volume 03, Issue 08, ISSN(E) 2395-0056, ISSN(P) 2395-0072	August 2016	7.2
4	Dr. J. M. Srishaila	Effect Of Fly Ash On Mechanical Properties Of High Strength Concrete	International	IRJET Volume 4, Issue 06, ISSN(E) 2395-0056, ISSN(P) 2395-0072	June 2017	5.181
5	Adana Gouda	Study On Strength And Durability Aspects Of Geopolymer Concrete	International	IRJET Volume 4, Issue 06, ISSN(E) 2395-0056, ISSN(P) 2395-0072	June 2017	5.181
6	Mahesh Sajjan	Experimental Investigation On Strength Characteristics Of Composite Fibre High-Performance Concrete With Combination Of Three Mineral Admixtures	International	IRJET Volume 4, Issue 06, ISSN(E) 2395-0056, ISSN(P) 2395-0072	August 2016	4.45
7	Basavaprabhu	An Experimental Investigation On Strength Properties Of Concrete Replacing Natural Sand By M-Sand Using Silica Fume As An Admixture	International	IRJET Volume: 03 Issue: 08, e-ISSN: 2395 -0056, p-ISSN: 2395-0072	August 2016	4.45
8	Sachin Patil	Effect Of Surface Treatment On Settlement Of Coir Mat Reinforced Sand	International	IJRSI Volume IV, Issue VIS, ISSN 2321-2705	June 2017	3.171
		Effect Of Surface Treatment On Settlement Of Randomly Distributed Coir Fiber Reinforced Sand	International	IJRSI Volume IV, Issue VIS, ISSN 2321-2705	June 2017	3.171
9	Basavalingappa	An Experimental Investigation On Strength Properties Of Concrete Replacing Natural Sand By M-Sand Using Silica Fume As An Admixture	International	IRJET Volume: 03 Issue: 08, e-ISSN: 2395 -0056, p-ISSN: 2395-0072	August 2016	4.45
		Experimental Investigation On The Strength Properties Of High Performance Concrete Using M-Sand And Metakaolin	International	IRJET Volume: 03 Issue: 09, e-ISSN: 2395 -0056, p-ISSN: 2395-0072	August 2016	7.2
		Experimental Investigation On Strength Characteristics Of Composite Fibre High-Performance Concrete With Combination Of Three Mineral Admixtures”	International	IRJET Volume: 03 Issue: 08, e-ISSN: 2395 -0056, p-ISSN: 2395-0072	August 2016	4.45
10	VinayKumar M. R.	Experimental Investigation On Strength Characteristics Of Composite Fibre High-Performance Concrete With Combination Of Three Mineral Admixtures”	International	IRJET Volume: 03 Issue: 08, e-ISSN: 2395 -0056, p-ISSN: 2395-0072	August 2016	4.45
11	Anil Katageri	Seismic Performance Study Of RC Buildings Having Plan Irregularity Using Pushover Analysis	International	IJSRD Vol. 3, Issue 11 ,ISSN(Online): 2321-0613	November 2016	4.396
		Seismic Performance Study Of R.C. Buildings Having Vertical Geometric Irregularity Using Pushover Analysis	International	IJSRD Vol. 3, Issue 11 ,ISSN(Online): 2321-0613	November 2016	4.396



12	Rajendra K. M.	Effect Of Fly Ash On Mechanical Properties Of High Strength Concrete	International	IJRET Volume 4, Issue 06, ISSN(E) 2395-0056, ISSN(P) 2395-0072	June 2017	5.181
		Characterization Of Controlled Low Strength Material Using Native Soil	International	IJESC Volume 7, Issue 01, ISSN(E) 2321-3361	January 2017	5.611
13	Sharanabasav G	Seismic Performance Study Of RC Buildings Having Plan Irregularity Using Pushover Analysis	International	IJSRD Vol. 3, Issue 11 ,ISSN(Online): 2321-0613	November 2016	4.396
		Seismic Performance Study Of R.C. Buildings Having Vertical Geometric Irregularity Using Pushover Analysis	International	IJSRD Vol. 3, Issue 11 ,ISSN(Online): 2321-0613	November 2016	4.396
14	Veereshaih H. M.	Performance Based Evaluation Of Floating Column Building By Pushover Analysis	International	IJSRSET Volume 2, Issue 4, ISSN(E) - 2394-1990, ISSN(P) - 2395-4099	August 2016	4.293

### 2015-16

Sl. No	Name of the faculty	Title	National / International	Citation	Month & Year	Impact Factor
1	Dr.H M. Somasekariah	Experimental Investigation On Strength Characteristics Of Silica Fume Based High Performance Concrete With Steel Fiber And Polypropylene Fiber	International	IJRET Vol. 4, Issue 9, ISSN(Online) :2319-8753 ISSN (Print) : 2347-6710	October 2015	7.34
		Experimental Investigation On Strength Characteristics Of Fly Ash Based High Performance Concrete With Steel Fiber And Polypropylene Fiber	International	IJRSET Vol. 4, Issue 9, ISSN(Online) :2319-8753 ISSN (Print) : 2347-6710	September 2015	7.34
		Experimental Investigation On Strength Characteristics Of Metakaolin Based High Performance Concrete With Steel And Polypropylene Fibres	International	IJRSET Vol. 4, Issue 9, ISSN(Online) :2319-8753 ISSN (Print) : 2347-6710	September 2015	7.34
		A Study On Fiber Reinforced High Performance Concrete Using Multiple Mineral Admixtures	International	IJRET Volume: 04 Issue: 10, eISSN: 2319-1163   pISSN: 2321-7308	October 2015	7.34
2	Adana Gouda	Experimental Investigation On Strength Characteristics Of Silica Fume Based High Performance Concrete With Steel Fiber And Polypropylene Fiber	International	IJRSET Vol. 4, Issue 9, ISSN(Online) :2319-8753 ISSN (Print) : 2347-6710	October 2015	7.34
		Experimental Investigation On Strength Characteristics Of Fly Ash Based High Performance Concrete With Steel Fiber And Polypropylene Fiber	International	IJRSET Vol. 4, Issue 9, ISSN(Online) :2319-8753 ISSN (Print) : 2347-6710	September 2015	7.34
		Experimental Investigation On Strength Characteristics Of Metakaolin Based High Performance Concrete With Steel And Polypropylene Fibres	International	IJRET Vol. 4, Issue 9, ISSN(Online) :2319-8753 ISSN (Print) : 2347-6710	September 2015	7.34
3	Mahesh Sajjan	A Study On Fiber Reinforced High Performance Concrete Using Multiple Mineral Admixtures	International	IJRET Volume: 04 Issue: 10, eISSN: 2319-1163   pISSN: 2321-7308	October 2015	7.34
4	VinayKumar M. R.	An Experimental And Analytical Study Of Cold-Formed Steel Structural Members With Perforations Subjected To Compression Loading	International	IJEDR Volume 4, Issue 2, ISSN - 2321-9939	May 2016	7.37

#### Details of National and International Conferences

2018-19					
Sl. No	Name of the faculty	Title	National / International	Conference Details	Month & Year
1	Dr. J. M. Srishaila	Experimental Investigation on Workability and Mechanical Properties of Self Compacting Geo Polymer Concrete Made With Eco Friendly Materials	National	National Conference on Recent trends in Architectural and Civil Engineering Towards Energy Efficient and Sustainable Architecture (NCACESD 2019)	January 2019

### 2017-18

Sl. No	Name of the faculty	Title	National / International	Conference Details	Month & Year
1	Dr. J. M. Srishaila	Effect Of Mineral Admixtures On Kinetic Property And Compressive Strength Of Self Compacting Concrete	International	2nd International Conference on Civil Engineering	2017
2	Dr. J. M. Srishaila	Experimental and Prediction of Compressive Strength by TAGUCHI and ANOVA methods on Self Compacting Geo Polymer Concrete	International	6th International Conference on Contemporary Engineering and Technology	March 2018
3	Dr. J. M. Srishaila	Investigation on Impact Resistance and Mechanical properties of Self Compacting Concrete made with Flyash and GGBS	International	2nd International RILEM / COST Conference on Early Age Cracking and Serviceability on Cement Based Materials and Structures (EAC2)	September 2017
4	Dr. J. M. Srishaila	Investigation on Durability Characteristics of Self compacting Concrete made with Environmentally Friendly Materials	International	4th International Conference on Earth Sciences and Engineering (ICEE 2017)	August 2017
<b>2016-17</b>					
Sl. No	Name of the faculty	Title	National / International	Conference Details	Month & Year
1	Dr. J. M. Srishaila	Investigation on Mechanical Properties of Self Compacting Concrete with High Volume Flyash	International	3rd International Conference on Sustainable Energy and Built Environment	March 2017

**Faculty Receiving Ph.D. during the Assessment Years**

Sl. No.	Name	Date of obtaining Ph.D.
1	Dr. M. S Shobha	21/01/2017
2	Dr. J.M. Srishaila	18/07/2018

**Research Supervisors in the Department**

Sl. No.	Name of Supervisor	Name of Research Scholar	Date of Registration	Registration No	University
1	Dr.H.M.Mallikarjuna	Aijaz Hussain	03/02/2016	3VC16PCJ02	VISVESVARAYA TECHNOLOGICAL UNIVERSITY
2	Dr.H.M.Somasekhariah	Adanagouda	13/01/2015	3VC15PCJ01	VISVESVARAYA TECHNOLOGICAL UNIVERSITY
		Mahesh	13/01/2015	3VC15PCJ02	VISVESVARAYA TECHNOLOGICAL UNIVERSITY
		Sachin Patil	20/04/2015	14PH0106	JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY, ANANTAPUR
		Pushpalatha R Gadag	20/04/2015	14PH0110	JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY, ANANTAPUR
		Basavalingappa	06/11/2015	3VC16PCJ01	VISVESVARAYA TECHNOLOGICAL UNIVERSITY

	Basavaprabhu M S	18/05/2017	3VC17PCA01	VISVESVARAYA TECHNOLOGICAL UNIVERSITY
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**Faculty Pursuing Ph.D. in the Department**

SL.No	Name of the Faculty	Date of Registration	Registration No	Title	Name of the Supervisor	University	Status of Course Work (Completed/Not Completed)	Submission of Thesis (Yes/No)
1	M R Vijaya Kumar	04/01/2010	2SD09PCN01	Concrete Mixes for High Performance Concrete-A Probabilistic Approach	Dr.S.B.Vanakudre	VISVESVARAYA TECHNOLOGICAL UNIVERSITY	Completed	No
2	Adanagouda	13/01/2015	3VC15PCJ01	Strength & Durability Studies on Hybrid Fiber Reinforced High-Performance Concrete	Dr.H.M.Somasekhariah	VISVESVARAYA TECHNOLOGICAL UNIVERSITY	Completed	No
3	Mahesh	13/01/2015	3VC15PCJ02	Studies on Hybrid Fiber Reinforced High-Performance Ternary Concrete	Dr.H.M.Somasekhariah	VISVESVARAYA TECHNOLOGICAL UNIVERSITY	Completed	No
4	Sachin Patil	20/04/2015	14PH0106	Study on Strength and Durability Properties of Composite Fiber Reinforced High Performance Concrete With Mineral Admixture	Dr.H.M.Somasekhariah	JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY, ANANTAPUR	Completed	No
5	Pushpalatha R Gadag	20/04/2015	14PH0110	Study on Strength and Durability Properties of High Performance Concrete With Nano Materials	Dr.H.M.Somasekhariah	JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY, ANANTAPUR	Completed	No
6	Basavalingappa	06/11/2015	3VC16PCJ01	Effect of Replacement of natural Sand by M-Sand on the Strength and Durability Properties of High Performance Concrete With mineral Admixture	Dr.H.M.Somasekhariah	VISVESVARAYA TECHNOLOGICAL UNIVERSITY	Completed	No
7	Basavaprabhu M S	18/05/2017	3VC17PCA01	Assesement of Strength and Durability Properties of hybrid Fiber Reinforced Ultra High Performance Concrete with Quartz Sand and Nano Materials	Dr.H.M.Somasekhariah	VISVESVARAYA TECHNOLOGICAL UNIVERSITY	Not Completed	No
8	Pavan Kumar M	18/05/2017	3VC17PCA02	Study on Strength and Durability Properties of Composite Fiber Reinforced Ultra high performance Concrete with Nano Silica	Dr.B.M.Gangadharappa	VISVESVARAYA TECHNOLOGICAL UNIVERSITY	Not Completed	No

**5.7.2 Sponsored Research (5)**

Institute Marks : 5.00

**2017-18 (CAYm1)**

Project Title	Duration	Funding Agency	Amount
Design and Development of Anaerobic Biodigester for an Individual house in Kolagallu Village, Ballari District Using the Available Domestic Bio Degradable waste	6 Months	Karnataka State Council for Science and Technology	5000.00
To Investigate on the Vermicomposting Process by Using Various Natural and Agricultural Products by Employing Different Earthworm Species	6 Months	Karnataka State Council for Science and Technology	5000.00
Assessment of Strength and Durability Properties of Hybrid Fiber Reinforced Ultra High Performance Concrete with Quartz and Nano materials	36 months	V.V Sangha, Balalri	800000.00
High Performance Concrete using Nanosilica and Admixtures (Metakaoline, Silicafume, Ultra Flyash) with Fibers(Glass Fibers,Steel,Polypropelene Fibers)	36 Months	V.V Sangha, Balalri	800000.00
Stabilisation of Clay Subgrade Soils for Pavements Using Ground Granulated Blast Furnace Slag	36 Months	V.V Sangha, Balalri	900000.00
			Total Amount(X): 2510000.00

**2016-17 (CAYm2)**

Project Title	Duration	Funding Agency	Amount
-	0	0	0.00
			Total Amount(Y): 0.00

Project Title	Duration	Funding Agency	Amount
-	0	0	0.00
			Total Amount(Z): 0.00

Cumulative Amount(X + Y + Z) = 2510000.00

### 5.7.3 Development Activities (10)

Institute Marks : 10.00

## Technology Research and Development center

### Details of Center of Excellence

Sl.No	Center of Excellence	
1	Technology Research and development center	In collaboration with Tata Technologies Ltd. Pune
2	Advanced Manufacturing center	

RYMEC has incepted a state of the art, Centre of Excellence by signing an MoU with TATA Technologies Ltd., Pune in association with Science & Technology Park under National Skill Development Programme, initiated through MHRD, Government of India, with nomenclature “Centre for Invention, Innovation, Incubation & Training”. These competency centres will expose our students to advanced technology adapted in the industry, provides hands-on experience, enhances employability skills and makes them Industry ready. These centres will help Civil Engineering in enhancing their core skills. These centres are geared with facilities which will make possible that our students can apply the theoretical knowledge gained in their academics and create conceptual projects and products that will solve many industrial and social problems.

The Competency centres established are:

### i. Technology Research & Development Centre

“Technology Research & Development Centre” having high-end Industrial workstations with Commercial licensed S/W tools.

This competency centre is equipped with the following facilities:

- 1. Workstation Configuration:** Intel Xeon Processor, 32 GB RAM, 8GB Quadro Graphics with dual Bezel monitors.

Make: HP

- 2. List of Softwares available:**

- Dassault Systems suite package comprises of 40 modules for Industrial Design & Development, Research and Consultancy.
- MSC Software Suite package comprises of 81 different modules of Adams, Easy5, Marc, Apex, Nastran and SCFlow for CAE analysis.
- ISRO-FEAST comprises of 10 tools for Linear static, Free Vibration, Buckling, Transient, Frequency response, Random response, Base excitation, Thermal analysis and many more.
- I-GET IT for E-Learning on advanced technologies in CAD, CAM, CAE and PLM

- 3. The center can deliver domain trainings on:**

- Product Design
- Product Modelling
- Analysis
- Product Life cycle and Data management.

### ii. Advanced Manufacturing Centre

“Advanced Manufacturing Engineering Centre” Equipped with Advanced Digital manufacturing facilities.

This Competency centre is equipped with the following facilities:

- 1. Equipments:-**

- CNC Vertical Milling Machine- AMS 430
- Industrial Robot for Arc Welding - YASKAWA MOTOMAN
- 3D Printer for Additive Manufacturing - ULTIMAKER 3 EXTENDED
- 3D Scanner for Reverse Engineering - EINSCAN SE

- 2. Support Software:-**

- CAPS Turn, CAPS Mill, seeNC Turn, seeNC Mill, nCyclo Turn, nCyclo Mill.
- CURA.
- EinScan-S series\_v2.7.0.8

- 3. This centre can deliver hands on domain trainings on:**

- CNC Technology and Operations.

- b. Digital Manufacturing.
- c. Robotic Operations & Programming.
- d. Reverse Engineering.
- e. Re- Engineering.
- f. Computer Integrated Manufacturing.

**Details of Research laboratory**

SI No	Equipment available in Research laboratory	Year of Procurement
1	Loading Frame of 200Ton of capacity.(Milenium Technologies PVT. LTD)	2015
2	Shake table of 50 Kg payload with accessories.(SERVO made with Vertical Shake Table, 12 Experimental Models, 1 set of Beam Moulds, Floor Crane, Shake Table Instrumentation)	2015
3	3000kN Capacity Compression Testing Machine. (Computer controlled Servo Hydraulic Compression Testing Machine with load/stress, displacement & strain control)	2015
4	RCPT (Rapid Chloride Permeability Test) Setup	2015
5	Tar Viscometer, Thermometer (5 Degrees to 370 Degrees), Digital Ductility Apparatus, Flash & Fire Apparatus and Hand Operated Bitumen Extractor	2016
6	Flexural Testing Machine	2017
7	11 Computer Systems.( 4 Nos with Microsoft Windows XP Professional version 2002 Intel (R)core™2 Duo CPU E8400 @ 3.00GHz 3.0 GHz, 1.99 GB RAM of HCL and 7 Nos with Microsoft Windows XP professional version 2002 Intel (R) Pentium (R) 4 CPU 3.00 GHz 3.00GZz, 484 MB of RAM of ACER)	2015 & 2013

**Details of Instruction Materials**

SI no	Instruction materials available	Year of Procurement
1	8 LCD Projectors(Sony VPL DX100, Epson X41,Optoma Projector 8310C	2016 & 2019
2	7 Dell Tab's with wireless presentation facility	2015

3	1 OHP Projector	2014
4	Lab Manuals	-

**Details of Working models/ charts available**

Sl no	Subject	Number of Working models/ charts available	Year of Procurement
1	Irrigation Engineering	10 models	2014
2	Building Materials & Construction	8 models	2014
3	Building Materials & Testing Lab	15 charts	2016
4	Environmental Engineering Lab	20 charts	2016
5	CHMT Lab	8 charts	2016
6	Geo Technical Lab	11 charts	2016
7	Applied Engineering Geology Lab	17 charts	2016
8	Survey Lab	3 charts	2016
9	Design of Steel Structures	14 models	2016
10	Structural Analysis	4 models	2016
11	Transportation Engineering	2 models	2014
12	Hydrology	6 charts	2014
13	Design of Steel Structures	3 charts	2016
14	RCC Models	5 Models	2017

**5.7.4 Consultancy(from Industry) (5)**

Institute Marks : 5.00

**2017-18 (CAYm1)**

Project Title	Duration	Funding Agency	Amount
Third Party Inspection	12 Months	Town Municipal Corporation Siruguppa	316667.00
Third Party Inspection	12 Months	Town Municipal Corporation Tekkalakote	436654.00
Third Party Inspection	12 Months	Town Municipal Corporation Kurugodu	166559.00
Third Party Inspection	12 Months	Town Municipal Corporation Kudithini	76932.00
Third Party Inspection	12 Months	Town Municipal Corporation Sandur	316468.00
Third Party Inspection	12 Months	Bellary Urban Development Authority	742120.00
Third Party Inspection	12 Months	The Secretary APMC, Ballari	25000.00
Testing	12 Months	AEE KUIDS Sindhanur, Executive Engg, RDWS, NEKRTC, PRE-Division, KPTCL, KUWS and Other Private Agencies	1166270.00
			Total Amount(X): 3246670.00

**2016-17 (CAYm2)**

Project Title	Duration	Funding Agency	Amount
Third Party Inspection	12 Months	Town Municipal Corporation Siruguppa	375803.00
Third Party Inspection	12 Months	Town Municipal Corporation Tekkalakote	310811.00
Third Party Inspection	12 Months	Town Municipal Corporation Kurugodu	20875.00
Third Party Inspection	12 Months	Town Municipal Corporation Kudithini	11690.00
Third Party Inspection	12 Months	Town Municipal Corporation Sandur	62080.00
Third Party Inspection	12 Months	Bellary Urban Development Authority	424005.00
Third Party Inspection	12 Months	City Municipal Corporation Ballari	466890.00
Third Party Inspection	12 Months	Town Municipal Corporation Kampli	47697.00
Third Party Inspection	12 Months	Valmiki Bhavan, Ballari	154856.00
Third Party Inspection	12 Months	Chief Executive Officer, ZP Ballari	21000.00
Third Party Inspection	12 Months	Government PU College, Bundri, Sandur (Tq)	12458.00
Third Party Inspection	12 Months	AEE KSOU, Ballari	106375.00
Third Party Inspection	12 Months	Asst Divisional Engineer, SW Railway	25000.00
Testing	12 Months	AEE KUIDS Sindhanur, Executive Engg, RDWS, NEKRTC, PRE-Division, KPTCL, KUWS and Other Private Agencies	793050.00
			Total Amount(Y): 2832590.00

**2015-16 (CAYm3)**

Project Title	Duration	Funding Agency	Amount
Third Party Inspection	12 Months	Town Municipal Corporation Siruguppa	69598.00
Third Party Inspection	12 Months	Town Municipal Corporation Sandur	95104.00
Third Party Inspection	12 Months	Town Municipal Corporation Tekkalakote	50979.00
Third Party Inspection	12 Months	City Municipal Corporation Ballari	147478.00
Third Party Inspection	12 Months	K.R.D.L, Ballari	349346.00
Third Party Inspection	12 Months	P.R.E, Hagari Bommana Halli	9213.00
Third Party Inspection	12 Months	D.C. Science Centre Ballari	65096.00
Third Party Inspection	12 Months	K.S.O.U, Ballari	57500.00
Testing	12 Months	AEE KUIDS Sindhanur, Executive Engg, RDWS, NEKRTC, PRE-Division, KPTCL, KUWS and Other Private Agencies	769329.00
			Total Amount(Z): 1613643.00

Cumulative Amount(X + Y + Z) = 7692903.00

**5.8 Faculty Performance Appraisal and Development System (FPADS) (30)**

Total Marks 30.00

Institute Marks : 30.00

Faculty members of Higher Educational Institutions today have variety of tasks pertaining to diverse roles. In addition to instruction, Faculty members need to innovate and conduct research for their self-renewal, keep abreast with changes in technology, and develop expertise for effective implementation of curricula. They are also expected to provide services to the industry and community for understanding and contributing to the solution of real-life problems in industry. Another role relates to the shouldering of administrative responsibilities and co-operation with other Faculty, Heads of Departments and the Head of Institute. An effective performance appraisal system for Faculty is vital for optimizing the contribution of individual Faculty to institutional performance.

Faculty Performance Appraisal letter is collected from each faculty in which they need to show their innovations and research for their self-renewal to cope up with changes in technology and develop expertise for effective implementation of curricula. The format of Faculty Performance Appraisal letter is provided.

**Components of Faculty Performance Appraisal Development System****1. Faculty contribution towards Research**

1. Publications in conferences and Journals
2. Submission of Research proposal
3. Contribution to growth of any industry, consultancy to industry, any solution developed by faculty being implemented in industry
4. Books, Printed lab journals, compendium, or any printed contribution to academic area

- Invited talks, workshops, conferences organized by faculty as coordinator or important role in the organization of the event
- Funds received from funding agencies in last academic year
- Membership with Professional bodies (CSI, ISTE)

## **2. Faculty contribution towards curriculum**

- Best practice that is introduced to improve teaching and learning process
- Course taught by faculty which contributes to contents beyond syllabus
- What is the role in publishing newsletter of the college/Department?
- Contribution to E-Learning contents
- Students under guidance acquiring certificates that can be used as proof of Lifelong Learning
- Contribution to help direct and indirect analysis of NBA.
- What is the role played in finalization of Vision, Mission, PEO, PSO's or any other document
- Analysis of CO-PO mapping in last three years and suggestion to improve attainment of PO's. Expected target level shall be more than 50%
- Analysis of course exit survey and suggestions to improve attainment of CO and PO's
- Analysis of CO-PO mapping of Project works through rubric form in last three years

## **3. Faculty contribution at Department/Institute level**

- Contribution to the department in the previous academic year
- Philosophy of teaching that includes staff member conception of teaching and learning, description of how staff members teach and justification for why you teach that way
- Visiting status in other engineering institutions/universities
- Have faculty helped the department to have MOU with any industry, Specify industry name and its activities?
- Improvements in the department observed in faculty since last accreditation visit
- Role of Staff member at the institute level
- Faulty publication in collaboration with peers of other institution
- Contribution to improve campus placements /higher education etc.
- Any other information that can help assessment of staff member or Help NBA process

## **4. Students Feedback**

Following are the components considered for Students Feedback

- Arising curiosity in the subject by linking to practical or real time applications Preparation for the class
- Attitude/Professionalism towards students Regularity and punctuality in conducting classes.
- Availability of Staff in Campus to clarify the doubts
- Communication Skills and Subject knowledge
- Coverage of Syllabus & Regularity in Conducting Classes
- Effective Planning and Organization of lecture Contents
- Fairness in evaluation of IA books and Assignments
- Guidelines for external theory examinations / Practice & Revision of Important Topics
- Presentation of Subject matter or method of teaching
- Response to slow learners / Could your teacher inspire or make you work harder for better results

Each component is rated by giving 1 to 10 points.

- Below average:1-4
- Average:5-6
- Good:7-8
- Excellent:9-10

The performance analysis of faculty is carried out by calculating the average rating and the number of student responses for each component of the student feedback.

## **Evaluation of Faculty Forms**

### **1. Head of the department Evaluation of faculty Form**

Head of the department completes the Evaluation of Faculty Form using the information from observation of instruction, review of syllabi, evaluation of other duties, feedback from students, and subject results. HOD evaluates each faculty based on the following parameters:

- Character and conduct
- Regularity and punctuality/availability during the working hours/frequency of leaves availed
- Attitude towards work



4. Papers published
5. Papers presented
6. Sponsored projects
7. Presentation in class rooms/labs
8. Communication skills
9. Shouldering responsibility /Extra Curricular activities
10. Memos

Each component on the evaluation is rated by giving 1 to 10 points.

- Poor (2)
- Fair (4)
- Good (8)
- Excellent (10)

Based on the observation, HOD recommends promotion/increment for the faculty to the principal office.

## 2. Principal office

1. Supports and monitor the execution of the system
2. Verifies and accredits the results submitted by the respective departments
3. Considers reevaluation applications submitted by each faculty
4. Prepares final college faculty evaluation report
5. Sends final report/s to the Office of Evaluation

Based on the feedback given by HOD, the principal office recommends for further action

## 3. The Office of Evaluation

1. General supervision of the application of the Faculty Performance Review and Development System
2. Cooperation with the various departments of the colleges to implement the Review and Development System
3. Contribution in overcoming problems arising at the time of implementation of the Review and Development System
4. Preparation of the final Faculty Review and Development Report and submits to the management

**Document Confidentiality:** Evaluation documents and materials prepared and gathered in this process are treated as confidential and limited to authorized persons.

After completion of the system, the concerned Head of the Department is required to meet with every faculty member in person to provide necessary feedback on strengths and weaknesses of the faculty performance, so as to launch a better future plan.

## 5.9 Visiting/Adjunct/Emeritus Faculty etc. (10)

Total Marks 10.00

Institute Marks : 10.00

Dr. P Shiva Keshava Kumar has been appointed as Adjunct faculty for Civil Engineering Department from 22.05.2015 on Contractual basis.

### Details of Subjects Handled by Dr.P Shiva Keshava Kumar During Assessment Years

SL NO.	Subjects Handled	Sem	Section	Academic Year
1	Water Resource Management (15CV661)	VI	B	2018-19
2	Municipal And Industrial Waste Water Engineering (15CV71)	VII	B	
3	Fluid Mechanics (17CV33)	III	B	2017-18
4	Environmental Engineering II (15CV651)	VI	A	
5	Environment Engineering.-I (10CV61)	VI	A&B	2016-17
6	Environment Engineering-II (10CV71)	VII	B	

## 6 FACILITIES AND TECHNICAL SUPPORT (80)

Total Marks 80.00

### 6.1 Adequate and well equipped laboratories, and technical manpower (30)

Total Marks 30.00

Institute Marks : 30.00

Sr. No	Name of the Laboratory	Number of students per set up(Batch Size)	Name of the Important Equipment	Weekly utilization status(all the courses for which the lab is utilized)	Technical Manpower Support		
					Name of the Technical staff	Designation	Qualification
1	Building Materials Testing Laboratory	25	1) Universal Testing Machine [Test Well Instruments – TUT-1000 110/07-08] 2) Impact Testing Machine [Fuel Instruments &Engineering (FIE) –IT 30-6/83-1059] 3) Compression Testing Machine 2000KN [AIMIL – AIM-31-83239] 4) Abrasion Testing for Tiles [AIMIL – AIM-481-94019]	18 hrs	Bharghavi N Patil	Instructor	B E (Civil)
2	Computer Aided Building Planning and Drawing (CABPD) Laboratory	25	1. Dell I-5 Processor systems-45 No's [Dell Optiplex 5060 MT Intel core i5, 8GB RAM, 1 TB HDD, DVD, 19.5 LED Monitor] 2. Lenovo I-5 Processor systems-25 No's [Lenovo S510 Intel core i5, 8GB RAM, 1 TB HDD, DVD, 18.5 LED Monitor] 3. Dell I-3 Processor systems-10 No's [Dell Optiplex 390 DT Intel core i3, 4GB RAM, 500 GB HDD, DVD, 18.5 LED Monitor] 4.Epson L1455 A3 Color Printer and Scanner-2 No's Software's Available In Cad Lab 1.AUTO CAD 2007 2. MS Office 2007 3. STAAD.Pro V8i 4. MS Project 2013 5. GRASS GIS 7.2.2	12 hrs	Swamy Aradhya Matada	Programmer	B.Sc,MCA
3	Engineering Geology Laboratory	25	1. Mohr's Scale Hardness 2. Clinometer Compass 3. Brunton Compass 4. Contact Goniometer 5. Rock samples	18hrs	Bharghavi N Patil	Instructor	B E (Civil)
4	Basic Surveying Laboratory	25	1. Total Station 1. 8 NOS LINERTIC Total Stations-[LTS-205N- 903227, 064, 272, 056, 035, 304, 475, 534] 2. 2 NOS PENTAX Total Station- [R150N-910972 & 910876] 2.Theodolite [Lawrence & Mayo- LETA-02]	18 hrs	M.Shivanandaiah	Foreman	Diploma in Civil Engineering
5	Concrete And Highway Material Testing Laboratory	25	1) Ductility Testing Machine [230V - 27 deg C /0.5 deg C – Single phase] 2 )Compression Testing Machine 3000KN [HEICO – HCA592-402 / H-04057] 3) Los Angles Abrasion Machine [ 220-240V 50 Hz, 1 ph - UTC-0600-T] 4) Marshal Stability Value 50 KN [AIM 550-1] 5) Concrete Permeability Equipment [AIMIL – AIM-168- 102167] 6) Rebound Hammer -4nos [MATEST: TREVIOL0- 24048 - , C380- AH- 1V0850,0944, 0857] 7) Electronic Pulse Velocity [TICO – 7999- EN – 12504-4:2004 – ASTM C 597]	18 hrs	Nataraj M	Assistant Instructor	ITI
6	Environmental Engineering Laboratory	25	1) BOD Incubator [Range 50 TO 500C] 2 .Jar Test Apparatus [By Prism Instruments] 3.pH Meter [ELICO – PGL 1613 – 245/1127] 4.Spectrophotometer [ELICO – CL -27 – 14A / 0290] 5.Flame Photometer [ELICO – MODEL 360] 6.Air Sampler i) Environtech PM 2.5 – [APM-550 MFC- 9027/1000] ii) Environtech Gaseous Sampler - [APM-433-9027/1000] 7. Muffle Furnace [Size- 10"X 5"X5"]	18 hrs	Bharghavi N Patil	Instructor	B E (Civil)
7	Software Application Laboratory	25	1. Dell I-5 Processor systems-45 No's [Dell Optiplex 5060 MT Intel core i5, 8GB RAM, 1 TB HDD, DVD, 19.5 LED Monitor] 2. Lenovo I-5 Processor systems-25 No's [Lenovo S510 Intel core i5, 8GB RAM, 1 TB HDD, DVD, 18.5 LED Monitor] 3. Dell I-3 Processor systems-10 No's [Dell Optiplex 390 DT Intel core i3, 4GB RAM, 500 GB HDD, DVD, 18.5 LED Monitor] 4.Epson L1455 A3 Color Printer and Scanner-2 No's Software's Available In Cad Lab 1.AUTO CAD 2007 2. MS Office 2007 3. STAAD.Pro V8i 4. MS Project 2013 5. GRASS GIS 7.2.2	18 hrs	Swamy Aradhya Matada	Programmer	B.Sc,MCA

8	Extensive Survey Project	10	1. Total Station 1. 8 NOS LINERTIC Total Stations-[LTS-205N- 903227, 064, 272, 056, 035, 304, 475, 534] 2. 2 NOS PENTAX Total Station- [R150N-910972 & 910876] 3.Theodolite [Lawrence & Mayo- LETA-02]	18 hrs	M.Shivanandaiah	Foreman	Diploma in Civil Engineering
9	Geotechnical Engineering Laboratory	25	1. Direct Shear Apparatus [AIMIL – AIM- 04-083398] 2. CBR Apparatus [AIMIL – AIM- 133-97081] 3. Unconfined Compression Apparatus [AIMIL – AIM- 034-83062] 4. Consolidation Apparatus [AIMIL – AIM- 114,115-83108, 83044] 5. Tri-axial Shear Apparatus [AIMIL – AIM- 079-83013] 6. Universal Parameter Apparatus [AIMIL – AIM- 04-083398] 7. Automatic Compactor Apparatus [AIMIL – AIM- 04-083398] 8. Digital Tri-Axial Test Apparatus [AIMIL – AIM- 04-083398]	18 hrs	C Jadiswamy	Foreman	B E (Civil)
10	Computer Aided Detailing of Structures Laboratory	25	1. Dell I-5 Processor systems-45 No's [Dell Optiplex 5060 MT Intel core i5, 8GB RAM, 1 TB HDD, DVD, 19.5 LED Monitor] 2. Lenovo I-5 Processor systems-25 No's [Lenovo S510 Intel core i5, 8GB RAM, 1 TB HDD, DVD, 18.5 LED Monitor] 3. Dell I-3 Processor systems-5 No's [Dell Optiplex 390 DT Intel core i3, 4GB RAM, 500 GB HDD, DVD, 18.5 LED Monitor] 4.Epson L1455 A3 Color Printer and Scanner-2 Nos Software's Available In Cad Lab 1.AUTO CAD 2007 2. MS Office 2007 3. STAAD.Pro V8i 4. MS Project 2013 5. GRASS GIS 7.2.2	9 hrs	Swamy Aradhya Matada	Programmer	B.Sc,MCA

**6.2 Additional facilities created for improving the quality of learning experience in laboratories (25)**

Total Marks 25.00

Institute Marks : 25.00

Sr. No	Facility Name	Details	Reason(s) for creating facility	Utilization	Areas in which students are expected to have enhanced learning	Relevance to POs/PSOs
1	Smart Class Room	Fully equipped Class room with projector and with the seating capacity of 80. Comfortable desks, chairs and teaching aids. Glass board, Fan, Tube light, chalk board.	For better interpretation of curriculum	By UG and PG Students	For better understanding of lectures through audio-visuals, photographs and presentations	PO: 1,2,5,10 PSO: 1
2	RCPT (CHMT-Lab)	Rapid chloride Penetration test [with 3 members of display with mould size 100 x 50 mm]	Study on durability properties of concrete	By UG and PG Students for Project work & Research	Concrete Technology	PO:1,4 PSO:1
3	Loading frame (CHMT-Lab)	To study the different mechanical properties related to strength and displacement [Capacity – 200 tons – MTI/RMEC/15-16/11]	Study on Mechanical properties of RCC elements	By UG and PG Students for Project work & Research	RCC	PO: 1,4 PSO:1
4	SERVO Shake Table of 50 Kg Pay Load Capacity with accessories	Type - Servo, Maximum Payload - 50 Kg, Sliding table dimension - 500mm x 500 mm, Frequency - 0-10 Hertz, Amplitude/Stroke - 0 to 180 mm (±50mm), Input Power - 230 volts AC, Base Motion - Random, Sine etc. With computer interface. Max accn = +2g	To understand the behavior of structures under lateral loads	By UG and PG Students for Project work & Research	Structural Engineering	PO: 1,2,3,4 PSO: 1,2
5	Electronic Theodolite	Lynx- LETA -02 with Compensator	For accurate angular measurement	By UG and PG Students for Project work & Research	Modern methods of Surveying	PO: 1,4,5 PSO: 1,2
6	Initial Surface Absorption Apparatus	ISAT is specified in BS - 1881-part 5	To measure the porosity of the concrete	By UG and PG Students for Project work & Research	Concrete Technology	PO:1,4 PSO:1
7	Concrete Impact Testing Apparatus	Assembled on site as per specifications	To measure the impact strength of the concrete	By UG and PG Students for Project work & Research	Concrete Technology	PO:1,4 PSO:1
8	CNC vertical milling machine	ACE Micromatics 3-Axis machining center (Model 430V)	Content beyond syllabus , training students, R&D and Consultancy	Students, R&D work and Consultancy	Advanced Manufacturing	PO1 PO3 PO5 PSO1 PSO2
9	Industrial Robot for arc welding applications	YASKAWA, MOTOMAN arc welding robot	Content beyond syllabus , training students, R&D and Consultancy	Students, R&D work and Consultancy	Advanced Manufacturing	PO1 PO3 PO5 PSO1 PSO2
10	CNC machining center	MTAB milling machine 3-Axis machining	Content beyond syllabus , training students, R&D and Consultancy	Students, R&D work and Consultancy	Advanced Manufacturing	PO1 PO3 PO5 PSO1 PSO2
11	3D Printer	ULTIMAKER 3 EXTENDED	Content beyond syllabus , training students, R&D and Consultancy	Students, R&D work and Consultancy	Advanced Manufacturing	PO1 PO3 PO5 PSO1 PSO2
12	3D Scanner	EINSCAN SE 3D Scanner For Reverse Engineering	Content beyond syllabus , training students, R&D and Consultancy	Students, R&D work and Consultancy	Advanced Manufacturing	PO1 PO3 PO4 PO5 PSO1 PSO2
13	MAT-Lab-software	R8.65/2015	Content beyond syllabus & R&D work	R&D work and Demonstration for the students	Industrial Design & analysis	PO1 PO3 PO4 PO5 PSO1
14	3D Experience Suite from Dassaults systems	3D Experience Suite comprise of 40 different tools for industrial design & development, research, digital manufacturing & consultancy	Content beyond syllabus to make students industry ready, R&D and consultancy	Training, R&D and consultancy	Industrial Design & Development, Digital Manufacturing and PLM	PO1 PO3 PO4 PO5 PSO1
15	Internet Facility	10Mbps	Essential tool for information & Communication	Students & Staff	Information & Communication	PO12

**6.3 Laboratories: Maintenance and overall ambience (10)**

Total Marks 10.00

**Laboratories: Maintenance and overall ambience**

The maintenance and ambience of all the laboratories in the department of civil engineering is carried out in proper way

**Maintenance:**

- Maintenance and calibration of equipments are carried out on regular basis.
- Log book is maintained in all the laboratories.
- Adequate number of technical Staff are available for maintenance of equipment's and Computers.
- Minor damages are rectified by the technical staff themselves.
- Major damages are rectified by the concerned authorized service staff from the company which supplied the equipments.

**Overall Ambience:**

- Name of laboratory is displayed in front of every laboratory.
- Name of faculty in charge and staff in charge are displayed in every laboratory.
- Sufficient floor area is available in the laboratories.
- Corresponding equipment details are displayed in the laboratory.
- Laboratory manual/safety instructions are made available to the students.
- Each laboratory is equipped with white/ black board and other required amenities.
- Sufficient ventilation and natural light are available in laboratories.
- Safety systems (MCBs, ELCBs etc.) are in place in case of any electrical emergency.
- UPS system is provided in Computer Aided Civil Engineering Lab to ensure uninterrupted power supply along with air conditioning.
- Provision for Temperature controlled chamber is made to conduct certain experiments
- Department Layout diagram is displayed at the department entrance.

**6.4 Project laboratories (5)**

Total Marks 5.00

Institute Marks : 5.00

In addition to the laboratories listed in the Criteria 6.1 and 6.2, other resources available in the department laboratories are utilized for the project work.

Sl no	Facilities	Utilization
1	Software's for design and drafting of structures 1. E- Survey CAD 2. E- TAB 3. STAAD PRO	For Students projects
2	Structural laboratory	For Students projects

**6.5 Safety measures in laboratories (10)**

Total Marks 10.00

Institute Marks : 10.00

Sr. No	Laboratory Name	Safety Measures
1	Geology Lab	<ul style="list-style-type: none"> <li>• Display of instructions (DOs and DON'Ts).</li> <li>• Briefing by faculty on DOs and DON'Ts in labs.</li> <li>• Availability of fire extinguisher.</li> <li>• Designated area for carrying out each experiment.</li> <li>• Display of danger notice board (if applicable).</li> <li>• Designated storage areas for keeping all items.</li> <li>• Students are restricted from using cell phones as per VTU regulations</li> <li>• Availability of well trained technical staff.</li> <li>• Avoiding the use of damaged equipment.</li> <li>• Periodical servicing of equipment.</li> <li>• Maintaining a clean and organized laboratory.</li> <li>• Provision of UPS wherever possible for uninterrupted working.</li> <li>• Provision of First Aid Kits.</li> <li>• Adherence to proper dress code.</li> </ul>

2	Survey lab	<ul style="list-style-type: none"> <li>• Display of instructions (DOs and DON'Ts).</li> <li>• Briefing by faculty on DOs and DON'Ts in labs.</li> <li>• Availability of fire extinguisher.</li> <li>• Designated area for carrying out each experiment.</li> <li>• Display of danger notice board (if applicable).</li> <li>• Designated storage areas for keeping all items.</li> <li>• Students are restricted from using cell phones as per VTU regulations</li> <li>• Availability of well trained technical staff.</li> <li>• Avoiding the use of damaged equipment.</li> <li>• Periodical servicing of equipment.</li> <li>• Maintaining a clean and organized laboratory.</li> <li>• Provision of UPS wherever possible for uninterrupted working.</li> <li>• Provision of First Aid Kits.</li> <li>• Adherence to proper dress code.</li> </ul>
3	Environmental Engineering [E E] Lab	<ul style="list-style-type: none"> <li>• Display of instructions (DOs and DON'Ts).</li> <li>• Briefing by faculty on DOs and DON'Ts in labs.</li> <li>• Availability of fire extinguisher.</li> <li>• Designated area for carrying out each experiment.</li> <li>• Display of danger notice board (if applicable).</li> <li>• Designated storage areas for keeping all items.</li> <li>• Students are restricted from using cell phones as per VTU regulations</li> <li>• Availability of well trained technical staff.</li> <li>• Avoiding the use of damaged equipment.</li> <li>• Periodical servicing of equipment.</li> <li>• Maintaining a clean and organized laboratory.</li> <li>• Provision of UPS wherever possible for uninterrupted working.</li> <li>• Provision of First Aid Kits.</li> <li>• Adherence to proper dress code.</li> </ul>
4	Concrete And Highway Material Testing [C H M T] lab	<ul style="list-style-type: none"> <li>• Display of instructions (DOs and DON'Ts).</li> <li>• Briefing by faculty on DOs and DON'Ts in labs.</li> <li>• Availability of fire extinguisher.</li> <li>• Designated area for carrying out each experiment.</li> <li>• Display of danger notice board (if applicable).</li> <li>• Designated storage areas for keeping all items.</li> <li>• Students are restricted from using cell phones as per VTU regulations</li> <li>• Availability of well trained technical staff.</li> <li>• Avoiding the use of damaged equipment.</li> <li>• Periodical servicing of equipment.</li> <li>• Maintaining a clean and organized laboratory.</li> <li>• Provision of UPS wherever possible for uninterrupted working.</li> <li>• Provision of First Aid Kits.</li> <li>• Adherence to proper dress code.</li> </ul>
5	Auto CAD lab	<ul style="list-style-type: none"> <li>• Display of instructions (DOs and DON'Ts).</li> <li>• Briefing by faculty on DOs and DON'Ts in labs.</li> <li>• Availability of fire extinguisher.</li> <li>• Designated area for carrying out each experiment.</li> <li>• Display of danger notice board (if applicable).</li> <li>• Designated storage areas for keeping all items.</li> <li>• Students are restricted from using cell phones as per VTU regulations</li> <li>• Availability of well trained technical staff.</li> <li>• Avoiding the use of damaged equipment.</li> <li>• Periodical servicing of equipment.</li> <li>• Maintaining a clean and organized laboratory.</li> <li>• Provision of UPS wherever possible for uninterrupted working.</li> <li>• Provision of First Aid Kits.</li> <li>• Adherence to proper dress code.</li> </ul>
6	Structural Engineering Lab	<ul style="list-style-type: none"> <li>• Display of instructions (DOs and DON'Ts).</li> <li>• Briefing by faculty on DOs and DON'Ts in labs.</li> <li>• Availability of fire extinguisher.</li> <li>• Designated area for carrying out each experiment.</li> <li>• Display of danger notice board (if applicable).</li> <li>• Designated storage areas for keeping all items.</li> <li>• Students are restricted from using cell phones as per VTU regulations</li> <li>• Availability of well trained technical staff.</li> <li>• Avoiding the use of damaged equipment.</li> <li>• Periodical servicing of equipment.</li> <li>• Maintaining a clean and organized laboratory.</li> <li>• Provision of UPS wherever possible for uninterrupted working.</li> <li>• Provision of First Aid Kits.</li> <li>• Adherence to proper dress code.</li> </ul>

7 CONTINUOUS IMPROVEMENT (50)

Total Marks 50.00

7.1 Actions taken based on the results of evaluation of each of the POs & PSOs (20)

Total Marks 20.00

Institute Marks : 20.00

## POs Attainment Levels and Actions for Improvement- (2018-19)

POs	Target Level	Attainment Level	Observations
<b>PO 1 : Engineering Knowledge</b>			
PO 1	2.08	1.82	It is identified that level of attainment is moderate in few subjects of different courses some of them are listed below I. Elements of civil engineering and mechanics II. Building material and testing lab III. Design of RC Structural Elements, IV. Analysis of indeterminate structures V. Basic Geo-Technical engineering VI. Design of RCC & Steel structures
Action 1: Personal attention is given through the tutorial and remedial classes to apply the contents of PO1 to improve. Action 2: Related assignments to be given to the students in the form of numerical problems which are appeared in previous year semester end examinations.			
<b>PO 2 : Problem Analysis</b>			
PO 2	2.03	1.78	It is identified that level of attainment is moderate in few subjects of different courses some of them are listed below I. Elements of Civil Engineering II. Analysis of indeterminate structures III. Concrete technology IV. Basic Geo-Technical engineering V. Design of RCC & steel structures VI. Applied Geo-Technical engineering VII. Hydrology and irrigation.
Action 1: The students are provided with seminars, projects related to Civil engineering Programme and made to work by involving them to Identify, formulate, review literature and analyze complex engineering problems. Action 2: Technical quiz and essay writing competitions are arranged for the students.			
<b>PO 3 : Design/development of Solutions</b>			
PO 3	2.10	1.88	It is identified that level of attainment is moderate in few subjects of different courses some of them are listed below I. Fluid mechanics, II. Advance surveying III. Analysis of indeterminate structures IV. Applied Geo-Technical engineering V. Computer aided building planning and drawing VI. Solid waste management.
Action 1: Technical talks on the topics of public health and safety are arranged from the subject experts.			
<b>PO 4 : Conduct Investigations of Complex Problems</b>			
PO 4	1.98	1.80	It is identified that level of attainment is moderate in few subjects of different courses some of them are listed below I. Design of RCC & steel structures II. Building Material testing lab III. Analysis of determinate structures IV. Advance surveying V. Traffic engineering VI. Geotechnical Engineering Lab
Action 1: Students are made to work on research-based projects under faculty scholars who are registered for the Ph.D and made to learn contents of PO4. Action 2: related software's for research-based knowledge, design of experiments are made available, and training is provided in line with the contents of PO4.			
<b>PO 5 : Modern Tool Usage</b>			
PO 5	2.09	1.95	1. It is identified that level of attainment is moderate in few subjects of different courses some of them are listed below I. Advance surveying II. Computer aided building planning and drawing III. Software application lab IV. Computer aided detailing of structures. 2. It is identified that level of attainment is moderate as per the curriculum prescribed by the VTU to create, select and apply appropriate techniques hence different approaches are preferred for the attainments.
Action 1: Students are made to participate in department technical fests. Action 2: Students are provided with advanced equipments related to civil engineering and made to work on contents of PO5.			
<b>PO 6 : The Engineer and Society</b>			
PO 6	1.94	1.70	It is identified that level of attainment is moderate in few subjects of different courses some of them are listed below I. Construction Management & Entrepreneurship II. Extensive survey project III. Water resource management.
Action 1: Technical talks by the subject experts are arranged to attain the contents of PO6 against to the curriculum prescribed by the university.			
<b>PO 7 : Environment and Sustainability</b>			
PO 7	2.00	1.74	It is identified that level of attainment is moderate in few subjects of different courses some of them are listed below I. Water supply and treatment engineering II. Solid waste management III. Water Resource Management IV. Extensive survey project V. Environmental engineering Lab.
Action 1: Technical field visits are arranged in different fields of Civil engineering for the students to understand the impact of professional engineering in societal and environmental contexts. Action 2: Students are entertained to take up problem oriented field projects and made to solve the issues.			
<b>PO 8 : Ethics</b>			
PO 8	1.93	1.71	It is identified that level of attainment is moderate in few subjects of different courses some of them are listed below I. Applied Geo-Technical Engineering II. Geo-Technical Engineering Lab III. Construction Management & Entrepreneurship IV. Design of steel structural elements V. Design of RC structural elements.
Action 1: Students are made to learn engineering ethics through referring codal specifications in analyzing & designing of structures and other related engineering fields. Action 1: Technical talks are arranged by inviting subject experts in line with contents of PO8.			
<b>PO 9 : Individual and Team Work</b>			
PO 9	2.13	1.97	It is identified that level of attainment is moderate in few subjects of different courses some of them are listed below I. Construction Management & Entrepreneurship II. Water resource management III. Extensive-survey Project.

Action 1: Students are motivated to work as individual and leader in diverse teams through seminars & Projects, organizing Engineer's day, Teacher's Day, Environmental day, Go-green Marathon and other related programs in line with the contents of PO9.

**PO 10 : Communication**

PO 10	1.70	1.57	It is identified that level of attainment is moderate in few subjects of different courses some of them are listed below I. Construction Management & Entrepreneurship II. Extensive-survey project.
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Action 1: To improve the communication skills for the students English lab, Essay writing, Interaction with the industries, Debate on technical topics are arranged.

**PO 11 : Project Management and Finance**

PO 11	1.86	1.66	It is identified that level of attainment is moderate in few subjects of different courses some of them are listed below I. Construction Management & Entrepreneurship II. Design of bridges III. Urban transport planning IV. Computer aided detailing of structures.
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Action 1: To motivate the students in Entrepreneur and management skills District Entrepreneur's Officer, Govt. Of Karnataka was invited and talk was arranged against to the curriculum prescribed by the university.

**PO 12 : Life-long Learning**

PO 12	1.76	1.55	It is identified that level of attainment is moderate in few subjects of different courses some of them are listed below I. Strength of Materials II. Analysis of Determinate structures III. Basic Geotechnical Engineering IV. Design of RC structural elements V. Traffic engineering VI. Water Resource Management VII. Software Application Lab.
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Action 1: Students are made to learn advanced software which are useful in solving civil engineering problems through the software training from CAD Center organizations.

**POs Attainment Levels and Actions for Improvement- (2017-18)**

POs	Target Level	Attainment Level	Observations
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**PO 1 : Engineering Knowledge**

PO 1	1.99	1.83	It is identified that Level of attainment is moderate in Few subjects of different courses some of them listed below : I. Engineering mathematics II. Design and Drawing of RC structures III. Analysis of determinate structures IV. Applied hydraulics V. Basic geotechnical engineering VI. Design of Pre-stressed concrete. VII. Design and drawing of steel structures.
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Action 1: Personal attention is given through the tutorial and remedial classes to apply the contents of PO1 to improve. Action 2: Related assignments to be given to the students in the form of numerical problems which are appeared in previous year semester end examinations.

**PO 2 : Problem Analysis**

PO 2	1.86	1.78	It is identified that Level of attainment is moderate in few subjects of different courses some of them listed below : I. Strength of Material II. Concrete technology III. Basic geotechnical engineering IV. Design and Drawing of steel structures V. Design of RC structures VI. Computer aided building planning & drawing VII. Design of pre stressed concrete.
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Action 1: The students are provided with seminars, projects related to Civil engineering Programme and made to work by involving them to Identify, formulate, review literature and analyze complex engineering problems. Action 2: Technical quiz and essay writing competitions are arranged for the students.

**PO 3 : Design/development of Solutions**

PO 3	2.36	2.13	It is identified that Level of attainment is moderate in few subjects of different courses some of them listed below : I. Basic surveying, II. Advance surveying III. Analysis of indeterminate structures IV. Design of reinforced concrete structures, V. Highway engineering VI. Software application lab, VII. Deign of steel structures.
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Action 1: Technical talks on the topics of public health and safety are arranged from the subject experts.

**PO 4 : Conduct Investigations of Complex Problems**

PO 4	1.84	1.45	It is identified that Level of attainment is moderate in few subjects of different courses some of them listed below : I. Analysis of determinate structures II. Basic surveying III. Advance surveying IV. Design & Drawing of RC structures V. Computer aided building planning and drawing, VI. Design of steel structures, VII. Design of pre stressed concrete
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Action 1: Students are made to work on research-based projects under faculty scholars who are registered for the Ph.D and made to learn contents of PO4. Action 2: related software's for research-based knowledge, design of experiments are made available, and training is provided in line with the contents of PO4.

**PO 5 : Modern Tool Usage**

PO 5	2.12	1.94	It is identified that Level of attainment is moderate in few subjects of different courses some of them listed below : I. Advance Surveying II. Geo technical engineering lab III. Software application lab.
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Action 1: Students are made to participate in department technical fests. Action 2: Students are provided with advanced equipment s related to civil engineering and made to work on contents of PO5.

**PO 6 : The Engineer and Society**

PO 6	2.10	1.93	It is identified that Level of attainment is moderate in few subjects of different courses some of them listed below : I. Analysis of Determinate Structures, II. Construction Management & Entrepreneurship III. Analysis of indeterminate structures IV. Environmental Engineering, V. Extensive survey project VI. Solid waste management VII. Environmental Engineering lab.
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Action 1: Technical talks by the subject experts are arranged to attain the contents of PO6 against to the curriculum prescribed by the university.

**PO 7 : Environment and Sustainability**

PO 7	2.34	2.02	It is identified that Level of attainment is moderate in few subjects of different courses some of them listed below : I. Basic surveying II. Analysis of determinate structure III. Environmental Engineering IV. Pavement Material Construction V. Industrial Waste Water Treatment VI. Water supply and treatment engineering. VII. Environmental Impact Assessment
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Action 1: Technical field visits are arranged in different fields of Civil engineering for the students to understand the impact of professional engineering in societal and environmental contexts. Action 2: Students are entertained to take up problem oriented field projects and made to solve the issues.

**PO 8 : Ethics**

PO 8	2.13	1.94	It is identified that Level of attainment is moderate in few subjects of different courses some of them listed below : I. Construction Management & Entrepreneurship II. Environmental Engineering III. Basic geo technical engineering IV. Extensive survey project V. Design and Drawing RC Structure VI. Design of steel structures.
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Action 1: Students are made to learn engineering ethics through referring codal specifications in analyzing & designing of structures and other related engineering fields. Action 1: Technical talks are arranged by inviting subject experts in line with contents of PO8.

**PO 9 : Individual and Team Work**

PO 9	2.47	2.47	It is identified that level of attainment is moderate in few subjects of different courses some of them are listed below I. Management & Entrepreneurship II. Extensive-survey.
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Action 1: Students are motivated to work as individual and leader in diverse teams through seminars & Projects, organizing Engineer's day, Teacher's Day, Environmental day, Go-green Marathon and other related programs in line with the contents of PO9.

**PO 10 : Communication**

PO 10	1.49	1.46	It is identified that Level of attainment is moderate in few subjects of different courses some of them listed below : I. Construction Management and Entrepreneurship II. Advanced Design of RC Structures III. Design and Drawing of Steel Structures IV. Advance concrete technology.
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Action 1: To improve the communication skills for the students English lab, Essay writing, Interaction with the industries, Debate on technical topics are arranged.

**PO 11 : Project Management and Finance**

PO 11	1.93	1.73	It is identified that Level of attainment is moderate in few subjects of different courses some of them listed below : I. Construction Management and Entrepreneurship, II. Software application lab III. Design of pre-stressed concrete.
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Action 1: To motivate the students in Entrepreneur and management skills District Entrepreneur's Officer, Govt. Of Karnataka was invited and talk was arranged against to the curriculum prescribed by the university.

**PO 12 : Life-long Learning**

PO 12	1.94	1.82	It is identified that Level of attainment is moderate in few subjects of different courses some of them listed below : I. Construction Management & Entrepreneurship II. Basic surveying III. Applied geo technical engineering IV. Analysis of indeterminate structures V. Geo Technical engineering Lab VI. Computer aided Drawing Lab.
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Action 1: Students are made to learn advanced software which are useful in solving civil engineering problems through the software training from CAD Center organization.

**POs Attainment Levels and Actions for Improvement- (2016-17)**

POs	Target Level	Attainment Level	Observations
<b>PO 1 : Engineering Knowledge</b>			
PO 1	2.12	1.92	It is identified that level of attainment is moderate in few subjects of different courses some of them are listed below I. Engineering Mathematics II. Strength of materials III. Structural analysis –II IV. Geo-Technology-I V. Design and Drawing of RC structures VI. Design of Pre-stressed concrete.
Action 1: Personal attention is given through the tutorial and remedial classes to apply the contents of PO1 to improve. Action 2: Related assignments to be given to the students in the form of numerical problems which are appeared in previous year semester end examinations.			
<b>PO 2 : Problem Analysis</b>			
PO 2	1.90	1.79	It is identified that level of attainment is moderate in few subjects of different courses some of them are listed below I. Strength of Material II. Basic surveying III. Analysis of determinate structures IV. Structural Analysis-II V. Geo-Technical engineering-II VI. Design & Drawing of RC structures.
Action 1: The students are provided with seminars, projects related to Civil engineering Programme and made to work by involving them to Identify, formulate, review literature and analyse complex engineering problems. Action 2: Technical quiz and essay writing competitions are arranged for the students.			
<b>PO 3 : Design/development of Solutions</b>			

PO 3	2.50	2.24	It is identified that level of attainment is moderate in few subjects of different courses some of them are listed below I. Structural Analysis-II II. Design and drawing of RC structures III. Basic surveying IV. Analysis of determinate structures V. Advance surveying VI. Design and drawing of steel structures VII. Design of Pre stressed concrete.
Action 1: Technical talks on the topics of public health and safety are arranged from the subject experts.			
<b>PO 4 : Conduct Investigations of Complex Problems</b>			
PO 4	1.68	1.4	It is identified that level of attainment is moderate in few subjects of different courses some of them are listed below I. Structural analysis II II. Basic surveying III. Analysis of determinate structures IV. Design & Drawing RC structure V. Geo-Technical engineering-II.
Action 1: Students are made to work on research-based projects under faculty scholars who are registered for the Ph.D and made to learn contents of PO4. Action 2: related software's for research-based knowledge, design of experiments are made available, and training is provided in line with the contents of PO4.			
<b>PO 5 : Modern Tool Usage</b>			
PO 5	2.3	1.93	It is identified that level of attainment is moderate in few subjects of different courses some of them are listed below I. Advance Surveying II. Fluid Mechanics-LAB III. Design of RCC IV. Transportation Engineering-I V. Transportation Engineering-II VI. Hydraulics and hydraulic machines lab.
Action 1: Students are made to participate in department technical fests. Action 2: Students are provided with advanced equipment s related to civil engineering and made to work on contents of PO5.			
<b>PO 6 : The Engineer and Society</b>			
PO 6	2.45	1.84	It is identified that level of attainment is moderate in few subjects of different courses some of them are listed below I. Analysis of Determinate Structures II. Management & Entrepreneurship III. Transportation Engineering-I IV. Extensive survey project V. Environmental Engineering-II VI. Design and Drawing Steel Structure.
Action 1: Technical talks by the subject experts are arranged to attain the contents of PO6 against to the curriculum prescribed by the university.			
<b>PO 7 : Environment and Sustainability</b>			
PO 7	2.60	1.75	It is identified that level of attainment is moderate in few subjects of different courses some of them are listed below I. Environmental Impact Assessment II. Structural analysis-II III. Environmental Engineering-I, IV. Pavement Material Construction V. Industrial Waste Water Treatment.
Action 1: Technical field visits are arranged in different fields of Civil engineering for the students to understand the impact of professional engineering in societal and environmental contexts. Action 2: Students are entertained to take up problem oriented field projects and made to solve the issues.			
<b>PO 8 : Ethics</b>			
PO 8	2.56	2.06	It is identified that level of attainment is moderate in few subjects of different courses some of them are listed below I. Management & Entrepreneurship II. Transportation Engineering-I III. Transportation Engineering-II IV. Environmental Engineering-I V. Design and drawing of steel structures.
Action 1: Students are made to learn engineering ethics through referring codal specifications in analyzing & designing of structures and other related engineering fields. Action 1: Technical talks are arranged by inviting subject experts in line with contents of PO8.			
<b>PO 9 : Individual and Team Work</b>			
PO 9	2.84	2.58	It is identified that level of attainment is moderate in few subjects of different courses some of them are listed below III. Management & Entrepreneurship IV. Extensive-survey.
Action 1: Students are motivated to work as individual and leader in diverse teams through seminars & Projects, organizing Engineer's day, Teacher's Day, Environmental day, Go-green Marathon and other related programs in line with the contents of PO9.			
<b>PO 10 : Communication</b>			
PO 10	1.83	1.34	It is identified that level of attainment is moderate in few subjects of different courses some of them are listed below I. Management and Entrepreneurship II. Design And Drawing Of Reinforced Structures III. Advanced Design of RC Structures IV. Design and Drawing of Steel Structures.
Action 1: To improve the communication skills for the students English lab, Essay writing, Interaction with the industries, Debate on technical topics are arranged.			
<b>PO 11 : Project Management and Finance</b>			
PO 11	1.95	1.84	It is identified that level of attainment is moderate in few subjects of different courses some of them are listed below I. Management and Entrepreneurship II. Transportation Engineering-I, III. Design of pre-stressed concrete.
Action 1: To motivate the students in Entrepreneur and management skills District Entrepreneur's Officer, Govt. Of Karnataka was invited and talk was arranged against to the curriculum prescribed by the university.			
<b>PO 12 : Life-long Learning</b>			
PO 12	1.85	1.69	It is identified that level of attainment is moderate in few subjects of different courses some of them are listed below I. Management & Entrepreneurship II. Strength of materials Fluid mechanics, III. Structural Analysis-II IV. Building material and construction V. Geo Technology engineering –I VI. Computer aided Drawing Lab.

Action 1: Students are made to learn advanced software which are useful in solving civil engineering problems through the software training from CAD Center organization.

### PSOs Attainment Levels and Actions for Improvement- (2018-19)

PSOs	Target Level	Attainment Level	Observations
<b>PSO 1 : Ability to Develop the skills required for planning, analyzing &amp; designing, estimating &amp; executing the civil engineering structures</b>			
PSO 1	1.74	1.57	It is identified that level of attainment is moderate in few subjects of different courses some of them are listed below I. Strength of Materials II. Fluid Mechanics III. Design of Pre Stressed Concrete Elements IV. Quantity survey and Contracts Management V. Design of RCC & steel structures VI. Design of Steel Structural Elements VII. Design of Bridges.

Action 1: Students are made to learn advanced software which are useful in solving civil engineering problems.

### PSO 2 : Ability to identify the soils of different nature through the geo technical investigations and providing the suitable foundation to the structures.

PSO 2	1.67	1.56	It is identified that level of attainment is moderate in few subjects of different courses some of them are listed below I. Applied Geo-technical engineering II. Basic Geo-technical engineering III. Highway Engineering IV. Geotechnical Engineering Lab.
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Action 1: Students are made to take up geotechnical projects and involving in technical consultancy cell of the department and motivated to satisfy PSO2.

### PSO 3 : Ability to plan, analyze, design and to solve environmental engineering related problems.

PSO 3	1.55	1.44	It is identified that level of attainment is moderate in few subjects of different courses some of them are listed below I. Municipal and Industrial Waste Water Treatment II. Water supply and treatment engineering III. Solid waste management IV. Water resource management V. Environmental Engineering lab.
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Action 1: Students are made to take up environmental projects. Action 2: Technical field visits are arranged in different fields for the students for better understanding the subjects.

### PSOs Attainment Levels and Actions for Improvement- (2017-18)

PSOs	Target Level	Attainment Level	Observations
<b>PSO 1 : Ability to Develop the skills required for planning, analyzing &amp; designing, estimating &amp; executing the civil engineering structures</b>			
PSO 1	1.66	1.54	It is identified that Level of attainment is moderate in few subjects of different courses some of them listed below : I. Strength of Materials II. Analysis of determinate structures III. Applied hydraulics IV. Analysis of indeterminate structures V. Computer aided building planning and drawing VI. Software application lab.

Action 1: Students are made to learn advanced software which are useful in solving civil engineering problems.

### PSO 2 : Ability to identify the soils of different nature through the geo technical investigations and providing the suitable foundation to the structures.

PSO 2	2.32	2.12	It is identified that Level of attainment is moderate in few subjects of different courses some of them listed below : I. Engineering Geology II. Basic Geo Technical engineering III. Applied Geo Technical engineering.
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Action 1: Students are made to take up geotechnical projects and involving in technical consultancy cell of the department and motivated to satisfy PSO2.

### PSO 3 : Ability to plan, analyze, design and to solve environmental engineering related problems.

PSO 3	1.92	1.70	It is identified that Level of attainment is moderate in few subjects of different courses some of them listed below : I. Environmental Impact Assessment II. Environmental Engineering III. Industrial Waste Water Treatment IV. Water supply and treatment engineering V. Environmental Engineering lab.
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Action 1: Students are made to take up environmental projects. Action 2: Technical field visits are arranged in different fields for the students for better understanding the subjects.

### PSOs Attainment Levels and Actions for Improvement- (2016-17)

PSOs	Target Level	Attainment Level	Observations
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**PSO 1 : Ability to Develop the skills required for planning, analyzing & designing, estimating & executing the civil engineering structures**

PSO 1	1.78	1.48	It is identified that level of attainment is moderate in few subjects of different courses some of them are listed below I. Strength of Materials II. Fluid Mechanics III. Basic surveying IV. Structural Analysis-I V. Geo-Technical engineering-II VI. Design of Pre Stressed Concrete VII. Design and drawing of steel structures.
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Action 1: Students are made to learn advanced software which are useful in solving civil engineering problems.

**PSO 2 : Ability to identify the soils of different nature through the geo technical investigations and providing the suitable foundation to the structures.**

PSO 2	2.65	2.5	It is identified that level of attainment is moderate in few subjects of different courses some of them are listed below I. Engineering Geology II. Applied Hydrology III. Geo Technical engineering-I IV. Geo technical engineering –Lab.
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Action 1: Students are made to take up geotechnical projects and involving in technical consultancy cell of the department and motivated to satisfy PSO2.

**PSO 3 : Ability to plan, analyze, design and to solve environmental engineering related problems.**

PSO 3	1.83	1.01	It is identified that level of attainment is moderate in few subjects of different courses some of them are listed below I. Environmental Engineering—I II. Environmental Engineering-II III. Environmental Impact Assessment IV. Environmental Engineering lab.
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Action 1: Students are made to take up environmental projects. Action 2: Technical field visits are arranged in different fields for the students for better understanding the subjects.

**7.2 Academic Audit and actions taken thereof during the period of Assessment (10)**

Total Marks 10.00  
Institute Marks : 10.00

Academic Audit system/process and its implementation in relation to Continuous Improvement.

**Academic Audit Report for the Academic Year 2017-18 To 2018-19**

Academic audits are conducted in order to monitor and evaluate the teaching learning process Audits are conducted for teaching learning process, laboratory maintenance and departmental activities.

The institute established Internal Quality Assurance Cell (IQAC) in the year 2017 -18, as per the guidelines of NAAC & UGC whose major responsibility is to conduct periodical audits and take corrective/preventive measures for assuring/improving the academic performance.

**Audit Process and its implementation:**

1. Professor Dr. Veeragangadhara Swamy T.M of Computer Science & Engineering is the IQAC Convener. He with the consensus of the Principal and IQAC members constitutes a committee for assessing the academic performance of the different departments.
2. Academic audit is conducted for every year and the details are mentioned below:

**Table: Audit Details**

SL. No	Audit Date	Audit Members	Remarks
01	29/06/2016	1. Dr.P Sravana Professor & HOD Civil Engineering Department JNTU Hyderabad 2. Dr. G. Kanakadurga, Professor MVSR Engineering College, Hyderabad.	NBA audit and Seminar on Accreditation Process with External expert by Department
02	19/12/2018	1. Dr. Mohamed Rafi Prof ,CSE UBDT Davangere	Academic audit by IQAC
03	19/02/2019	Dr. Radhakrishna Professor & HOD, Civil Engineering, RVCE, Bengaluru	NBA audit with External expert by Department

04	28/06/2019	1. Dr S.G.Anuradha Associate Professor, CSE, RYMEC  2. K.M.Shiva Prasad  Assistant Professor, CSE, RYMEC	NBA Internal audit Committee
05	16/09/2019	1. Dr. Veeragangadhara swamy T.M,  Prof, CSE,RYMEC  2. Mrs. Rakhee Patil  Prof, ECE,RYMEC  3. Mr Shivananda K B  Asst. Placement Officer, RYMEC	Administrative audit by IQAC
06	04/11/2019	1. Dr. Prashanth B.G  Prof. Dept of Mech. JSS academy of Technical education Bengaluru.  2. Dr. Bhimasen Soragaon.  Prof. Dept of Mech. JSS academy of Technical Education Bengaluru.	Academic audit by IQAC

3. The audit committee will visit the department as per the schedule given by the IQAC to inspect the effectiveness of academic process implementation.

**Faculty audit:** The following are the records of the faculty members that are verified during the internal academic audits.

- Calendar of Events.
- Lesson Plan, Execution Plan.
- Syllabus, Attendance Registers.
- Individual Time Table.
- IA Question Paper, Scheme of Evaluation and Assignment Questions.
- Model Question Papers, Previous University Question Papers.
- Lab Records, Lab Manuals, Ledger
- Course File
- Personal File
- Remedial and Tutorial Class Records.
- Result Analysis
- Counseling and Mentoring Records.
- Additional Resources to Students (Notes, PPT, Etc.)
- Co-Curricular Activities: Seminar/Conference/Workshop/Guest Lecture Conducted and Attended.
- Industrial Visits, Faculty Achievements: Paper publications, Books etc.
- Feedback mechanism for assessing the Teaching-Learning Process.

5. Audit committee submits the report of audit to the IQAC Convener and also shares it with the concerned Head of the Department.

6. IQAC Convener and members do the analysis of the report and initiates the corrective measures as necessary with the department.

7. The Head of the department discuss the audit findings with the faculty and prepares plan of action in the DAC meeting for addressing any concern(s) identified by the auditor.

8. Department Submits the Action taken report with respect to audit report to IQAC.

**Corrective Measures for the improvement of academic performance.**

**Feedback from Students – Course End Survey:** A questionnaire about the course is prepared by the course coordinator and the program - coordinator for the students. This serves as a feedback at end of the semester to gauge the degree of attainment of POs and PSOs.

**Feedback from students – Course Exit Survey:** A questionnaire is prepared by the program coordinator, and given to students at end of the program to get their feedback of the program. The results are analyzed to gauge the degree of attainment of program outcomes.

**Feedback from parents:** The Program coordinator will collect the feedback from parents about their experience and their wards opinion on the program. This activity is carried out once in every semester for the betterment of the system.

**Feedback from the academic/industry experts:** Curriculum reviews by Industry/Academic experts provide a broad-based internal and external feedback regarding the relevance and organization of a program's curriculum. Their feedback serves as an evidence for assessing significant changes (individual course competencies) required within a program when the change is inevitable.

feedback from alumni: A questionnaire is prepared by the program and course coordinator and is given to the alumni. Open ended questions/experiments in the lab Open ended questions are designed for which students formulate meaningful solutions using subject knowledge. These open-ended questions tend to be more objective and less leading than closed-ended questions.

### 7.3 Improvement in Placement, Higher Studies and Entrepreneurship (10)

Total Marks 10.00

Institute Marks : 10.00

#### Placement Details

SL NO	YEAR	TOTAL NO OF STUDENTS	TOTAL NO OF STUDENTS PLACED				PERCENTAGE OF STUDENT PLACED
			No of Students Placed (X)	Higher studies (Y)	Entrepreneurship (Z)	Total =X+Y+Z	
1	2015-16	126	40	19	04	63	50
2	2016-17	130	29	25	04	58	45
3	2017-18	109	48	17	00	65	61

### 7.4 Improvement in the quality of students admitted to the program (10)

Total Marks 10.00

Institute Marks : 10.00

Item		2018-19	2017-18	2016-17
National Level Entrance Examination  NIL	No of students admitted	0	0	0
	Opening Score/Rank	0	0	0
	Closing Score/Rank	0	0	0
State/ University/ Level Entrance Examination/ Others  Karnataka CET	No of students admitted	110	93	116
	Opening Score/Rank	34802	37064	30378
	Closing Score/Rank	211468	117109	122606
Name of the Entrance Examination for Lateral Entry or lateral entry details  Karnataka DCET	No of students admitted	46	30	45
	Opening Score/Rank	1417	1769	2051
	Closing Score/Rank	18381	11568	20637
Average CBSE/Any other board result of admitted students(Physics, Chemistry&Maths)		61	57	78

### 8 FIRST YEAR ACADEMICS (50)

Total Marks 40.38

#### 8.1 First Year Student-Faculty Ratio (FYsFR) (5)

Total Marks 5.0

Institute Marks : 5.0

Please provide First year faculty information considering load for the particular program

Name of the faculty member	PAN No.	Qualification	Area of Specialization	Designation	Date of joining	Teaching load (%)			Currently Associated(Yes/No)	Nature Of Association(Regular/Contract)	Date Of leaving(In case Currently Associated is 'No')
						CAY	CAYm1	CAYm2			
H.M.Manjunath	AFSPM3162L	M.Sc	FLUID DYNAM	Assistant Professor	10/11/1997	100	100	100	Yes	Regular	
K.Sangameshv	AMJPK1027C	M.Sc	FLUID DYNAM	Assistant Professor	08/12/1997	100	100	100	Yes	Regular	
A.Sivamma	DGXPS2403B	M.Sc	FUZZY SETS F	Assistant Professor	13/08/2007	100	100	100	Yes	Regular	
Bhagya K R	BPGPB2907F	M.Sc	MOLECULAR	Assistant Professor	01/08/2009	100	100	100	Yes	Regular	

AnandThipperu	AFKPT7174B	M.Sc	Physics	Assistant Professor	27/08/2012	100	100	100	Yes	Regular	
M.Jayashree	AHNPJ0297Q	M.Sc	ORGANIC CHEMISTRY	Assistant Professor	01/09/2002	100	100	100	Yes	Regular	
R M Sunitha	EEQPS7963A	M.Sc	ORGANIC CHEMISTRY	Assistant Professor	01/09/2010	100	100	100	No	Regular	30/06/2019
R.P.Rajeshwar	AMUPR4622F	M.E/M.Tech	CSE	Assistant Professor	30/11/2006	100	0	100	Yes	Regular	
Jagadeesh G M	AHKPJ7367G	M.E/M.Tech	CSE	Assistant Professor	11/01/2018	100	0	0	Yes	Regular	
Shivaprasad K	CCEPK3972P	M.E/M.Tech	CCT	Assistant Professor	01/08/2011	100	0	100	Yes	Regular	
Punneth GJ	BTPPP9481M	M.E/M.Tech	COMPUTER SCIENCE	Assistant Professor	13/10/2014	100	100	0	Yes	Regular	
SwamyAradhy	AHOPA1959P	MCA	PCM	Assistant Professor	13/08/2008	100	100	0	Yes	Regular	
A T Satya Narayana	BGAPS9165H	MCA	ELECTRONICS	Assistant Professor	04/09/2003	100	100	100	Yes	Regular	
K B Shivanand	BEMPS5384A	MCA	ELECTRONICS	Assistant Professor	30/09/2003	100	100	100	Yes	Regular	
B Mallikarjuna	BLTPM0095G	MCA	COMPUTERS	Assistant Professor	01/01/2010	100	0	0	Yes	Regular	
Achyuthaanand	AIWPA1969Q	M.E/M.Tech	TOOL DESIGN	Assistant Professor	12/09/2013	100	100	100	Yes	Regular	
B Basavaprakas	AGRPP5813I	M.E/M.Tech	THERMAL POWER ENGINEERING	Assistant Professor	02/08/2014	100	100	100	Yes	Regular	
V Chetan	AOLPV8561L	M.E/M.Tech	CAMS	Assistant Professor	01/08/2014	100	0	0	Yes	Regular	
H M Naveen	AGRPP4813H	M.E/M.Tech	MACHINE DESIGN	Assistant Professor	04/08/2014	100	0	0	Yes	Regular	
Rajashekar K	BLKPR2131P	M.E/M.Tech	DIGITAL ELECTRONICS	Assistant Professor	02/08/2014	100	0	0	Yes	Regular	
Shasidhar R	ASMPR9050K	M.E/M.Tech	Power Electronics	Assistant Professor	17/04/2017	100	0	0	Yes	Regular	
R Basava Raj	DAIPP8552B	M.E/M.Tech	STRUCTURAL	Assistant Professor	23/07/2018	100	100	0	No	Regular	29/06/2019
Mubarak Moha	CHCPM7552G	M.E/M.Tech	Structural Engineering	Assistant Professor	02/04/2018	100	100	0	No	Regular	13/05/2019
Monica Bhutad	CNBPB9046H	M.E/M.Tech	CASE	Assistant Professor	23/08/2017	100	100	0	No	Regular	06/05/2019
Vinay A	AROPA1220B	M.E/M.Tech	CNE	Assistant Professor	18/07/2011	100	0	0	Yes	Regular	
Kumuda B	CSTPK3031L	M.E/M.Tech	Digital Electron	Assistant Professor	16/08/2012	100	0	0	Yes	Regular	
Nagaraj Gouda	AJYPN4580D	M.E/M.Tech	VLSI	Assistant Professor	22/04/2017	100	0	0	Yes	Regular	
H Victor Ravikiran	AEHPH2429H	MA	English	Assistant Professor	01/02/2018	100	100	0	Yes	Regular	
Pushpa B M	CQTTP7389E	MA	English	Assistant Professor	23/08/2018	100	0	0	Yes	Regular	
B Veeresh	ACKPV6194N	M.Sc	FLUID DYNAMICS	Assistant Professor	11/11/2000	0	0	100	Yes	Regular	
Shivaraja P	DPWPS7576B	MCA	CSE	Assistant Professor	21/07/2011	100	0	0	Yes	Regular	
Aparna K S	ALGPA6872M	M.E/M.Tech	CNE	Assistant Professor	14/02/2007	0	0	100	Yes	Regular	
K.Suresh	AYOPS7651P	M.E/M.Tech	CSE	Assistant Professor	01/08/2011	0	0	100	Yes	Regular	
BERGI VEERE	AGNPV1571A	M.E/M.Tech	CSE	Assistant Professor	01/08/2013	0	100	0	Yes	Regular	

SRIDEVI MAL	CNNPM1062J	M.E/M.Tech	CSE	Assistant Professor	01/08/2013	0	100	0	Yes	Regular	
PRASANA KUI	CLQPP0180B	M.E/M.Tech	CSE	Assistant Professor	20/10/2016	0	100	0	Yes	Regular	
Prashanth Ken	BMTPK6538F	M.E/M.Tech	DECS	Assistant Professor	04/08/2014	0	100	100	Yes	Regular	
Vani H	APGPV5271B	M.E/M.Tech	VLSI ESD	Assistant Professor	01/08/2014	0	100	100	Yes	Regular	
SudharshanBa	EKMPS3714M	M.E/M.Tech	DECS	Assistant Professor	01/08/2014	0	100	100	Yes	Regular	
Nagaraj M K	BFGPK0562M	M.Sc	NUCLEAR PH'	Assistant Professor	30/01/2008	0	0	100	No	Regular	09/01/2018
S.Kotresh	AYLPS5544G	M.E/M.Tech	Biomedical instl	Associate Professor	18/03/2006	0	100	100	Yes	Regular	
Shambulingar	CILPS9805G	M.E/M.Tech	Electrical Mainl	Assistant Professor	27/08/2007	0	100	100	Yes	Regular	
T. Naga Anush	ASZPA7618M	M.E/M.Tech	STRUCTURAL	Assistant Professor	04/08/2015	0	0	100	No	Regular	01/05/2018
Shadakshari M	FCIPS1171K	M.E/M.Tech	STRUCTURAL	Assistant Professor	08/01/2016	0	0	100	No	Regular	11/05/2018
Ashwini.R	BBKPA1674J	M.E/M.Tech	Environmental	Assistant Professor	08/08/2016	0	0	100	No	Regular	19/05/2018
Vittal Rao Cha	APPPC2984R	M.E/M.Tech	PRODUCTION	Assistant Professor	25/07/2011	0	100	100	No	Regular	30/06/2018
Chidananda Mi	BUVPC8870Q	M.E/M.Tech	MACHINE DES	Assistant Professor	23/02/2015	0	0	100	No	Regular	14/06/2017
M Balaji	ALXPB1671J	M.E/M.Tech	PRODUCTION	Assistant Professor	05/10/2001	0	100	0	Yes	Regular	
Shaik Ghouse	AWAPM6628G	MA	LINGUISTIC	Assistant Professor	11/02/2017	0	0	100	No	Regular	30/06/2018
DR JEEVARGI	ABZPP1752G	M.Sc. and PhD	FLUDYNNUMI	Professor	24/02/1988	100	100	100	Yes	Regular	
DR SUMANGA	BJOPS5236E	M.Sc. and PhD	DIFFERENTIA	Associate Professor	23/07/2015	100	100	100	Yes	Regular	
DR P SHAIKS	AMJPK1027C	M.Sc. and PhD	FUID DYNAMI	Assistant Professor	23/02/2006	100	100	100	Yes	Regular	
DR SHRUTHI I	BOLPR2695G	M.Sc. and PhD	GRAPH THEO	Assistant Professor	27/07/2012	100	100	0	Yes	Regular	
DR NAGABHU	AHJPN8422B	M.Sc. and PhD	PHYSICS	Assistant Professor	24/08/2016	100	100	100	Yes	Regular	
DR. NAGARAJ	AHHPN0995R	M.Sc. and PhD	PHYSICS	Professor	24/01/2018	100	100	0	Yes	Regular	
DR. HIREMATI	ABDPB5162C	M.Sc. and PhD	ORGANIC CHI	Professor	02/02/1987	100	100	100	Yes	Regular	
DR. N.M. KOT	ACQPN3434K	M.Sc. and PhD	PHYSICAL CH	Professor	01/01/2003	100	100	100	Yes	Regular	
DR. CHANDR/	AIKPC9836A	ME/M. Tech and PhD	ALTERNATIVE	Assistant Professor	20/01/2009	100	100	100	No	Regular	04/09/2019

Year	Number Of Students(approved intake strength) N	Number of Faculty members(considering fractional load) F	FYSFR (N/F)	*Assessment=(5*20)/FYSFR(Limited to Max.5)
2016-17(CAYm2)	600	35	17	5
2017-18(CAYm1)	600	36	17	5
2018-19(CAY)	760	39	19	5
<b>Average</b>	653	36	17	5

### 8.2 Qualification of Faculty Teaching First Year Common Courses (5)

Total Marks 4.33

Institute Marks : 4.33



Year	x (Number Of Regular Faculty with Ph.D)	y (Number Of Regular Faculty with Post graduate Qualification)	RF (Number Of Faculty Members required as per SFR of 20:1	Assessment Of Faculty Qualification [ (5x + 3y) / RF ]
2016-2017	8	34	30	4.00
2017-2018	8	37	30	5.00
2018-2019	9	37	38	4.00

Average Assessment: 4.33

### 8.3 First Year Academic Performance (10)

Total Marks 5.05

Institute Marks : 5.05

Academic Performance	2018-19	2017-18	2016-17
Mean of CGPA or mean percentage of all successful students(X)	6.68	6.34	5.46
Total Number of successful students(Y)	72.00	106.00	81.00
Total Number of students appeared in the examination(Z)	98.00	113.00	113.00
API [X*(Y/Z)]	5.03	5.93	4.18

Average API[ (AP1+AP2+AP3)/3 ] : 5.05

Assessment [ 1.5 \* Average API ] : 5.05

### 8.4 Attainment of Course Outcomes of first year courses (10)

Total Marks 8.00

#### 8.4.1 Describe the assessment processes used to gather the data upon which the evaluation of Course Outcomes of first year is done (5)

Institute Marks : 4.00

ACADEMIC YEAR 2018-19

2018-19

- o Three internal tests for a maximum mark of 50 are conducted and reduced to 30marks, average of three internals is considered. The remaining 10 marks shall be awarded based on the evaluation of assignment/unit tests/written quizzes that support to cover some of the course/program outcomes and added to the average internal assessment test marks. The final marks out of 40 are considered as CIE marks.
- o The performance of a student in internal assessment with respect to the CO's is recorded.
- o End Semester university exam performance of student for the maximum mark of 100 is conducted. 60% of the marks is considered as external exam performance.
- o The summation of these two performances is considered as cumulative assessment for a prescribed course out come.
- o Continuous Internal Evaluation (CIE) and Semester End Examinations (SEE) to constitute the major evaluation prescribed for each course. SEE and CIE to carry 60% and 40% respectively, to enable each course to be evaluated for 100 marks, irrespective of its credits.
- o For Laboratory assessment, the performance of a student in conduction of each experiment, final lab internal test and external lab exam is considered. Marks are awarded by SEE and CIE to carry 60% and 40% respectively.

**2018-19: CBCS Scheme**

<b>Assessment</b>	<b>Marks</b>
IA	50 MARKS (Reduced to 30marks)
Assignment /Quiz/Test	10
Total for IA	40
External Exam (SEE)	60 (100 marks reduced to 60%)
<b>Total</b>	<b>100</b>

ACADEMIC YEAR 2017-18

2017-18

- Three internal tests for a maximum mark of 30 are conducted and average of three internals is considered. The remaining 10 marks shall be awarded based on the evaluation of assignment/unit tests/written quizzes that support to cover some of the course/program outcomes and added to the average internal assessment test marks. The final marks out of 40 are considered as CIE marks.
- The performance of a student in internal assessment with respect to the CO's is recorded.
- End Semester university exam performance of student for the maximum mark of 100 is conducted. 60% of the marks is considered as external exam performance.
- The summation of these two performances is considered as cumulative assessment for a prescribed course out come.
- Continuous Internal Evaluation (CIE) and Semester End Examinations (SEE) to constitute the major evaluation prescribed for each course. SEE and CIE to carry 60% and 40% respectively, to enable each course to be evaluated for 100 marks, irrespective of its credits.
- For Laboratory assessment, the performance of a student in conduction of each experiment, final lab internal test and external lab exam is considered. Marks are awarded by SEE and CIE to carry 60% and 40% respectively.

**2017:CBCS scheme**

Assessment	Marks
IA	30
Assignment /Quiz/Test	10
Total for IA	40
External Exam (SEE)	60 (100 marks reduced to 60%)
<b>Total</b>	<b>100</b>

**ACADEMIC YEAR 2016-17**

2016-17

- Three internal tests for a maximum mark of 30 are conducted and reduced to 15 marks, best of two internal is considered. The remaining 5 marks shall be awarded based on the evaluation of assignment/unit tests/written quizzes. The final marks out of 20 are considered as CIE marks.
- The performance of a student in internal assessment with respect to CO's is recorded.
- End semester university exam performance of students for the maximum mark of 80 is considered for external exam performance.
- The summation of these two performances is considered as cumulative assessment for a prescribed course out come.
- For laboratory assessment, the performance of a student in conduction of each experiment (10 marks), final lab internal test (10marks) and external lab exam (80 marks) is considered.

**2015:CBCS scheme**

Assessment	Marks
IA	15
Assignment /Quiz/Test	5
Total for IA	20
External Exam (SEE)	80
<b>Total</b>	<b>100</b>

DIRECT ATTAINMENT
<p>Attainment Tools used for Direct Attainment are</p> <ol style="list-style-type: none"> <li>1. Internal Assessment Test</li> <li>2. Final Examination</li> <li>3. Assignment</li> </ol>
<p>1. Internal Assessment Test -30% weightage to Internal Assessment</p>
<ul style="list-style-type: none"> <li>• 60% of students score more than 60% marks out of the relevant marks</li> <li>• 70% of students score more than 60% marks out of the relevant marks</li> <li>• 80% of students score more than 60% marks out of the relevant marks</li> </ul>
<p><u>Attainment Level 1:</u> 60% of students score more than or equal to 18 marks out of the 30 marks</p> <p><u>Attainment Level 2:</u> 70% of students score more than or equal to 18 marks out of the 30 marks</p> <p><u>Attainment Level 3:</u> 80% of students score more than or equal to 18 marks out of the 30 marks</p>
<p>2. Final Examination- 70% Weightage to Final Examination</p>
<ul style="list-style-type: none"> <li>• 60% of students score more than or equal to 45% marks out of the relevant marks</li> <li>• 70% of students score more than or equal to 45% marks out of the relevant marks</li> <li>• 80% of students score more than or equal to 45% marks out of the relevant marks</li> </ul>
<p><u>Attainment Level 1:</u> 60% of students score more than or equal to 27 marks out of the 60 marks</p> <p><u>Attainment Level 2:</u> 70% of students score more than or equal to 27 marks out of the 60 marks</p> <p><u>Attainment Level 3:</u> 80% of students score more than or equal to 27 marks out of the 60 marks</p> <p><u>NOT ATTAINED:</u> &lt;60%</p>
<p>3. Assignment</p>
<ul style="list-style-type: none"> <li>• 60% of students score more than or equal to 60% marks out of the relevant marks</li> <li>• 70% of students score more than or equal to 60% marks out of the relevant marks</li> <li>• 80% of students score more than or equal to 60% marks out of the relevant marks</li> </ul>
<p><u>Attainment Level 1:</u> 60% of students score more than or equal to 06 marks out of the 10 marks</p> <p><u>Attainment Level 2:</u> 70% of students score more than or equal to 06 marks out of the 10 marks</p> <p><u>Attainment Level 3:</u> 80% of students score more than or equal to 06 marks out of the 10 marks</p>

Index	Course	CO-1	CO-2	CO-3	CO-4	CO-5
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C101	18MAT12	55.31	55.91	57.84	58.51	59.7
C102	18PHY12	41.37	40.24	37.42	39.7	-
C103	18ELE14	43.16	54.4	46.8	37.95	-
C104	18CIV15	55.67	57.98	58.25	58.97	-
C105	18EGDL16	78.3966	78.37	78.21	78.3233	-
C106	18PHYL16	79.09	78.86	78.6	78.63	-
C107	18ELEL17	66.49	66.92	85.71	81.71	-
C108	18EGH18	54.06	54.88	53.88	55.3	53.78
C109	18MAT11	56.92	57.79	57.71	60.2	60
C110	18CHE12	64.65	65.51	63.67	65.14	-
C111	18CPS13	54.56	56.31	50.92	49.95	-
C112	18ELN14	49.72	51.02	40.53	48.56	-
C113	18ME15	67.4825	68.66	58.16	71.4075	65.595
C114	18CHEL16	81.66	81.63	67.46	80.45	-
C115	18CPL17	77.05	69.37	69.37	69.37	-
C116	18EGH18	53.59	54.17	53.68	54.79	54.8
C117	18MAT21	59.44	57.95	60.11	61.11	60.2
C118	18PHY22	61.95	60.6	60.82	60.25	-
C119	18ELE23	44.068	55.016	47.506	39.182	-
C120	18CIV24	52.38	52.7	53.67	54	-
C121	18EGDL25	81.428	81.512	81.59	81.562	-
C122	18PHYL26	74.82	77.57	78.07	78.63	-
C123	18ELEL27	67.098	67.014	85.66	81.434	-
C124	18EGH28	52.12	54.35	53.75	54.01	53.71
C125	18MAT22	66.44	67.76	65.82	66.7	66.12
C126	18CHE23	56.96	58.04	56.68	57.51	-
C127	18CPS24	49.24	51.46	46.34	47.1	-
C128	18ELN25	39.25	39.74	31.85	37.7	-
C129	18ME25	54.328	54.436	51.366	60.178	54.668
C130	18CHEL27	78.83	78.82	66.21	78.83	-
C131	18CPL28	79.28	71.34	71.34	71.34	-
C132	18EGH28	51.64	54.33	54.77	54.88	54.686

**CO attainment for first year courses for the Academic year 2017-18**

Index	Course	CO-1	CO-2	CO-3	CO-4	CO-5
C101	17MAT11	65.15	72.65	52.44	57.67	-
C102	17PHY12	66.04	66.56	66.74	66.16	67.61
C103	17CIV13	57.115	61.948	54.255	56.19	-
C104	17EME14	66.1	66.28	57.99	73.27	67.615
C105	17ELE15	90.668	81.343	75.923	62.133	-
C106	17WSL16	58.45	67.3	59.35	64.95	-
C107	17PHYL17	72.46	73.08	71.24	73.71	-
C109	17MAT11	57.82	69.62	35.43	45.34	-
C110	17CHE12	55.18	56.685	56.578	56.218	-
C111	17PCD13	62.453	65.253	65.333	52.518	-
C112	17CED14	84.2675	84.2975	84.375	84.3275	-
C113	17ELN15	53.3	54.115	52.965	52.2	-
C114	17CPL16	80.575	82.95	76.65	82.25	-
C115	17CHEL17	79.963	79.963	-	-	-
C116	17CIV18	95.323	97.198	97.193	95.04	-
C117	17 MAT 21	71.58	65.27	64.5	65.84	-
C118	17 PHY 22	61.76	62.26	63.12	62.54	-
C119	17 CIV 23	57.615	58.198	56.005	59.133	-
C120	17 EME 24	60.43	63.475	54.495	64.485	63.945
C121	17ELE25	78.21	67.41	70.77	53.98	-
C122	17 WSL 26	65.7	75.04	66.085	73.875	-
C123	17 PHYL 27	71.48	71.39	65.76	71.35	-
C125	17 MAT 21	56.7	44.96	44.38	45.85	-
C126	17 CHE 22	65.14	64.99	65.55	64.31	-
C127	17 PCD 23	48.32	50.365	49.915	45.863	-

C128	17 CED 24	81.5933	81.6266	81.6933	81.7266	-
C129	17 ELN 25	60.18	59.71	58.515	59.57	-
C130	17 CPL 26	83.5	77.338	77.338	77.338	-
C131	17 CHEL 27	77.37	77.37	-	-	-
C132	17 CIV 28	93.688	94.063	94.633	92.718	-

**CO attainment for first year courses for the Academic year 2016-17**

Index	Course	CO-1	CO-2	CO-3	CO-4	CO-5
C101	15MAT11	66.46	72.66	56.31	60.37	-
C102	15PHY12	68.2	69.3	69.84	56.21	-
C103	15CIV13	58.662	60.266	58.92	58.576	-
C104	15EME14	75.064	66.426	55.76	73.434	63.7
C105	15ELE15	75.374	82.568	72.47	63.318	-
C106	15WSL16	64.4975	72.6325	64.8825	72.34	-
C107	15PHYL17	80.1	80.14	79.29	79.23	-
C108	15CPH18	52.01	53.154	58.238	58.786	-
C110	15MAT11	65.66	77.87	47.36	56.35	-
C111	15CHE12	67.258	66.738	68.24	67.716	-
C112	15PCD13	62.262	64.076	62.53	59.992	-
C113	15CED14	87.23	87.23	87.23	87.23	-
C114	15ELN15	62.472	63.186	62.152	63.54	-
C115	15CPL16	79.33	82.51	82.93	81.58	-
C116	15CHEL17	81.682	81.682	-	-	-
C117	15CIV18	95.014	96.54	95.41	95.686	-
C119	15MAT21	51.31	44.61	44.08	41.47	-
C120	15PHY22	69.22	69.79	69.84	69.64	-
C121	15CIV23	58.24	61.466	58.73	58.68	-
C122	15EME24	64.524	65.26	54.288	69.718	67.767
C123	15ELE25	79.08	81.008	73.966	62.106	-
C124	15WSL26	63.3125	68.3225	59.895	70.1	-
C125	15PHYL27	77.04	76.8	77.41	77.42	-
C126	15CPH28	51.55	52.7	55.18	56.39	-
C128	15MAT21	55.96	43.96	44.35	42.31	-
C129	15CHE22	65.63	65.99	66.61	65.99	-
C130	15PCD23	57.462	59.374	58.848	54.304	-
C131	15CED24	83.79	83.83	83.95	83.85	-
C132	15ELN25	68.132	68.154	69.002	69.29	-
C133	15CPL26	78.244	81.378	81.378	80.48	-
C134	15CHEL27	79.89	79.89	-	-	-
C135	15CIV28	95.342	95.522	94.356	95.738	-

8.5 Attainment of Program Outcomes from first year courses (20)

Total Marks 18.00

8.5.1 Indicate results of evaluation of each relevant PO and/ or PSO, if applicable (15)

Institute Marks : 14.00

POs Attainment:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C101	1.67	1.67	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C102	1.51	1.04	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C103	1.26	1.53	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C104	1.60	1.60	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C105	2.467	2.001	PO3	PO4	2.677	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C106	1.77	2.68	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C107	2.46	2.46	PO3	PO4	PO5	PO6	PO7	PO8	1.96	1.96	PO11	PO12
C108	PO1	PO2	PO3	PO4	1.87	PO6	PO7	PO8	PO9	1.77	PO11	1.77
C109	1.76	1.76	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C110	2.31	1.57	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C111	1.91	1.43	1.43	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C112	1.65	1.20	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C113	2.7	1.8	1.84	0.9	1.8	PO6	0.94	PO8	PO9	PO10	PO11	2.7
C114	2.12	2.51	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C115	2.08	2.16	2.16	2.08	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C116	PO1	PO2	PO3	PO4	1.81	PO6	PO7	PO8	PO9	1.83	PO11	1.75
C117	1.86	1.86	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C118	2.06	1.59	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C119	1.40	1.60	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C120	1.57	1.57	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C121	2.554	2.119	PO3	PO4	2.752	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C122	1.86	2.78	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C123	2.47	2.47	PO3	PO4	PO5	PO6	PO7	PO8	1.92	1.96	PO11	PO12
C124	PO1	PO2	PO3	PO4	1.87	PO6	PO7	PO8	PO9	1.83	PO11	1.80
C125	2.00	2.00	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C126	2.05	1.39	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C127	1.75	1.31	1.31	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C128	1.29	0.94	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C129	2.23	1.49	1.49	0.76	1.47	PO6	0.76	PO8	PO9	PO10	PO11	2.23
C130	2.08	2.46	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C131	2.14	2.22	2.22	2.14	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C132	PO1	PO2	PO3	PO4	1.76	PO6	PO7	PO8	PO9	1.82	PO11	1.83

**PO Attainment Level**

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
Direct Attainment	1.95	1.83	1.74	1.47	2.00	0	0.85	0	1.94	1.86	0	2.01
CO Attainment	1.95	1.83	1.74	1.47	2.00	0	0.85	0	1.94	1.86	0	2.01

**PSOs Attainment:**

Course	PSO1	PSO2	PSO3
	PSO1	PSO2	PSO3

8.5.2 Actions taken based on the results of evaluation of relevant POs (5)

Institute Marks : 4.00

**POs Attainment Levels and Actions for Improvement- (2018-19)**



POs	Target Level	Attainment Level	Observations
<b>PO 1 : Engineering Knowledge</b>			
PO 1	2.2	1.95	Needs to Improvement
Action 1. Guest lectures. Action 2: Fundamental concepts were discussed in classroom periodically.			
<b>PO 2 : Problem Analysis</b>			
PO 2	2.2	1.83	Scope for improvement. Ability to identify, formulate and analyze the problems can be enhanced.
Action 1. Guest lectures.			
<b>PO 3 : Design/development of Solutions</b>			
PO 3	2.2	1.74	Scope for improvement. Design skills can be improved.
Action 1. Lab demonstrations/video presentations to design and develop solutions for problems to be arranged. Action 2. Collaborative learning by group activity, arrange activity to solve different problems to different groups and share the answers			
<b>PO 4 : Conduct Investigations of Complex Problems</b>			
PO 4	1.6	1.47	Scope for improvement. Guest lectures
Action 1. Guest lectures.			
<b>PO 5 : Modern Tool Usage</b>			
PO 5	2.2	2.00	Lack of knowledge in application of modern tools.
Action 1. Guest lectures. Action 2. Laboratory			
<b>PO 6 : The Engineer and Society</b>			
PO 6	1	0	Scope for improvement.
Action 1:Need scope on Engineering and society			
<b>PO 7 : Environment and Sustainability</b>			
PO 7	1	0.85	Scope for improvement. Awareness on sustainable environment.
Action 1.Discussion on environment and sustainability concepts by different fields of engineering			
<b>PO 8 : Ethics</b>			
PO 8	1	0	Needs to improve
Action 1:Need scope on ethics			
<b>PO 9 : Individual and Team Work</b>			
PO 9	2	1.94	Scope for improvement. Group activities can be arranged
Action 1. Encouraging students as volunteers in technical and cultural fests Action 2. Encouraging students to participate in sports events Action 3. Group assignments.			
<b>PO 10 : Communication</b>			
PO 10	2.2	1.86	Scope for improvement. Presentation and communication skills can be improved.
Action 1. English course as an extra learning is arranged Action 2: Ability to participate in group activity and communicate effectively.			
<b>PO 11 : Project Management and Finance</b>			
PO 11	1	0	Scope for improvement.
Action 1:Need scope on project Management and finance			
<b>PO 12 : Life-long Learning</b>			
PO 12	2.2	2.01	Scope for improvement. Ability to participate in group activity and communicate effectively.
Action 1. Encouraging students to participate in various co-curricular activities. Action 2. Orientation programme on interdisciplinary applications in engineering.			

#### POs Attainment Levels and Actions for Improvement- (2017-18)

POs	Target Level	Attainment Level	Observations
<b>PO 1 : Engineering Knowledge</b>			
PO 1	2.2	2.05	Needs Improvement
Action 1: Basic knowledge in all relevant subjects were refreshed during classroom teaching in order to update themselves and refreshed in subjects. Action 2: Fundamental concepts were discussed in classroom periodically.			
<b>PO 2 : Problem Analysis</b>			
PO 2	2.2	1.89	Needs Improvement
Action 1: suggestions will be given to students to refer research article available in library.			
<b>PO 3 : Design/development of Solutions</b>			
PO 3	2.2	1.90	Needs Improvement
Action 1: Students will be encouraged to participate various model exhibitions organized by other institutes.			
<b>PO 4 : Conduct Investigations of Complex Problems</b>			
PO 4	1.62	1.52	Needs Improvement
Action 1: Science model exhibition and poster exhibition conducted for first year students to develop their investigation skills.			
<b>PO 5 : Modern Tool Usage</b>			
PO 5	2.4	2.15	Needs Improvement
Action 1: organised orientation program on training & placement Action 2: Students will be advised to utilize digital library to know more about latest tools.			
<b>PO 6 : The Engineer and Society</b>			
PO 6	1	0	Needs Improvement
Action 1:Need scope on Engineering and society			
<b>PO 7 : Environment and Sustainability</b>			
PO 7	1.5	1.31	Needs Improvement
Action 1: Social awareness like green campus initiated and encouraged to participate in workshops conducted in various institutes			
<b>PO 8 : Ethics</b>			
PO 8	2	1.76	Needs Improvement
Action 1: Augmented course like Constitution and professional ethics, and human rights in the curriculum by University.			
<b>PO 9 : Individual and Team Work</b>			
PO 9	1	0	Needs Improvement
Action 1: Project teams are required by design to follow team work principles and the evaluation model necessitates each member to contribute in all aspects, Additionally teachers encourage students to participate in project exhibition.			
<b>PO 10 : Communication</b>			
PO 10	1	0	Needs Improvement
Action 1: classroom seminars in prior given topics were assigned and students were motivated to speak out fluently.			
<b>PO 11 : Project Management and Finance</b>			
PO 11	1	0	Needs Improvement
Action1: Project exhibition to be conducted by physics & chemistry department			
<b>PO 12 : Life-long Learning</b>			
PO 12	2.2	1.98	Improved Compared to last Year
Action 1: Students are encouraged towards Research and Innovation.			

### POs Attainment Levels and Actions for Improvement- (2016-17)

POs	Target Level	Attainment Level	Observations
<b>PO 1 : Engineering Knowledge</b>			
PO 1	2.2	2.04	Needs Improvement
Action 1: Basic knowledge in all relevant subjects were refreshed during classroom teaching in order to update themselves and refreshed in subjects. Action 2: Fundamental concepts were discussed in classroom periodically.			
<b>PO 2 : Problem Analysis</b>			
PO 2	2.2	1.93	Needs Improvement
Action 1: Students are given additional problems in the form of assignments and CLASS TEST Action 2: one day talk on Teaching strategies in Mathematics.			
<b>PO 3 : Design/development of Solutions</b>			
PO 3	2.2	1.84	Needs Improvement
Action 1: Planning to Organize national science day.			
<b>PO 4 : Conduct Investigations of Complex Problems</b>			
PO 4	1	0.78	Needs Improvement
Action 1: Students are encouraged to present/publish papers based on literature review and their own projects.			
<b>PO 5 : Modern Tool Usage</b>			
PO 5	2.5	2.33	Needs Improvement
Action 1: Students will be advised to utilize digital library to know more about latest tools.			
<b>PO 6 : The Engineer and Society</b>			
PO 6	1.8	1.4	Needs Improvement
Action 1: Students motivated to participate many social awareness program like "Swachh Bharath Internship camps and NSS Camps etc.			
<b>PO 7 : Environment and Sustainability</b>			
PO 7	1.68	1.31	Needs Improvement
Action 1: Social awareness like green campus initiated and encouraged to participate in workshops conducted in various institutes.			
<b>PO 8 : Ethics</b>			
PO 8	2.8	2.11	Needs Improvement
Action 1: Augmented Courses like Constitution and Professional ethics and human rights is included in the university curriculum.			
<b>PO 9 : Individual and Team Work</b>			
PO 9	3	2.835	Needs Improvement
Action 1: Advice the students to develop the mini projects as team and demonstrate the mini projects in intra/inter college technical events.			
<b>PO 10 : Communication</b>			
PO 10	3	2.835	Needs Improvement
Action 1: Language lab will be conducted from which periodical communication skill development sessions were organized. Action 2: Students will be motivated by their mentors during mentoring to participate in intra/inter college technical events/symposiums.			
<b>PO 11 : Project Management and Finance</b>			
PO 11	1	0	Needs Improvement
Action 1: Suggested the students to participate in national level technical workshops, conferences and symposiums to enhance their knowledge in recent trends and technology.			
<b>PO 12 : Life-long Learning</b>			
PO 12	2.2	1.91	Needs Improvement
Action 1: Planning to organize Induction program for first year students. Action 2: Planning to organize industrial expert talk to create awareness.			

PSOs	Target Level	Attainment Level	Observations
<b>PSO 1 : Ability to Develop the skills required for planning, analyzing &amp; designing, estimating &amp; executing the civil engineering structures</b>			
PSO 1	1	0	Not applicable
Action 1:University curriculum does not satisfy/meets PSO 1			
<b>PSO 2 : Ability to identify the soils of different nature through the geo technical investigations and providing the suitable foundation to the structures.</b>			
PSO 2	1	0	Not applicable
Action 1:University curriculum does not satisfy/meets PSO 2			
<b>PSO 3 : Ability to plan, analyze, design and to solve environmental engineering related problems.</b>			
PSO 3	1	0	Not applicable
Action 1:University curriculum does not satisfy/meets PSO 3			

### PSOs Attainment Levels and Actions for Improvement- (2017-18)

PSOs	Target Level	Attainment Level	Observations
<b>PSO 1 : Ability to Develop the skills required for planning, analyzing &amp; designing, estimating &amp; executing the civil engineering structures</b>			
PSO 1	1	0	Not applicable
Action 1:University curriculum does not satisfy/meets PSO 1			
<b>PSO 2 : Ability to identify the soils of different nature through the geo technical investigations and providing the suitable foundation to the structures.</b>			
PSO 2	1	0	Not applicable
Action 1:University curriculum does not satisfy/meets PSO 2			
<b>PSO 3 : Ability to plan, analyze, design and to solve environmental engineering related problems.</b>			
PSO 3	1	0	Not applicable
Action 1:University curriculum does not satisfy/meets PSO 3			

### PSOs Attainment Levels and Actions for Improvement- (2016-17)

PSOs	Target Level	Attainment Level	Observations
<b>PSO 1 : Ability to Develop the skills required for planning, analyzing &amp; designing, estimating &amp; executing the civil engineering structures</b>			
PSO 1	1	0	Not applicable
Action 1:University curriculum does not satisfy/meets PSO 1			
<b>PSO 2 : Ability to identify the soils of different nature through the geo technical investigations and providing the suitable foundation to the structures.</b>			
PSO 2	1	0	Not applicable
Action 1:University curriculum does not satisfy/meets PSO 2			
<b>PSO 3 : Ability to plan, analyze, design and to solve environmental engineering related problems.</b>			
PSO 3	1	0	Not applicable
Action 1:University curriculum does not satisfy/meets PSO 3			

### 9 STUDENT SUPPORT SYSTEMS (50)

Total Marks 50.00

#### 9.1 Mentoring system to help at individual level (5)

Total Marks 5.00

Institute Marks : 5.00

#### 9.1 Mentoring system to help at individual levels

The Institute is working towards enhancing the institutional culture to better serve the needs of an ever-changing and dynamic learning community. Effective mentoring begins with the faculty. When it comes to academic success and persistence, there is no substitute for a healthy relationship between faculty and students.

Mentoring and Guidance provides

- Encouraging students to discuss their ideas.
- Encouraging students to try new techniques and expand their skills.

Each faculty is assigned 15 to 20 students. The faculty monitors their progress and reports to department in-charge of counseling cell. This mentoring is for over-all development of the student. A counseling sheet is maintained by faculty, where attendance, examination marks and family details are recorded. The same is continued till the student completes his/her graduation. The periodic status will be submitted to the parents/Guardians.

**Type of Mentoring: Professional Guidance/Career advancement/Course work specific /Lab specific/Total development (Mentoring covers all types of guidance)**

No. of students per mentor: Between 15 to 20.

External Mentoring: 1. Professional Guidance

2. Career Guidance

**Non-Academic Mentoring (External Mentoring)**

**Table 9.1: Non-Academic Mentoring**

Sl.No	Type of Mentoring	Frequency of Meeting	Procedure Followed
1	Professional guidance	Every 6 months	Seminars/training/mock tests/professional guidance
2	Career advancement	Every 6 months	Conducting group discussions, debates, quiz, online tests, etc

**Academic Mentoring (Internal mentoring)**

The Institute is working towards enhancing the institutional culture to serve better, the needs of an ever-changing and dynamic learning community.

Mentoring and Guidance provides encouragement to the students as under:

- Encouraging students to discuss their ideas.
- Encouraging students to try new techniques and expand their skills.
- Reassure students of their skills and abilities to succeed.
- Teach students how to break large tasks into smaller, more manageable ones to avoid becoming overwhelmed.

Mentoring gives the extraordinary opportunity to facilitate a students personal and professional growth by sharing the knowledge what they learn through years of experience. Mentoring will also gives to the students an "inside look" at career options and guide them on skills that will improve their success.

**Mentoring Activities**

1. The interaction meeting will be conducted for departmental fresher's / new comers.
2. Mentor – Mentee meetings will be conducted periodically.
3. Mentoring also includes, encouraging students to participate in multi-faceted activities (group discussions, quiz, debate and other co curricular, extracurricular and sports activities).
4. Counselling will be done for those students having poor academic performance, as reported by the concerned class Co-ordinators / mentors in presence of their parents /guardians. Mentoring report shall be submitted monthly mentoring co-ordinators and the same will be submitted to parent cell co-ordinator.

**POLICY MECHANISM OF MENTORING SYSTEM**

**Table 9.2: Policy mechanism of mentoring system**

1	Mentors	Teaching faculty act as Mentor
2	No. of students per mentor	15 to 20
3	Frequency of meeting	Meeting conducted every month after internal assessment.
4	Parents feedback	The Parents feedback is collected after every meet by respective mentors
5	Analysis	The feedback analysis will be referred by the HOD's for corrective measures, through Head of the Institution

**9.2 Feedback analysis and reward /corrective measures taken, if any (10)****9.2 Feedback Analysis and Reward/Corrective measures taken, if any**

The feedback collection process is very important for improvement of the Institution. The faculty feedback is collected from the students every semester. This process contributes to evaluate the faculty performance for reward / corrective measures. The online feedback will be taken from the students in regular class hours and monitored by the inter department faculty.

**Average Percentage of Students who participate:** Students having attendance more than 75% are participated.

**The feedback analysis process:**

The inter department faculty collect the feedback from students online and consolidated Report generated online is forwarded to the Principals Office for further Corrective measures. The same will be sent to respective HOD's.

Grading	Points
Excellent	9.01 - 10
Good	7.01 - 9.0
Average	4.01 - 7.00
Below Average	1.00 – 4.00

The teaching performance indices are analyzed by the Principals office and the same is conveyed to the concerned.

**Basis of reward / corrective measures:**

The indices used for measuring the quality of teaching, learning and summary of the index values are mentioned below

1. Arising curiosity in the subject by linking to practical or real time applications.
2. Attitude/professionalism towards students.
3. Availability of the staff in the campus to clarify the doubts.
4. Communication skills and subject knowledge.
5. Coverage of syllabus and regularity in conducting classes.
6. Effective planning and organization of lecture contents.
7. Fairness in evaluation of IA books and assignments.
8. Guidelines for external theory examination/practice and revision of important topics.
9. Presentation of subject matter or method to teaching.
10. Response to slow learners/could your teacher inspire or make you to work hard for better results.

**System of Reward:**

Best performing faculty is rewarded by issuing a letter of appreciation. Performance rating of faculty through student feedback system is one of the factors in evaluating the annual performance and to release the annual increments.

**Corrective Actions taken:**

The faculties performing below average are trained continuously through Faculty Development Programme to improve the quality of the staff

**9.3 Feedback on facilities (5)****9.3 FEEDBACK ON FACILITIES**

Assessment is based on student feedback collection, analysis and corrective action taken.

**FEEDBACK ON FACILITIES**

A standard procedure for feedback on facilities is taken up in the college. Feedback is collected from the students on facilities available in the college such as Library facility, Internet facility, Canteen facility, Sports and Gymnastic facility Etc..

The feedback is analyzed and the necessary corrective measures are implemented after discussions with the Management.

**FOLLOWING IS THE PROCESS OF FEEDBACK ON FACILITES.**

- i) Feedback collection process
- ii) Feedback analysis
- iii) Corrective measures

**i) Feedback collection process:**

**Table 9.3.1: Details of feedback collection process**

Items	Description
Feedback collected on all facilities provided by the college.	YES
Feedback collection process	Computerized
Feedback receiver	Administrative officer / Admin manager / Academic Dean
Frequency of feedback collection	Once in a semester
Metrics used for calculation	9 to10 --- Excellent
	7 to 8.9 --- Good
	4 to 6.9 --- Average
	1-3.9 --- Weak
Purpose of comments	For improving the quality of facilities.

**FORMAT OF STUDENT FEEDBACK ON FACULTY****Questionnaires:**

1. How do you rate the Internet facility at Internet Centre?
2. How do you rate House Keeping at College Campus?
3. How do you rate Drinking Water Facility?
4. How do you rate Washroom facilities and maintenance?
5. How do you rate Sports Activities?
6. How do you rate Mentor-Mentee System?
7. Are you happy with the food served in the present canteen?
8. Are you aware of the NSS Activities in our University?
9. Interaction with the Principal.
10. Interaction with HODs.
11. How is the responsiveness of Reception?
12. Is there a Good support/interaction from Office?
13. Availability of Staff in working Hours.
14. Extra Curricular Activities.
15. Discipline in Campus

**Rating of Scale**

9 to10 --- Excellent

7 to 8.9 --- Good

4 to 6.9 --- Average

1-3.9 --- Weak

**ii) Feedback analysis:**

The feedback given by the students is consolidated and analyzed. Principal will discuss about the consolidated report with the management and come out with necessary actions.

**iii) Corrective measures:**

Corrective measures will be implemented at the college level with respect to the decision made by the management. Some of the corrective measures taken are:

- Internet facility has been provided at hostel.
- Library has been computerised.

#### 9.4 SELF LEARNING

Self-learning helps the students to develop sense of responsibility that equips with the essential attributes required for their career. Self learning helps the students in gaining the knowledge and applying to larger domains. Self learning helps better understanding of the discipline.

Facilities, Materials and Scope for self learning

- E-learning
- Technical Talks
- Workshops
- Webinars
- Industrial Tour
- internship
- Project Exhibitions
- MOOC certificates

**E-learning details:**

**Table 9.3: E-learning details**

Sl No	Facilities	Information Resources
1	Digital Library	Notes, Question Papers, Manual Solutions etc
2	VTU Edusat	CD's available for all the subjects
3	Language Lab	Communication skills, vocabulary, phonetics etc.
4	NPTEL online course	Available Online
5	IIT Bombay -X	FDP101X ,SKANI 101X ,FDP 201 X, ET611TX , CS101.1X ,ET702X-MOOC ,SKVIZ101X .
6	TEACHING SKILLS	Available Online
7	Professional activities	Available Online
8	Soft skills	Available Online
9	Work place communication	Available Online
10	English for oral communication	Available Online
11	Financial literacy	Available Online
12	Handling large project	Available Online
13	NITTTR	Available Online
14	WEBINAR	Available Online
15	E-SHIKSHANA	Available Online

**MOOC:**

A massive open online course is an online course aimed at unlimited participation and open access via web. In addition to traditional course materials such as filmed lectures, readings and problem sets, many MOOCs provide interactive user forums to support community interactions between students, professors and teaching assistants (TAs). MOOCs are a recent and widely researched development in distance education which was first introduced in 2008 and emerged as a popular mode of learning in 2012.

Learning beyond syllabus and creation of facilities for self-learning is to make the students well-verse in all the directions. The format for this system is as specified below.

**CONTENTS BEYOND SYLABUS**



RYMEC supports for students to learn the subjects in a broader way so as to inculcate the skills of creativity, applying domain knowledge for practical problems and to improve the quality of self-learning. Contents beyond the syllabus are given to students by respective subject teachers in the form of:

- Case Studies
- Mini Projects
- Assignments

### 9.5 Career Guidance, Training, Placement (10)

Total Marks 10.00

Institute Marks : 10.00

#### 9.5 Career guidance, Training and Placement

##### CAREER GUIDANCE

**Career guidance for engineering students** is a must so that graduates can discover their strengths and weaknesses before venturing out into the highly competitive world, some Precautionary as well as career-boosting measures need to be taken by graduates. The Students are guided by mentors. and also career guidance program is conducted by companies like

- Qtpi Robotics,
- Elements 14,
- TCS.

iii) Career Development workshop is conducted by the Resource Persons Mr. Prashanth Rao Social Entrepreneur. (President Sudiksha Charitable Trust), Mr. H. C. Ravi Shankar Deputy General Manager Quick Silver Pvt Ltd. Mr. Madhu Kumar Orientation Program on Software engineer Tarsha systems.

iv)TCS Bangalore team conducted career guidance program on **Industry 4.0 and Employability Skills**.

v) technical session conducted on“ **Scope of Date Analytics**”.

vi)International Student Exchange Program (Young Ambassador Program) on “**Design Thinking Workshop**” the students from Denmark, United Kingdom (U K), Iceland,germany,Belgium,Austria and Netherlands

SL.NO	ORIENTATION PROGRAM	RESOURCE PERSON/COMPANY
1.	Career opportunity for BE students in Japanese companies	Silver pack Globle, Bangalore
2.	Seminar on Study abroad	VideshConsultz, Bangalore
3.	Seminar on “ Role of BE/MBA Students in Banking and insurance sector	Bret Solutions Pvt Ltd, Bangalore
4.	Technical talk on Cryptography and IT Employability	TCS, Bangalore
5.	Orientation Program on abroad Studies	Manya Institute, Bangalore
6.	Orientation Program on GATE examination	ACE Engineering Academy, Hyderabad
7.	Orientation Program on	Qspiders, Bangalore

#### TRAINING AND PLACEMENT CELL

Campus training and placements play a major role in shaping up the career goals of students. To cater this, an independent Training and Placement Cell is in function in the institute since 2001. The Training and Placement Cell is headed by Concerned Officers and supported by Departmental co-ordinators. The vision of the training and placement cell is “**Transforming every student – an employers choice**”. Our mission is “Develop the students to face global competitive world with confidence and attain desired placement”. Our industry partners are TCS, JSW. Our Trusted recruiters are TCS, HCL, Emphasis, IGATE, Cigital, SLK Software Services, Advanced electronics Ltd, Global Edge, Tech Mahindra, L&T, Accenture, Mind Tree, JSW, Kirloskarand many more.

##### Pre Placement Training:

During campus placements, recruiters test for an array of skill sets in their potential employees. In addition to being knowledgeable in their core subjects, students should also possess a great aptitude and soft skills. Hence pre placement training is necessary. The Pre placement training has been conducted by **Universal Education Bangalore, Bizotic, Bangalore GTT, Pune and Ethnus, Bangalore** the contents of Pre Placement training are mention as below.

##### CONTENTS OF PRE-PLACEMENT TRAINING

###### Quantitative aptitude

- Basic math
- HCF,LCM and simple and compound interest
- Data sufficiency 1

- Data sufficiency 2
- Analytical Reasoning
- Logical Reasoning 2
- Progression
- Permutation and Combination
- Ratios and Proportion
- Averages and Blood Relations
- Percentages, Profit and loss
- Speed, time and distance
- Time and Work
- Logical Reasoning 1
- Data Interpretation 1
- Data Interpretation 2

#### Verbal aptitude

- Parts of speech & Vocabulary Building
- Synonyms, Antonyms
- Analogies
- Sentence Completion Sentence Correction & Incorrect sentence
- Reading comprehension 1
- Reading comprehension 2
- Error detection

#### Soft skills

- Group discussion
- Personal interviews
- Resume building
- Grooming

### 9.6 Entrepreneurship Cell (5)

Total Marks 5.00

Institute Marks : 5.00

#### 9.6 Entrepreneurship cell

EDC is headed by Dr.H.GIRISHA, Professor- Department of Computer Science and Engineering with a team of faculty coordinators from other departments of the college.

The goal of EDC is to assist students, entrepreneurs, including Institutes' faculty, with pre-venture, start-up or existing business with financial management, marketing, technology and product development, commercialization issues, to understand the employability options, opportunities to control unemployment and to create better opportunities for youngsters.

Working in collaboration with New Age Incubation Network (NAIN) Government of Karnataka and District Industry Centre – DIC, BALLARI and MSME-Incubation Centre – New Delhi. EDC has conducted various activities for the college students creating and promoting entrepreneurship awareness in the campus.

#### Recent activities carried out at college premises.

1. VTU TEQIP 1.3 Sponsored (STTP) 3 day short term training program for students Program on Employability & Entrepreneurial Skills On 6th - 8th September 2019 In Association with Visvesvaraya Technological University Belagavi, Karnataka Aryabhata Knowledge University Patna, Bihar Biju Patnaik University of Technology Rourkela, Orissa
2. BOOT CAMP in association with K-Tech and Department of IT-BT, Government of Karnataka on 29th August 2019. Many students presented their ideas during above said activities.

### 9.7 Co-curricular and Extra-curricular Activities (10)

Total Marks 10.00

Institute Marks : 10.00

#### 9.7 CO-CURRICULAR AND EXTRA- CURRICULAR ACTIVITIES

##### CO-CURRICULAR ACTIVITIES

**I.VIDHARA-TECH FEST** conducted annually by CSE-FORUM by CSE staff and students, for all the basic degree students and technical degree students. The various events conducted are both technical like debugging,coding,quiz etc and nontechnical event alike dancing,singing,video games, movie making etc.

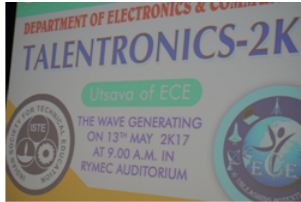


CSE-FORUM also has many other activities to improve the students all round personality development skills apart from prescribed syllabus. They are mentoring activities on technical skills. Improving memory skills and how to face the exams through blended learning techniques.

- Python programming skills
- How to mentally strong/Real-life ethical values through videos.
- Career development through workshops
- Soft skill programmes in the class room

**II. The department of ECE having forum named has TALENTRONICS and objectives are:**

- To encourage students to build their academic skills by organizing events such as paper presentation, quiz, circuit rigup.
- To encourage students to build their extra-curricular activities by organizing events such as pencil sketch, cooking without fire, cultural programs, sports events such as basket ball, cricket.
- To build leadership skills & make them work in a group by involving students as volunteers to organize the events.



**III. Dept of Mechanical facilitate a techno cultural democracy for the students the department has inaugurated students forum with the title "MECH-TANTRIKA"**

**IV) Department of EEE having forum named has "VIDYUTSAV"** under this forum , the events like Technical Talk, photo hunt, Brainstorming Activities were conducted. also Competitions like Logo Design, Rangoli and Skits were organized

**V) CIVIL-TECH FEST** conducted annually by CIVIL-FORUM by Civil Engineering staff and students, The CIVITECH-2018 was organized with an intent of communicating to the society by bringing sentient and exposure about the recently developed construction materials and to accomplish superior quality in every day Civil Engineering Construction.

**ACTIVITIES AT TECH FEST** • Technical paper Presentation • Poster making • Movie making • Model display & Making • Essay writing • Photography • Quiz • Technical Debate • CAED drafting • Sketching and painting • Technical Treasure Hunt.



### I. NSS-UNIT RYMEC

NSS UNIT of RYMEC is headed by Prof. S. Kotresh of EEE dept. NSS UNIT of our college is functioning from many years and organizing several useful programs for the society. The programs like

- Voluntary Blood donation camps- around **1061 units of blood** were collected during last 3 camps organized.
- Tree plantation
- Health education & Health orientation programs
- Essay writing- Drawing competitions
- Free medical and Health check up camps,
- Helping towards flood affected people etc.

#### Objective of NSS

- Creating awareness of social service for the students
- Motivating the students to serve for society in tree plantation, blood donation etc.,
- Not only education also promoting the students towards moral ethics, healthy and sound thinking about society.
- Helping for the poor and disabled people by organizing health orientation programs.
  - Outcome of the programs:
  - From our NSS UNIT many patients, poor and disabled people were benefited.

### II.AICTE SPONSORED WORK SHOP On Sansad Adarsh Grama Yojana

Dr.K Veeresh, Principal, RYMEC and Dr.Kotresh,S & Prashanth Keni of NSS UNIT, RYMEC participated in AICTE sponsored workshop on SANSAD ADARSH GRAMA YOJANA (SAGY) at Nagarjuna College of Engineering & Technology, Bengaluru on 25<sup>th</sup> & 26<sup>th</sup> of November-2017.



### SAANSAD ADARSH GRAM YOJANA

M.P. Constituency: Ballari

Member of Parliament: Sri B. Sriramulu (during 2017)

Village : Tambrahalli: Taluk: H.B. Halli.

NSS UNIT: Rao Bahadur Y.Mahabaleswarappa Engineering College

## Brief Report:

We the NSS Unit of RYMEC visited the Tambrahalli village (120KM from Ballari) which was declared as Saansad Adarsh Gram Yojana from the honorable Member of Parliament Sri B.Sriramulu. In this visit, we collected the information related to this program from the villagers and we organized some orientation programs Viz., Solar energy awareness, water conservation, Rain water harvesting, Global warming awareness to the people. The programs were organized in Kinnal parammambe Gurusiddappa high school, Tambrahalli village.



## II) SPORTS -UNIT RYMEC

Sports unit of RYMEC is headed by Mr.Vijaya Mahantesh Physical director of our college, college sports unit is functioning from many years and organizing several competitions like Athletic meet, various sports-games for MANDARA (college day celebrations) and encouraging the students to participate in the university / national / international level competitions. Prizes/awards will be distributed in MANDARA celebrations.

**Sports unit of RYMEC is having the following facilities:**

1. College sports ground for Athletics
2. Indoor-stadium for shuttle badminton
3. Table tennis
4. Foot ball ground
5. Basket ball court
6. Carom
7. Chess.
8. Throw ball court
9. Volley ball court

## List of Students participated in National and International Level

SL.No	Details
01.	<b>Shiva kumar STM MECHANICAL</b> Department Selected for Indian Throw ball team for Indo-Bangladesh International Throw ball Championship held at Chhattisgarh and won the tournament. <b>Shiva kumar STM MECHANICAL</b> Department Selected for Indian Throw ball team for Indo-Thailand International Throw ball series held at Bangkok Thailand JUNE 2017, and won the tournament.
02.	<b>Chandrakala T CSE</b> Department Selected for Indian Throw ball team for Indo-Thailand International Throw ball series held at Bangkok Thailand JUNE 2017, and won the tournament. <b>Chandrakala T CSE</b> Department Selected for Indian Throw ball team for Indo-Sri lanka International Throw ball championship held at Kagalu Srilanka NOV 2017,and won the tournament.
03.	<b>Aruna kumari IPE</b> Department selected for Indian Throw ball team to participate at Indonesia
04.	<b>PRASHANTH KUMAR H MECHANICAL</b> Department Selected for VTU Hockey team Inter University tournament held at Bangalore university. Bangalore, 2018.
05.	<b>LAXMIKANTH N. CIVIL</b> Branch .Selected for VTU Hockey team Inter University tournament held at Bangalore university. Bangalore, 2018.

06.	<b>GIRISH KM .</b> MECHANICAL Department. Selected for VTU KHO-KHO team Inter University tournament held at Mysore University. Mysore 2018.
07	<b>B Balaji</b> ECE Dept has won BRONZE MEDAL in ASIAN LEVEL KARATE CHAMPIONSHIP held at Jaipur, Rajasthan on April 2018 among 48 countries participated and he is been selected for WORLD KARATE CHAMPIONSHIP of 2019 among 40+ countries .
08	<b>H Raja</b> has participated in the 1st anniversary Indo-Srilanka kenryukan karate championship -2018 held at saumiya moorthy thondaman auditorium holy trinity science college,HAWA ELIYA,NUWARA ELIYA .on Saturday 15th september 2018 and won first place in the KATA (above 15 years) event.

#### Events organized by RYMEC, Ballari

VTU Inter Zone Hockey tournament ,

VTU Zone volley ball tournament,

VTU Kalaburagi Zone Hand ball tournament,

VTU Kalaburagi Zone basket ball for men tournament,

VTU Inter-Zone basket ball for men tournament,

VTU Inter -Zone cricket tournament,

VTU Kalaburagi Zone cricket tournament,

VTU Kalaburagi Zone KHO-KHO tournament.

#### iii) Youth Red Cross – Unit RYMEC

Youth Red Cross – Unit RYMEC is headed by Prof. A. Sharanabasappa of EEE dept. our college Youth Red Cross – Unit is functioning from last two years.

#### About YRC

Youth represent a substantial part of the membership of Red Cross for its humanitarian commitment. Young volunteers can make a significant contribution to meeting the needs of the most vulnerable people within their local communities through Red Cross youth programme. This has been designed to involve young people as much as possible in the movement and its activities not only as workers and beneficiaries, but as partners in management. The programme focuses on the following areas:

Promote life and health through training and education on safety and primary health care. Encourage community service through training and education. Disseminate the seven fundamental principles of Red Cross and Red Crescent movement through activities that encourage the Red Cross ideals Promote international friendship with activities that cultivate a humanitarian spirit Technical support in the development of youth programmes, fund-raising, identification of material and human resources.

#### OBJECTIVES

1. to serve as an information centre to the college community about any features of the Red Cross
2. to enable the college community to obtain Red Cross services available to students
3. to serve as a focal point to which incoming Red Cross services can be coordinated
4. to serve as an outlet for the College Youth Red Cross volunteer services in the community
5. to provide an atmosphere towards the all round development of its members

#### ACTIVITIES OF YRC

1. Orphanage Visits
2. Blood Donation camp
3. Awareness Programmes and seminars
4. First Aid Training

#### IV) LEAD activity

LEAD team of RYMEC is headed by **Prof. JAGADEESH.G.M of CSE dept.** our college LEAD team is functioning from last two years.

#### ABOUT LEAD

The Leaders Accelerating Development (LEAD) Program of Deshpande Foundation, Hubballi, Karnataka fosters innovative and entrepreneurial thinking within college students by exposing them to social issues and by encouraging them to volunteer their time and effort into the community. LEAD ignites their latent talent to come up with creative solutions. LEAD is an incubator where innovation meets implementation, knowledge meets experience, social issues meet solutions and efforts meet impact.

#### v) CULTURAL - UNIT RYMEC

**CULTURAL - UNIT RYMEC** of RYMEC is headed by **Prof. Netravathi of EEE dept. college CULTURAL - UNIT** is functioning from many years and organizing several competitions like : painting, photography, movie making, debate, essay writing, cooking without firing, Rangoli, mehendi, yogasana, best out of waste, cartooning etc. for MANDARA(college day celebrations). Our college is motivating the students to participate in university level cultural competitions. Prizes/awards will be distributed in MANDARA celebrations.

**VI) SVEEP (Systematic Voters Educational and Electoral participation)**

Aims at creating awareness about the moral voting and to ensure that all young voters are actively involved in the AWARENESS ACTIVITY by creating ELC(Electoral club) at the college level.

**10 GOVERNANCE, INSTITUTIONAL SUPPORT AND FINANCIAL RESOURCES (120)**

**Total Marks 117.00**

**10.1 Organization, Governance and Transparency (40)**

**Total Marks 40.00**

**10.1.1 State the Vision and Mission of the Institute (5)**

**Institute Marks : 5.00**

<b>Vision :</b>
To Produce Professionally Excellent, Knowledgeable, Globally Competitive, Socially Responsible Engineers and Entrepreneurs
<b>Mission :</b>
M1: To provide quality education in Engineering and Management.
M2: To establish a continuous Industry Institute interaction, Participation and Collaboration to contribute skilled Engineers.
M3: To develop human values, social values, entrepreneurship skills and professional ethics among the technocrats.
M4: To focus on innovation and development of technologies by engaging in cutting edge research areas.

**10.1.2 Governing body,administrative setup,functions of various bodies,service rules, procedures, recruitment and promotional policies (10)**

**Institute Marks : 10.00**

**The Governing Body:**

Governance is the key activity that connects between the management, staff, students and the community. The governing body of Institution is a legal structure responsible for the overall functioning of the college. In general, it is responsible for the Quality of service (QoS) the college offers to the student and other local community and society, as well as the college annual budget, health and strategic direction. Institution has a governing body in place wherein the members are drawn from distinguished cross-sections of the society as shown in Table 10.1.

**Table 10.1 Structure of Governing Body**

Sl. No.	Name	Designation	Occupation
1.	Sri Udeda Basavaraj	President	Advocate
2.	Sri J.S. Basavaraj	Chairman, RYMEC	Advocate
3.	Sri T.Kotrappa	Secretary	Retd. Dep. Director Kannada and Cultural Department
4.	Sri Kolar Mallikarjuna Gouda	Treasurer	Retd. Superintendent
5.	Dr. Kuppagal Veeresh	Member - Secretary	Principal, RYMEC, Bellary
6.	Dr. Anadinni	VTU Nominee	Principal, Vijaya Vittal College, Bangalore
7.	DTE Nominee, DTE Bangalore	Director, DTE	Director, DTE Bangalore
8.	AICTE Nominee (SWRO), Bangalore	Regional officer	Regional officer-AICTE Bangalore
9.	Sri H.R. Lal	Industrial Representative	Senior Vice-President (HR & Admin) JSW, Toranagallu, Bellary

**The Administrative Setup:**

Institute believes in dedicated work culture with love and affection to each and every stake-holder. Involvement of each and everyone in the decision-making and transparency associated therein also form the important features of the work culture. A core team of 24 to 28 members lead the processes in the institute. The administrator list is given below.

**Table 10.2 List of Administrators**

Sl. No.	Name	Designation	Responsibility
1.	Sri J.S. Basavaraj	Chairman, RYMEC	Administration
2.	Dr. Kuppagal Veeresh	Principal	Administration & Mechanical Research Centre
3.	Dr. Savita Sonoli	Vice-Principal, Professor & HOD,ECE	Academic Work
4.	Dr. T. Hanumantha Reddy	Vice-Principal, , Professor & HOD,CSE	Admission Head
5.	Dr. Girisha H	Professor,CSE	Dean Academics.
6.	Dr. B Sreepathi	Professor & HOD Dean Examinations	EMS Coordinator, VTU Examinations, Network Maintenance, Digital Library, Online Placement Test, Consultancy Work for online Test.
7.	Dr. Hiregoudar Yerrenagoudaru	Professor & PG Coordinator	NBA-Co-ordinator and Dean R & D at Institute Level,
8.	Dr. C Thotappa	Professor & PG Coordinator	Dept NBA Co-ordinator.
9.	Dr. H.M.Somasekharaiah	Professor & PG Coordinator	Academic Work
10.	Dr. H M Mallikarajuna	Professor & HOD,Civil	Departmental Academic Work, Consultancy Work.
11.	Dr. Kori Nagaraj	Professor & HOD,Mech	Departmental Academic Work
12.	Sri. Shambulingana Gouda	Assistant Professor	Electrical Maintenance
13.	Dr. A Thimmana gouda	Professor, MBA Co-ordinator	Departmental Academic Work
14.	Dr. Phakirappa Jeevargi	Professor & HOD,Maths & 1 <sup>st</sup> Year Coordinator	Departmental Academic Work, Dean (Academic & Student Welfare for first year).
15.	Dr. Hiremath Suresh Babu	Professor & HOD,Chem	Departmental Academic Work
16.	Dr. N M Nagabhusan	Professor & HOD,Phy	Research Coordinator(Physics)& NIRF Coordinator
17.	Dr. Veeragandharaiah Swamy	Professor	IQAC Coordinator
18.	Smt. Rakhee Patil	Associate Professor	Departmental Academic Work
19.	Sri. Gururaj K K	Assistant Professor & Placement Officer	Training & Placement
20.	Dr. S. G. Anuradha	Associate Professor	RYMEC Website Coordinator
21.	Sri. S. Kotresh	Associate Professor	NSS Coordinator
22.	Sri. Sharanabasappa Aladalli	Asst. Professor	Red Cross Co-ordinator
23.	Sri Khaja Mouinuddin	Asst. Professor	AISHE Co-ordinator
24.	Smt. Sridevi S Malipatil	Asst. Professor	Girls Hostel Warden
25.	Sri. K.M. Shiva Prasad	Asst. Professor	Boys Hostel Warden



26.	Smt. Rohini H.M	Asst. Professor	Girls Hostel Warden
27.	Sri. Phanindra Reddy	Asst. Professor	Boys Hostel Warden
28.	Smt. Chinna V Gowdar	Asst. Professor	EDUSAT Co-ordinator
29.	Sri Sridhar Belagi	Asst. Professor	A-View Co-ordinator
30.	Sri Vishwanath Reddy	Librarian	Library

**Service Rules:**

Service rules are constituted by V.V Sangha and mentioned in “ V.V Sangha Institution service Manual”.

**Recruitment Procedure:**

- The approval to the required posts for various departments as per statutory norms is taken from the Governing council and notification in the news papers, to invite applications as per AICTE norms.
- After receiving the applications, scrutinizing and short listing of eligible candidates is done on merit basis for various departments.
- Panel of experts comprise of VTU/DTE/AICTE/Industrial Nominee, Principal, HOD, subject expert will interview the eligible candidates.
- The selected candidates are appointed and orders are issued.
- Appointed Candidates should report to the duty on or before the given time.

**Procedures and Promotional Policies:**

- Policies regarding promotion are as per AICTE.
- Additional increments are given to faculty who excel in academics and research.

**Functions of Various Bodies:**

**Table 10.3 Governing Council and its Functionalities**

Position	Functions
Governing Council	<ul style="list-style-type: none"> <li>◦ Frame directive principles and policies</li> <li>◦ Amend and approve policies from time to time</li> <li>◦ Approve budgets</li> </ul>
Chairman	<ul style="list-style-type: none"> <li>◦ Frame directive principles and policies.</li> <li>◦ Amend and approve policies from time to time</li> <li>◦ To look after the overall development of institute</li> <li>◦ Mobilize external resources to strengthen the institute</li> <li>◦ Plan &amp; provide for necessary facilities / equipment for development.</li> </ul>
Principal	<ul style="list-style-type: none"> <li>◦ Design &amp; define organization structure.</li> <li>◦ Delegates responsibilities of various positions in the organization</li> <li>◦ Ensure periodic monitoring &amp; evaluation of various processes &amp; sub- processes</li> <li>◦ Ensure effective purchase procedure</li> <li>◦ Define quality policy and objectives</li> <li>◦ Conduct periodic meeting of various bodies such as Governing Council, Women’s Grievances Redressal Committee etc.</li> <li>◦ Manage accounts and finance</li> <li>◦ Employee recruitment process</li> </ul>
Vice- Principals	<ul style="list-style-type: none"> <li>◦ To discharge routine duty of Principal during absence of Principal</li> <li>◦ Annual Magazine</li> <li>◦ Resource Provision</li> <li>◦ Transport</li> <li>◦ Housekeeping including hostels</li> <li>◦ Prepare and execute academic calendar</li> <li>◦ Oversee the teaching-learning process</li> <li>◦ Carry out result analysis and submit corrective measures to Principal</li> <li>◦ Initiate supplementary teaching measures</li> <li>◦ Co-curricular activities</li> <li>◦ Formation of student council</li> <li>◦ Cultural activities</li> <li>◦ Sports activities</li> <li>◦ Student discipline</li> <li>◦ Student health care</li> </ul>

Head of the Departments/ P.G Coordinators	<ul style="list-style-type: none"> <li>◦ Plan and execute academic activities of the department</li> <li>◦ Maintain discipline and culture in the department</li> <li>◦ Maintain the department neat and clean</li> <li>◦ Pick and promote strengths of students / faculty / staff</li> <li>◦ Monitor academic activities of the department</li> <li>◦ Propose Department Budget</li> <li>◦ Maintain records of departmental activities and achievements</li> </ul>
Administrative Officer	<ul style="list-style-type: none"> <li>◦ Propose admission policy</li> <li>◦ Arrange campaign</li> <li>◦ Execute the admission process</li> <li>◦ Design and print admission brochure</li> <li>◦ Maintain and update college website</li> <li>◦ Maintain softcopy of photographs</li> <li>◦ Publicity of events</li> </ul>
Training and Placement Officer	<ul style="list-style-type: none"> <li>◦ Liaison with industry</li> <li>◦ Identify and provide for training needs of students</li> <li>◦ Arrange campus interviews</li> <li>◦ Proposing annual T &amp; P budget</li> </ul>
Superintendent-(Establishment, accounts, admissions)	<ul style="list-style-type: none"> <li>◦ Corresponding with AICTE, DTE, VTU, etc</li> <li>◦ College roster</li> <li>◦ Service Books</li> <li>◦ Faculty personal files</li> <li>◦ Recruitment process</li> <li>◦ Maintain minutes of meeting</li> <li>◦ Co – ordinate day to day activities of office</li> <li>◦ AICTE, DTE, VTU, etc committee preparation</li> <li>◦ Annual College budget</li> </ul>
Librarian	<ul style="list-style-type: none"> <li>◦ Plan and execute modus operandi of routine activity of the library</li> <li>◦ Plan and propose expansion / development</li> <li>◦ Maintain library discipline and culture</li> <li>◦ Prepare annual budget for library</li> </ul>
Alumni Association	<ul style="list-style-type: none"> <li>◦ Arrange periodic meetings of student council</li> <li>◦ Ensure alumni registration</li> <li>◦ Prepare alumni news letter</li> <li>◦ Arrange annual alumni meet (“ Apoorva Milana ” )</li> <li>◦ Proposing annual budget</li> </ul>
Director of Physical Education	<ul style="list-style-type: none"> <li>◦ Ensure smooth conduct of sports</li> <li>◦ Ensure proper use of gymnastics</li> <li>◦ Purchasing of sport items</li> <li>◦ Encourage students to participate in zonal tournaments</li> <li>◦ Creation and upkeep of sports facilities</li> <li>◦ Proposing annual budget</li> </ul>
Student Professional Activities	<ul style="list-style-type: none"> <li>◦ Organize events through students professional societies / chapters</li> <li>◦ Encourage student participation</li> <li>◦ Publication of technical magazine and news letters</li> <li>◦ Record of student participation and achievements in Co-curricular and extra – curricular activities</li> </ul>

10.1.3 Decentralization in working and grievanceredressal mechanism (10)

10.1.3. Decentralization in working and grievance redressal mechanism

Decentralization in working

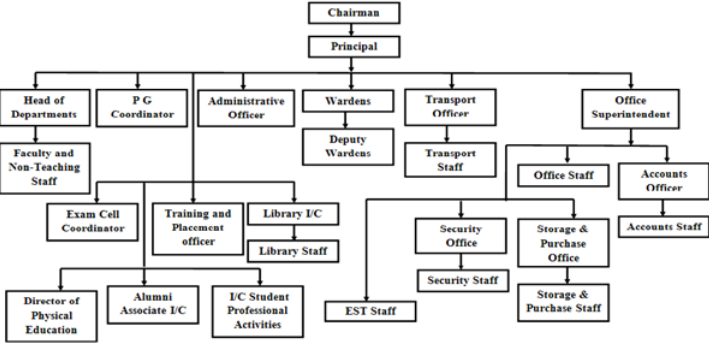


Fig 10.1 Decentralized administration

Grievance Redressal Cell

The function of the cell is look into the complaints lodged by any student if any and then judge its merit. The grievance cell is also empowered to look into matters of harassment. Anyone with a genuine grievance may approach the department members in person or in consultation with officer in-charge student's grievance cell. In case person is unwilling to appear in self, grievance may be dropped in writing at the letter box/suggestion box of the grievance cell at administrative block.

Process for disposal of Grievances

### Process for disposal of Grievances

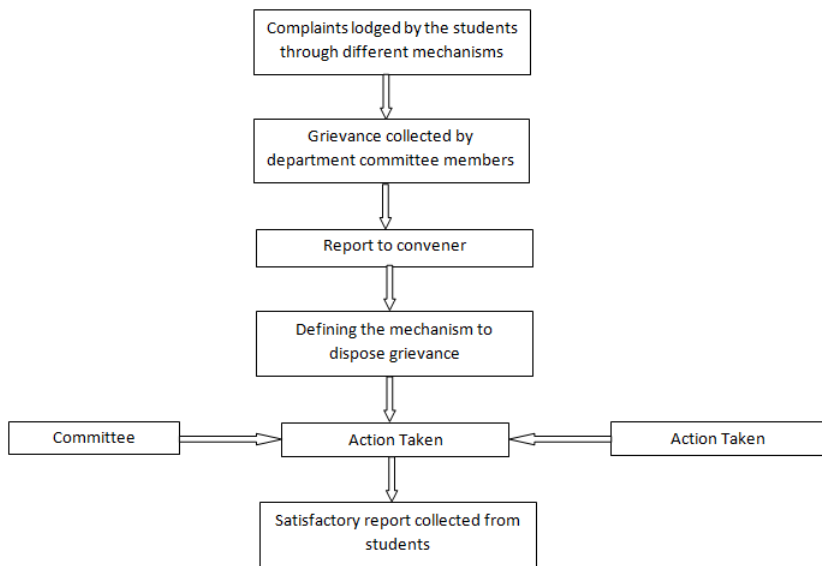


Fig 10.2 Grievance Disposal Mechanism

Table 10.4 Central Grievance Redressal Cell Committee

Sl.No	Name of the Faculty	Designation	Department	Role	Contact Number
1	Dr.Prabhavathi.S	Professor	E&CE	Convener	8105289789
2	Dr.Kotresh.S	Associate Professor	EEE	Member	9986275325
3	Mr.A.M Shivaprakash Swamy	Assistant Professor	Mechanical	Member	9036900991
4	Mrs.Manjula Patil	Assistant Professor	ISE	Member	9986413377
5	Mr.Sharanagouda.V.Patil	Assistant Professor	E&CE	Member	9980376126
6	Mr.ShivaKumar	Assistant Professor	CSE	Member	9449556693
7	Mr.Sagar	Assistant Professor	Civil	Member	9731433646
8	Mr.Prabhakar Meti	Assistant Professor	Mathematics	Member	9036550309

### Anti-Ragging Committee

- The following team members are informed to act members of Anti-Ragging group.
- Group members are informed to make surprise visits as per the schedule given and one of team members are requested to write a brief report after inspection.
- These groups are formed to prevent and curb the menace of Ragging.

Table 10.5: Anti Ragging Committee

Sl.No	Name of the Member	Designation	Department	Role	Contact Number
1	Dr. B.Doddabasavana Goud	Professor	EEE	Convener	9449171271
2	Dr.D.Sai Madhavi	Associate Professor	CSE	Member	9945829150
3	Sri.M.R.Vijaykumar	Associate Professor	Civil	Member	9886893258

4	Sri.Manjunatha H.M	Associate Professor	Mathematics	Member	9481709495
5	Smt.K.R.Bhagya	Assistant Professor	Physics	Member	8762707799
6	Sri.Vasanth Kumar	Police Sub-Inspector	Police	Member	
7	Sri.S.M.Sanna Basaiah	Parents/Guardian	Rtd. Health Inspector	Member	
8	Sri.M.Venu Gopal	Parents/Guardian	Govt.Official	Member	

**Table10.6 : Anti Ragging Squad**

SL.No	Name of the Member	Designation	Department	Role	Contact Number
1	Sri.Shridhar Bilagi	Assistant Professor	E&CE	Member	8105828383
2	Sri.Adhana Gouda	Assistant Professor	Civil	Member	9972612107
3	Sri.K.Phanidra Reddy	Assistant Professor	E&CE	Member	9241220917
4	Sri.Prabhakar Meti	Assistant Professor	Mathematics	Member	9036550309
5	Sri.S.P.Jagadeesh	Associate Professor	Mechanical	Member	9481716642

**Table10.7: Monitoring Cell on Ragging**

SL.No	Name of the Member	Designation	Department	Role	Contact Number
1	Sri. K.Raghavendra Prasad	Associate Professor	EEE	Member	9448035570
2	Sri.B.Veeresh	Associate Professor	Mathematics	Member	9449632718
3	Sri.Khaja Mouinuddin	Associate Professor	E&CE	Member	8105263354
4	Mrs.Sridevi Mali Patil	Assistant Professor	CSE	Member	9008055312
5	Mrs.Rohini.H.M	Assistant Professor	E&CE	Member	9902502026

**Table10.8: Committee of wardens**

SL.No	Name of the Member	Designation	Department	Contact Number
1	Sri.K.M.Shivaprasad	Asst. Professor & Warden of GN Boys Hostel	CSE	7899964163
2	Sri.Phanidhar Reddy	Asst. Professor & Warden of Campus Boys Hostel	E&CE	9241220917
3	Mrs.Sridevi Mali Patil	Asst. Professor & Warden of WW Hostel	CSE	9008055312
4	Mrs.Rohini.H.M	Asst. Professor & Warden of Gandhinagar Girls Hostel	E&CE	9902502026

**10.1.4 Delegation of financial powers (10)**

Institute Marks : 10.00

**10.1.4. Delegation of financial powers**

Financial powers are delegated/authorized to Principal to spend up to Rs. 1,00,000(One Lakh Rupees) and the HOD's of all the departments of this Institute are also authorized to spend up to Rs. 25,000(Twenty Five Thousand Rupees) for academic purposes.

**10.1.5 Transparency and availability of correct/unambiguous information in public domain (5)**

Institute Marks : 5.00

**Dissemination and Availability of institute/program specific information through the web:**

The institute has hosted its own website which is updated as and when required. The institute and programme specific information is made available to all aspirants through the web-site.

The web-site URL is: [www.rymec.in](http://www.rymec.in) (<http://www.rymec.in>)

**10.2 Budget Allocation, Utilization, and Public Accounting at Institute level (30)**

Total Marks 27.00

**Summary of current financial year's budget and actual expenditure incurred (for the institution exclusively) in the three previous financial years**

Total Income at Institute level: For CFY,CFYm1,CFYm2 & CFYm3

CFY : (Current Financial Year),

CFYm1 : (Current Financial Year minus 1),

CFYm2 : (Current Financial Year minus 2) and

CFYm3 : (Current Financial Year minus 3)

**Table 1 - CFY 2018-2019**

Total Income 181956393				Actual expenditure(till...): 178111619			Total No. Of Students 2565
Fee	Govt.	Grants	Other sources(specify) Other Sources	Recurring including salaries	Non Recurring	Special Projects/Anyother, specify	Expenditure per student
166855086	36000	63500	15001807	169149356	8962263		69439.23

**Table 2 - CFYm1 2017-2018**

Total Income 210284966				Actual expenditure(till...): 193707423			Total No. Of Students 2590
Fee	Govt.	Grants	Other sources(specify) Other Sources	Recurring including salaries	Non Recurring	Special Projects/Anyother, specify	Expenditure per student
174679277	38451	1000000	34567238	177751819	15955604		74790.51

**Table 3 - CFYm2 2016-2017**

Total Income 185014727				Actual expenditure(till...): 198848544			Total No. Of Students 2966
Fee	Govt.	Grants	Other sources(specify) Other Sources	Recurring including salaries	Non Recurring	Special Projects/Anyother, specify	Expenditure per student
165697193	59000	0	19258534	177580156	21268388		67042.66

**Table 4 - CFYm3 2015-2016**

Total Income 184380992.93				Actual expenditure(till...): 239049215			Total No. Of Students 2944
Fee	Govt.	Grants	Other sources(specify)	Recurring including salaries	Non Recurring	Special Projects/Anyother, specify	Expenditure per student
164726847	0	0	19654145.93	174506460	64542755		81198.78

Items	Budgeted in 2018-2019	Actual Expenses in 2018-2019 till	Budgeted in 2017-2018	Actual Expenses in 2017-2018 till	Budgeted in 2016-2017	Actual Expenses in 2016-2017 till	Budgeted in 2015-2016	Actual Expenses in 2015-2016 till
Infrastructure Built-Up	3000000	2751639	12500000	11670452	12500000	9651979	30000000	28541462
Library	4000000	2414111	4000000	3039712	4000000	3207796	5000000	3782128
Laboratory equipment	5000000	4225128	10000000	3777440	15000000	10006429	35000000	33584020
Laboratory consumables	500000	415132	1000000	363180	1000000	928958	1000000	561566
Teaching and non-teaching staff salary	130000000	128157804	130000000	128768357	130000000	126835905	130000000	122148206
Maintenance and spares	12500000	9263565	12500000	11728486	12500000	12141483	15000000	12240269
R&D	1000000	563767	1000000	701299	1000000	749674	1000000	698473
Training and Travel	2000000	1209662	2000000	1407863	2000000	1739269	2500000	2014573
	2500000	1669763	3500000	2012649	3000000	3188497	2500000	2219718
Others, specify	32500000	27442444	32500000	30237985	35000000	30398554	35000000	33258800
<b>Total</b>	<b>193000000</b>	<b>178113015</b>	<b>209000000</b>	<b>193707423</b>	<b>216000000</b>	<b>198848544</b>	<b>257000000</b>	<b>239049215</b>

**Budget:**

The Budget proposal for the academic year is prepared by the individual departments as per the guidelines by V.V Sangha and Principal office. The collective budget proposals are scrutinized by the budget committee at the college level and further taken to governing council and management council for approval and sanction. Once it is sanctioned, the Principal will issue the budget order as shown in Annexure 10. The budget allocation and utilization for the last three years is adequate.

**10.2.2 Utilization of allocated funds (15)**

Institute Marks : 14.00

**10.2.2. Utilization of allocated funds****Table 10.15 Utilization of allocated funds during 2015-2019**

	2018-19	2017-18	2016-17	2015-16
Utilization of the Budget (%)	92.28	92.68	92.05	93.01

**10.2.3 Availability of the audited statements on the institute's website (5)**

Institute Marks : 4.00

**10.2.3. Availability of the audited statements on the institute's website**

The audit statements of the academic years are available in the institute website:

<http://www.rymec.in/index.php/about-us/location>

**10.3 Program Specific Budget Allocation, Utilization (30)**

Total Marks 30.00

Institute Marks :

Total Income at Institute level: For CFY,CFYm1,CFYm2 & CFYm3

CFY: (Current Financial Year),

CFYm1 : (Current Financial Year minus 1),

CFYm2 : (Current Financial Year minus 2) and

CFYm3 : (Current Financial Year minus 3)



**Table 1 :: CFY 2018-2019**

2150000	Actual expenditure (till...): 1457405		Total No. Of Students 513
Non Recurring	Recurring	Non Recurring	Recurring
12,00,000	9,50,000	10,37,929	4,19,476
		Expenditure per student	
		2840.95	

**Table 2 :: CFYm1 2017-2018**

2860000	Actual expenditure (till...): 1759885		Total No. Of Students 491
Non Recurring	Recurring	Non Recurring	Recurring
12,00,000	16,60,000	10,97,344	6,62,541
		Expenditure per student	
		3584.29	

**Table 3 :: CFYm2 2016-2017**

4400000	Actual expenditure (till...): 3583560		Total No. Of Students 551
Non Recurring	Recurring	Non Recurring	Recurring
26,50,000	17,50,000	23,79,760	12,03,800
		Expenditure per student	
		6503.74	

**Table 4 :: CFYm3 2015-2016**

1850000	Actual expenditure (till...): 1526660		Total No. Of Students 541
Non Recurring	Recurring	Non Recurring	Recurring
15,00,000	3,50,000	13,38,072	1,88,588
		Expenditure per student	
		2821.92	

Items	Budgeted in 2018-2019	Actual Expenses in 2018-2019 till	Budgeted in 2017-2018	Actual Expenses in 2017-2018 till	Budgeted in 2016-2017	Actual Expenses in 2016-2017 till	Budgeted in 2015-2016	Actual Expenses in 2015-2016 till
Laboratory equipment	1200000	1037929	1200000	1097344	2500000	2269760	1500000	1338072
Software	0	0	0	0	150000	110000	0	0
Laboratory consumable	100000	67343	200000	19908	250000	215544	100000	69099
Maintenance and spares	350000	53035	750000	351952	750000	607516	100000	98939
R & D	100000	12682	500000	64658	500000	246013	50000	0
Training and Travel	200000	201074	10000	2000	50000	4000	50000	0
	200000	85342	200000	224023	200000	130727	50000	20550
<b>Total</b>	<b>2150000</b>	<b>1457405</b>	<b>2860000</b>	<b>1759885</b>	<b>4400000</b>	<b>3583560</b>	<b>1850000</b>	<b>1526660</b>

**10.3.1 Adequacy of budget allocation (10)**

Institute Marks : 10.00

**10.3.1. Adequacy of budget allocation**

The department wise budget is sanctioned by VV Sangha office and the sanction letters are sent to the Principal, RYMEC. The principal along with the respective HOD's further over sees the utilization of the sanctioned budget. After approval of the budget from governing council and management council the process of procuring is carried out as per the norms specified by the V.V.Sangha.

Note: Guidelines for purchases are mentioned in the annexure 10.

**10.3.2 Utilization of allocated funds (20)**

Institute Marks : 20.00

### 10.3.2. Utilization of allocated funds

**Table 10.21 Budget Utilization 2015-2019**

Year	2018-19	2017-18	2016-17	2015-16
Utilization of the Budget (%)	67.78	61.53	81.44	82.52

### 10.4 Library and Internet (20)

Total Marks 20.00

#### 10.4.1 Quality of learning resources (hard/soft) (10)

Institute Marks : 10.00

##### 10.4.1. Library

“Knowledge Centre” is established along with the parent institution in the year 1980 with prime objective of supporting the parent organization programs. It is having, functionally designed building and it is located in the convenient accessible place in the college campus to the different group of library users. The soul of the library builds with our ancient people’s knowledge bricks. The prime motto of the knowledge centre is to building the knowledge empowered society. The mission of the knowledge centre is to meet the expectations of the library stakeholders with available resources and by integrating external emerging trends with internal factors. The main goal of the knowledge centre is improving the service effectiveness, economy and efficiency of library management system, Safeguard the interest and benefits of the stakeholders and facilitate to develop the innovative thoughts and knowledge sharing culture among the library users. The quiver of the knowledge centre enfolded the both print and digital form of global standard mass and scholarly knowledge contents.

##### Digital library:

Digital library system integrated with campus network to enhance the learners’ body of knowledge. It is also fostered distribution units at the departments for timely access of needed information at the work place with zero foot print.

The library management system is automated with Easylib Software to improve the efficiency of library housekeeping operations and provide speed service to the library users. It is also collaborated with national information network agencies (VTU e-resources Consortium & DELNET) and provided Internet and Wi-Fi facility to access required information.

The library users can also access digital resources through Wi-Fi at Library. The users can access the digital resources by using web browsers (Chrome and Firefox) by clicking following url in the campus network:

- o 192.168.8.4/gdlc1
- o 192.168.8.4/gdlc2
- o 192.168.8.4/gdlc3
- o 192.168.8.4/nptel
- o 192.168.8.4/qp

##### Scope for self-learning:

The Institute believes that self-learning and learning beyond syllabus have a great scope in the development of the career of an engineer. Everything in engineering cannot be taught in the class room or laboratories. The explosion in knowledge related to applied science and engineering has been so much that four years is too short a period even to cover one branch of engineering. This fact calls for the relevance for self-learning for young engineers. Institution has done to provide adequate facilities for self-learning to students so that they get motivated to learn more and more and ultimately become life-long learners and innovators.

Motivation for self-learning should be provided in the classrooms. A teacher has a great role to play in this. Discussing subject beyond the syllabus, providing exposure to exciting developments in science and technology around the globe, attempting solutions to problems in daily life etc. are the ways to motivate students for self-learning. They should also be motivated to do things themselves so that they gain confidence to try anything with their own hands. Institution should provide ample opportunities and facilities for the students.

##### Self-Learning Facilities and Availability of Materials for Learning beyond Syllabus

Institution has provided the following facilities to students for their self-learning and learning beyond syllabus Infrastructure:

1. 24/7 internet access with Wi-Fi connectivity
2. Classrooms/Labs with audio & visual aids
3. Language lab, Computer Labs etc.

##### Learning resources:

1. Committed faculty who motivate students in the process of their learning
2. Reputed E-Journals from Science Direct, Springer, Emerald, T&F, etc.
3. Reputed E-Books from Spinger, CRC, Elsevier, T&F, McGraw Hill, New Age & Packt
3. Online Databases and Digital Video
4. Licensed Software’s.

The institution supports teachers to make learning efficient. The college provides a central library with all latest books and journals which the faculty can utilize effectively and provide comprehensive latest information to students. Students are encouraged to use the library independently to enhance their skills and knowledge.

Apart from this institute provides seminar halls where the students can participate in group discussions, debates, seminars etc. The institution and faculty members support and encourage every student to make use of Internet, computers and latest technologies available to upgrade themselves in their respective field of studies.

**Table 10.20 Library Details**

a.	Carpet Area of library (in m <sup>2</sup> )	943 sqm
b.	Reading Space (in m <sup>2</sup> )	257 sqm
c.	Number of Seats in reading space	150 Seats
d.	Number of Users (Issue Book) per day (2018)	349
e.	Number of Users (Reading space) per day (2018)	45
f.	Working days Timings( Monday –Friday)	8.00 am to 8.00 pm
g.	Weekend Timings: (Saturday)	8.00 am to 5.00 pm
h.	During Holidays /Sundays and Vacations	Closed
i.	Number of Library Staff	10
j.	Number of Library Staff with degree in Lib. Mgmt.	03
k.	Computerization for search, indexing, issue/return records	YES
l.	Bar Coding Used?	Yes.
m.	Library Services on Internet/Intranet	Yes.
n.	INDEST/DELNET and other similar membership?	DELNET & VTU Consortium.

**Table 10.21 Quality of Learning Resources (Hard/Soft)**

a.	Availability of Digital library Contents	Yes
b.	Number of Courses	10
c.	Number of e-Books	24220
d.	Availability of exclusive server	Yes
e.	Availability over Internet/Intranet	Intranet
f.	Availability of exclusive space/room	Yes
g.	Number of users per day.	Campus wide Access on Intranet

- Computers are provided with Multimedia facility in central library where students can access all kinds of e-journals.

- <http://www.sciencedirect.com>
- <http://www.link.springer.com>
- <http://www.tandfonline.com>
- <http://www.icevirtuallibrary.com>
- <http://emerald.com/insight/>
- [www.rbmec.new.knimbus.com](http://www.rbmec.new.knimbus.com)

- Digital library is provided in central library where users can access kinds of e-resources on/off campus.

- The users can access the e-Books/e-journals through Wi-Fi and Digital Library at any time.

- The students can access eBooks/e-journals at library computer Centre as well as in College Campus and hostels with wifi.

- The learning resources centre is open 12 hours a day for use and will be extended on demand. The Library contains the Reference Section with wide variety of resources, a quiet study area, the office, and a photocopier room. There is a study area with computer facilities, and a group study/reading room. Library aims to offer focused provision for the subjects in which the College admits mature undergraduates as well as postgraduates. The collection comprises textbooks, general reference material, Question Bank and career-oriented resources.

- Video Course:

- VTU e-Learning/NPTEL can accessed through Digital Library
- NPTEL on online <http://nptel.iitm.ac.in/>

Name of the Internet provider	AirTel
Available band width	125 Mbps
WiFi availability	Yes
Internet access in labs, classrooms, library and offices of all Departments	Yes
Security arrangements	Yes

**Annexure I**  
**(A) PROGRAM OUTCOME (POs)**

Engineering Graduates will be able to:

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 team work**: 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.

**(B) PROGRAM SPECIFIC OUTCOME (PSOs)**

PSO1	Ability to Develop the skills required for planning, analyzing & designing, estimating & executing the civil engineering structures
PSO2	Ability to identify the soils of different nature through the geo technical investigations and providing the suitable foundation to the structures.
PSO3	Ability to plan, analyze, design and to solve environmental engineering related problems.

# Declaration

The head of the institution needs to make a declaration as per the format given -

- I undertake that, the institution is well aware about the provisions in the NBA's accreditation manual concerned for this application, rules, regulations, notifications and NBA expert visit guidelines inforce as on date and the institutes hall fully abide by them.
- It is submitted that information provided in this Self Assessment Report is factually correct.
- I understand and agree that an appropriate disciplinary action against the Institute willbe initiated by the NBA. In case, any false statement/information is observed during pre-visit, visit, postvisit and subsequent to grant of accreditation.

**Head of the Institute**

Name : Dr.K.Veeresh

Designation : Principal

Signature :



Seal of The Institution :



**Place** : Ballari

**Date** : 25-11-2019 11:42:24

