



## Yearly Status Report - 2016-2017

### Part A

#### Data of the Institution

<b>1. Name of the Institution</b>	BALLARI INSTITUTE OF TECHNOLOGY AND MANAGEMENT, BALLARI
Name of the head of the Institution	DR V C PATIL
Designation	Principal
Does the Institution function from own campus	Yes
Phone no/Alternate Phone no.	08392237150
Mobile no.	9448006862
Registered Email	principal@bitm.edu.in
Alternate Email	bitmbly@gmail.com
Address	Jnana Gangotri Campus, No 873/2, Ballari Hosapete Road, Allipura,
City/Town	Ballari
State/UT	Karnataka
Pincode	583104

<b>2. Institutional Status</b>					
Affiliated / Constituent		Affiliated			
Type of Institution		Co-education			
Location		Urban			
Financial Status		private			
Name of the IQAC co-ordinator/Director		DR N GURURAJ			
Phone no/Alternate Phone no.		08392237100			
Mobile no.		9448695476			
Registered Email		bitmiqac@gmail.com			
Alternate Email		bitmbly@gmail.com			
<b>3. Website Address</b>					
Web-link of the AQAR: (Previous Academic Year)		<a href="http://www.bitm.edu.in">http://www.bitm.edu.in</a>			
<b>4. Whether Academic Calendar prepared during the year</b>		Yes			
if yes, whether it is uploaded in the institutional website: Weblink :		<a href="http://www.bitm.edu.in/nacc-ssr">http://www.bitm.edu.in/nacc-ssr</a>			
<b>5. Accrediation Details</b>					
Cycle	Grade	CGPA	Year of Accrediation	Validity	
				Period From	Period To
1	B	2.66	2015	25-Jun-2015	24-Jun-2020
<b>6. Date of Establishment of IQAC</b>			01-Jul-2015		
<b>7. Internal Quality Assurance System</b>					
Quality initiatives by IQAC during the year for promoting quality culture					
Item /Title of the quality initiative by IQAC	Date & Duration		Number of participants/ beneficiaries		
Three Days Out Come Based Education of NBA Accreditation	18-Jul-2016 3		304		

One Day Workshop on Gap Analysis	01-Aug-2016 1	200
One Week Advancements in MAT Lab and its applications	09-Sep-2016 6	40
Two Days IoT under outreach program of TECHNEX	20-Oct-2016 2	99
One Day Seminar on Entrepreneurship Development Program EDP	22-Nov-2016 1	40
Two Week workshop on CMOS, MIXED SIGNAL and RADIO FREQUENCY VLSI DESIGN	23-Jan-2017 14	1
Two days SDP on Signals Systems and Transform Techniques using MAT Lab.	12-Feb-2017 2	33
Three Days - PCB Design and NI Labview Simulations	04-Mar-2017 3	42
One Day National Seminar on The next Manufacturing Destination - Skill India	04-Mar-2017 1	40
Four Days Faculty development program-Cloud Computing IBM BLUEMIX	20-Feb-2017 4	14
Five day FDP on IBM CE Enablement program-Enterprise Application Development and Deployment Using IBM work light	26-Mar-2017 5	3
Five Days Faculty development program - Mobility Workshop IBM WORKLIGHT	26-Mar-2017 5	18
Four Days Faculty development program-Data Analytics INFOSPHERE INSIGHT	20-Jun-2017 4	11

**8. Provide the list of Special Status conferred by Central/ State Government-UGC/CSIR/DST/DBT/ICMR/TEQIP/World Bank/CPE of UGC etc.**

Institution/Department/Faculty	Scheme	Funding Agency	Year of award with duration	Amount
BITM Mechanical Department	Research and Development Scheme	Karnataka Council for Technical Upgradation	2016 1	497500

BITM EEE Department	Surya Mitra	NICE Govt. of India	2016 1	642000
BITM ECE Department	PMKVY	AICTE	2016 1	58000
<a href="#">View File</a>				

<b>9. Whether composition of IQAC as per latest NAAC guidelines:</b>	Yes
Upload latest notification of formation of IQAC	<a href="#">View File</a>
<b>10. Number of IQAC meetings held during the year :</b>	4
The minutes of IQAC meeting and compliances to the decisions have been uploaded on the institutional website	Yes
Upload the minutes of meeting and action taken report	<a href="#">View File</a>
<b>11. Whether IQAC received funding from any of the funding agency to support its activities during the year?</b>	No

<b>12. Significant contributions made by IQAC during the current year(maximum five bullets)</b>
1. Improved the Graduation Results 2. Enhanced employability by implementing personality development programs, value added certificate courses 3. Value Added Certificate Courses to bridge the gap in curriculum. 4. Improvement in R and D Activity 5. MoU with IBM and Harita Texserve (A unit of TVS Group)

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<b>13. Plan of action chalked out by the IQAC in the beginning of the academic year towards Quality Enhancement and outcome achieved by the end of the academic year</b>
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Plan of Action	Achivements/Outcomes
Improve the academic results and Placement	Achieved good results and results increased by three percent compared to last year, due to remedial classes, outcome based education and introducing design based experiments, additional labs related to academics.
Improve the Placements	Students were placed in MNCs and other companies and the placements percentage increased by twenty five percent compared to last year.
Improve the Students opting for higher Education	Higher education careers counselling programs were held which resulted in

	fifty seven percent increased in number of students going for higher education
To sign MoU and Set up center of excellence	IBM, Harita, J Spiders Q Spiders MoU center of excellence were setup in this academic year.
To depute and train faculty members related to industry courses	Forty six faculty members were trained in industry related courses by IBM and Infosys Ltd.,
Initiate social responsibility activity	NSS unit is organizing Blood Donation Campus, Literacy programs, Swatch Bharath, Help to Orphanage, Yoga day, etc.,
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<b>14. Whether AQAR was placed before statutory body ?</b>	Yes
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Name of Statutory Body	Meeting Date
Governing Body	10-Jun-2017

<b>15. Whether NAAC/or any other accredited body(s) visited IQAC or interacted with it to assess the functioning ?</b>	Yes
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Date of Visit	14-May-2016
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<b>16. Whether institutional data submitted to AISHE:</b>	Yes
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Year of Submission	2017
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Date of Submission	30-Mar-2017
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<b>17. Does the Institution have Management Information System ?</b>	Yes
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If yes, give a brief description and a list of modules currently operational (maximum 500 words)	The College has a fullfledged Management information system for the Academic and administrative functioning of the college. The administrative system in the college is fully automated with appropriate software and all information on student admission, examinations, marks, fee payments, etc., is available for timely decision making and actions. The College library is also automated and the information regarding availability of books, issue details, etc., is available to the students and staff at finger tips. An online public access catalogue OPAC is
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implemented to enable the students for speedy and convenient access to the library catalogue. All the academic and administrative issues are deliberated and discussed in the appropriate Committees. The deliberations are properly debated and action items recorded and the decisions implemented at all levels in the form of proceedings, rules and regulations and policies. All relevant information about the college is published on the college website for reference. ? Some forms of MIS are ? Daily Absent Report (Staff and Students) ? One Page Monthly Report ? IQAC Monthly Presentation ? Management Review Meetings ? Budget Meetings ? IQAC Quarterly Meetings ? Semester Progress Report ? Annual Report ? Governing Council.

## Part B

### CRITERION I – CURRICULAR ASPECTS

#### 1.1 – Curriculum Planning and Implementation

1.1.1 – Institution has the mechanism for well planned curriculum delivery and documentation. Explain in 500 words

The college systematically designs and develops action plans for effective implementation of the curriculum. At the outset, the Principal of the college conducts meetings regularly with the Heads of Departments to develop various strategies for effective implementation of the curriculum. The academic calendar issued by the affiliating university forms the basis for designing the college semester plan. The college semester plan consists of commencement date and last working date, dates for conduction of the internal assessment tests. Department-wise calendar of events' is prepared. Thereafter, the faculty members of various departments conduct their internal meetings and develop academic plans such as timetables, lesson plans, and course files for the coming academic year. Teachers are encouraged to plan in advance to impart the curriculum through innovative teaching methods such as presentations, assignments, discussions, workshops, seminars, industrial visits apart from regular lecture sessions and the same is taken for approval from their Head of Department and the Principal. Thereafter the lesson plans are prepared by the respective faculty in accordance with the curriculum. Lesson plans and subject course files are maintained by each faculty for their respective subjects allotted, which is reviewed on continuous basis by the review committee. The following criteria have been followed in effective implementation of the curriculum: • We have a predefined college calendar following the university dates regarding the schedule of the semester (sample of the academic calendar copy will be available for inspection during peer committee visit). • Lesson plan is made according to the college calendar for each semester. • As part of our plan in implementing the curriculum, we have scheduled internal assessment tests (minimum of three tests per semester) for all the students. • Apart from regular classes we have case study/presentation, Guest Lecturers/workshop hours to enhance the capability of students in presenting the topics related to the curriculum. • Identification of above-average students and motivating them towards excelling in their academic performance. • Identification of

academically weak students and conducting the remedial classes so as to raise their academic performance. • Organizing expert lecture series, workshops, and guest lecture to encourage industry-academia interface among students and faculty members on a regular basis. Industrial visits are arranged for the students to be familiar with the industry process to study in the curriculum.

#### 1.1.2 – Certificate/ Diploma Courses introduced during the academic year

Certificate	Diploma Courses	Dates of Introduction	Duration	Focus on employability/entrepreneurship	Skill Development
Flexible Manufacturing System	NIL	15/05/2017	14	Employability	Programming Skills
IBM Specialty Labs Cloud Computing	NIL	17/04/2017	7	Employability	Programming Skills
IBM Specialty Labs Mobile Application Development	NIL	11/05/2017	10	Employability	Programming Skills
Infosys Campus Connect Foundation Program	NIL	01/02/2017	120	Employability	Computer Foundation Program
eYantra Robotics (IIT, Bombay)	NIL	01/03/2017	90	Employability	Robotic Skills
Surya Mitra	NIL	15/07/2016	300	Employability	Solar Energy and Installation

#### 1.2 – Academic Flexibility

##### 1.2.1 – New programmes/courses introduced during the academic year

Programme/Course	Programme Specialization	Dates of Introduction
<b>No Data Entered/Not Applicable !!!</b>		
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##### 1.2.2 – Programmes in which Choice Based Credit System (CBCS)/Elective course system implemented at the affiliated Colleges (if applicable) during the academic year.

Name of programmes adopting CBCS	Programme Specialization	Date of implementation of CBCS/Elective Course System
BE	Engineering	01/08/2016
MBA	Management	01/08/2016
Mtech	Engineering	01/08/2016

##### 1.2.3 – Students enrolled in Certificate/ Diploma Courses introduced during the year

	Certificate	Diploma Course

Number of Students

476

0

**1.3 – Curriculum Enrichment**

## 1.3.1 – Value-added courses imparting transferable and life skills offered during the year

Value Added Courses	Date of Introduction	Number of Students Enrolled
InHouse Technical Training.	25/07/2016	324
Wipro (MTLC)	18/07/2016	30
Apti Softskills Training by ANTS Consultancy	09/08/2016	114
J/QSpiders training	17/01/2017	143
Capgemini Company Specific Trainings	20/08/2016	225
Mindtree Company Specific Trainings	31/08/2016	225
CGI Company Specific Training	16/08/2016	182
SLK Software Company Specific Trainings	10/10/2016	100
Company Specific Mock Test	20/07/2016	650
Technical Mock Interviews Group Discussion.	16/07/2016	400
Aptitude training by IU Solutions.	06/03/2017	699
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## 1.3.2 – Field Projects / Internships under taken during the year

Project/Programme Title	Programme Specialization	No. of students enrolled for Field Projects / Internships
MBA	Management	135
BE	Engineering	20
Mtech	Engineering	33
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**1.4 – Feedback System**

## 1.4.1 – Whether structured feedback received from all the stakeholders.

Students	Yes
Teachers	No
Employers	Yes
Alumni	Yes
Parents	Yes

## 1.4.2 – How the feedback obtained is being analyzed and utilized for overall development of the institution? (maximum 500 words)

Feedback Obtained
<b>FEED BACK ANALYSIS</b> Analysis of Student Survey All the students rate the



teaching and learning process of faculty on 12 parameters ranging from presentation of subject, punctuality, regularity and other qualitative aspects. Consolidated feedback report is obtained class wise and ratings are indicated on a scale from 1 to 10. Faculty having rating below 8 are counselled by the HOD or Senior Staff. Faculty who need a lot of improvement in teaching and learning process are recommended to attend Faculty Development Programs to improve their delivery as well as content. The feedback of the teaching faculty is also accounted in their appraisal. Analysis of Employers Survey Based on the analysis of the Employers survey the employers have indicated to improve industry oriented courses for Skilled Development and increase the research activity among faculty and develop problem solving and research mindset among students. The analysis also provides input towards developing project management's skills and increase the usage of modern tools for student development. Students should improve to develop ability to solve complex problems, team work and ethics. Analysis of Alumni Survey Based on the analysis of the Alumni survey the following aspects have been indicated by the Alumni for the overall development of the institution. Alumni have indicated to improve skills through new methodologies and by using modern tools, design and development process among the students. Team working ability by displaying the leadership, qualities, management skills and ability to solve complex problems through research mindset. Alumni's have indicated to improve project management and finance for lifelong learning. Analysis of Parent Feedback: Based on the inputs and feedback from the parents, it is clearly highlighted, the institute should setup centre of excellences and sign MoU's with top companies for skill development. Also the parents indicated to provide the modern facilities in the institution for overall development of the students. Parents have indicated to conduct more workshop on modern technologies and also encourage the students for research. Also develop students with good ethics and values. Students should also be encouraged to participate in external competitions. So that they develop personality, boldness and courage to face the real life world.

## CRITERION II – TEACHING- LEARNING AND EVALUATION

### 2.1 – Student Enrolment and Profile

#### 2.1.1 – Demand Ratio during the year

Name of the Programme	Programme Specialization	Number of seats available	Number of Application received	Students Enrolled
BE	Engineering	840	717	717
Mtech	Engineering	108	30	30
MBA	Management	180	135	135

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### 2.2 – Catering to Student Diversity

#### 2.2.1 – Student - Full time teacher ratio (current year data)

Year	Number of students enrolled in the institution (UG)	Number of students enrolled in the institution (PG)	Number of fulltime teachers available in the institution teaching only UG courses	Number of fulltime teachers available in the institution teaching only PG courses	Number of teachers teaching both UG and PG courses
2016	3350	369	177	21	17

### 2.3 – Teaching - Learning Process

2.3.1 – Percentage of teachers using ICT for effective teaching with Learning Management Systems (LMS), E-learning resources etc. (current year data)

Number of Teachers on Roll	Number of teachers using ICT (LMS, e-Resources)	ICT Tools and resources available	Number of ICT enabled Classrooms	Number of smart classrooms	E-resources and techniques used
198	198	5	35	2	30

2.3.2 – Students mentoring system available in the institution? Give details. (maximum 500 words)

The student mentoring system in the institution takes care of the overall development of students in terms of academic performance, building up the career, move towards the right path and be focused in relevant fields. The objectives of the support system are Monitor the academic performance, Mentor and guide them to achieve and do better in academics, Understand the problems including personal and advice appropriately to monitor the overall development of the student. Each student is allotted with a faculty mentor, and each mentor maintains a Proctor form with details like parent OR guardian name, addresses, contact numbers and academic details, academic scores. Psychological counselors are available to all the students who are counseled individually, aided therapeutically and are supported in their aspirations related to academics, career plans to air their grievances and cope with issues which may impede their progress in the above areas. All student mentors encourage the students participation, apart from curricular guidance, also in co-curricular, extra-curricular and other profession activities, which will motivate them stimulate their growth into well rounded young professionals. Regular orientation programs and Parent meetings are conducted bringing parents into the monitoring / mentoring system as key stake-holders. Follow up sessions with the parents/faculty/counselors and mentors are regularly arranged with the students who have poor performance and attendance to enable them to improve their attendance and performance. Details of mentoring system Sl. No. Type of mentoring system Functions 1 Professional guidance

Number of students enrolled in the institution	Number of fulltime teachers	Mentor : Mentee Ratio
3719	198	1 : 19

## 2.4 – Teacher Profile and Quality

2.4.1 – Number of full time teachers appointed during the year

No. of sanctioned positions	No. of filled positions	Vacant positions	Positions filled during the current year	No. of faculty with Ph.D
256	198	58	46	3

2.4.2 – Honours and recognition received by teachers (received awards, recognition, fellowships at State, National, International level from Government, recognised bodies during the year )

Year of Award	Name of full time teachers receiving awards from state level, national level, international level	Designation	Name of the award, fellowship, received from Government or recognized bodies
2017	Dr. Raghavendra Joshi	Professor	Innovative technological research and dedicated professor award
2016	Prof. Manjula R	Professor	Best Paper Presentation in IEEE student branch, IIT, Kharagpur.
2016	Mr. Naseeruddin	Assistant Professor	Proficiency Award, IIT, Mumbai
2016	Mr. Manjunath G	Assistant Professor	Proficiency Award, IIT, Mumbai

2016	Mr. Pramod Mutalik	Assistant Professor	Proficiency Award, IIT, Mumbai
2016	Mr. William Thomas	Assistant Professor	Proficiency Award, IIT, Mumbai
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## 2.5 – Evaluation Process and Reforms

2.5.1 – Number of days from the date of semester-end/ year- end examination till the declaration of results during the year

Programme Name	Programme Code	Semester/ year	Last date of the last semester-end/ year-end examination	Date of declaration of results of semester-end/ year- end examination
BE	CSE, EEE, ECE, MECH, CIVIL	I, III, V, VII	22/11/2016	06/03/2017
BE	CSE, EEE, ECE, MECH, CIVIL	II,IV,VI,VIII	20/05/2017	07/08/2017
MBA	MBA	I,III	13/01/2017	30/03/2017
MBA	MBA	II,IV	30/05/2017	14/08/2017
Mtech	CNE, DE EC, VLSI, DE ME, PE	I,III	13/01/2017	30/03/2017
Mtech	CNE, DE EC, VLSI, DE ME, PE	II,IV	31/05/2017	14/08/2017

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2.5.2 – Reforms initiated on Continuous Internal Evaluation(CIE) system at the institutional level (250 words)

The institute has taken efforts to improve the performance of students by framing significant reforms in Continuous Internal evaluation at the institute level. The reforms are as follows

1. Remedial measures are taken by conducting tutorial classes to clarify doubts and re-explaining the critical topics. Remedial Classes are conducted for the slow learners, absentees and the students who participate in Sports, NSS activities and Placement Interviews. This practice helps struggling learners to update their subject knowledge and helps them to catch up with their peers.
2. Unit tests are conducted prior to sessional examinations.
3. Topic wise question banks are provided for all subjects.
4. Students are encouraged to solve previous years University Exam question papers.
5. The institute regularly conducts workshop, technical talk, seminars and guest lectures.
6. Poor performance due to frequent absenteeism is dealt by sending registered letters to the parents of such students.
7. Monitoring the improvement in learning of slow learner and encouraging the advanced learners by reviewing their performance in exams.
8. The institution is keen on monitoring the performance of the students and reports to the Parents. Progress Reports are sent by the tutors to the parents after each of the test. Parents/ Guardians are advised to note the performance of their wards and take remedial measure if needed. Whenever necessary, the tutor shall recommend the visit of the parent to the college for a discussion about the student.

Impact These reforms have resulted in substantial improvement in students performance through comprehension of difficult topics, improved time management, enhanced writing skills and individualized attention resulting in refining their cognitive, psychomotor and affective domains of learning. This has significantly enhanced the pass percentage and academic excellence of students

2.5.3 – Academic calendar prepared and adhered for conduct of Examination and other related matters (250 words)

The institution ensures effective time management and timeliness. It receives the university given timeline and adheres to it. In the beginning of the academic year, academic calendar is published by the University for Respective Course. The college carries out effective planning to stick to academic calendar. This allows the teachers and the students to space out their teaching and learning and regular assessment of the same. The college conducts assessment to the students in three different components - theory and assignments. The theory component is marked out of ten. The assignment is marked out of five. These tests are conducted in evenly spaced out intervals to avoid pressuring the students with too many examinations. Every academic year consists of two semesters. Each semester is to be of 16 weeks. The first Continuous Internal Examination CIE I is conducted after 8 weeks of class work. CIE II is conducted after 16 weeks of class work. CIE III is conducted after 24 weeks of class work Within the above mentioned 8 weeks of class work, the concerned syllabus is taught to the students. They are then tested on the same material. An average of these examinations is calculated to attain the final internal marks of the student. These marks are also vitalized to decide the course of nature for teaching slow students and rectify their performance before the external examination.

**2.6 – Student Performance and Learning Outcomes**

2.6.1 – Program outcomes, program specific outcomes and course outcomes for all programs offered by the institution are stated and displayed in website of the institution (to provide the weblink)

<http://www.bitm.edu.in/computer-science> <http://www.bitm.edu.in/electronics-communication> <http://www.bitm.edu.in/mechanical-engineering>  
<http://www.bitm.edu.in/electrical-electronics> <http://www.bitm.edu.in/civil-engineering> <http://www.bitm.edu.in/mba>

2.6.2 – Pass percentage of students

Programme Code	Programme Name	Programme Specialization	Number of students appeared in the final year examination	Number of students passed in final year examination	Pass Percentage
CSE	BE	Engineering	125	119	95
ECE	BE	Engineering	154	151	98
ME	BE	Engineering	234	181	77
EEE	BE	Engineering	130	120	92
CNE	Mtech	Engineering	3	3	100
CSE	Mtech	Engineering	4	4	100
DE (EC)	Mtech	Engineering	3	3	100
VLSI	Mtech	Engineering	5	3	60
DE (ME)	Mtech	Engineering	11	9	82
PE	Mtech	Engineering	7	7	100
MBA	MBA	Management	135	116	86

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**2.7 – Student Satisfaction Survey**

2.7.1 – Student Satisfaction Survey (SSS) on overall institutional performance (Institution may design the

questionnaire) (results and details be provided as weblink)

<http://www.bitm.edu.in>

### CRITERION III – RESEARCH, INNOVATIONS AND EXTENSION

#### 3.1 – Resource Mobilization for Research

3.1.1 – Research funds sanctioned and received from various agencies, industry and other organisations

Nature of the Project	Duration	Name of the funding agency	Total grant sanctioned	Amount received during the year
Major Projects	2	KCTU	49.75	4.97
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#### 3.2 – Innovation Ecosystem

3.2.1 – Workshops/Seminars Conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative practices during the year

Title of workshop/seminar	Name of the Dept.	Date
eYantra Robotics Workshop	ECE	01/03/2017
Wipro Technology Learning Centre	CSE	01/02/2017
Cloud Computing IBM Workshop	CSE	17/04/2017
Mobile Application Development IBM	CSE	11/05/2017
Workshop on Advancements in MAT Lab and its application.	ECE	26/09/2016
Workshop on IoT	ECE	24/10/2016

3.2.2 – Awards for Innovation won by Institution/Teachers/Research scholars/Students during the year

Title of the innovation	Name of Awardee	Awarding Agency	Date of award	Category
Sustainable Development	Mr. Sharana Basava	World Merit 360	15/07/2016	Represented India at United Nations for Sustainable Development Goals One among five students selected to represent India
Excellence performance in Teaching students Industry Oriented Courses	Mr. Kiran Mudaraddi and Mr. Sridhar S. K.	INFOSYS CAMPUS CONNECT	14/07/2016	Bronze Partner Faculty Awarded by Infosys Ltd.,
Excellence performance in Teaching students Industry	Mr. Sridhar S. K.	INFOSYS CAMPUS CONNECT	14/07/2016	Bronze Partner Faculty Awarded by Infosys Ltd.,

Oriented Courses				
Setting up of Robotics Lab in a cost effective manner using open source tools	Mr. Naseeruddin,	IIT, Bombay	18/07/2016	Proficiency Award from IIT, Bombay
Setting up of Robotics Lab in a cost effective manner using open source tools	Mr. Prabhakar.K,	IIT, Bombay	18/07/2016	Proficiency Award from IIT, Bombay
Setting up of Robotics Lab in a cost effective manner using open source tools	Mr. William Thomas.H.M,	IIT, Bombay	18/07/2016	Proficiency Award from IIT, Bombay
Setting up of Robotics Lab in a cost effective manner using open source tools	Mr. Manjunath.G	IIT, Bombay	18/07/2016	Proficiency Award from IIT, Bombay
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### 3.2.3 – No. of Incubation centre created, start-ups incubated on campus during the year

Incubation Center	Name	Sponsored By	Name of the Start-up	Nature of Start-up	Date of Commencement
BITM INCUBATION CENTER	BIURED	BITM	Wogglesoft IT solutions Pvt. Ltd.	Mobile Apps and Application Development for ordering food in the canteen	01/08/2016
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### 3.3 – Research Publications and Awards

#### 3.3.1 – Incentive to the teachers who receive recognition/awards

State	National	International
0	0	0

#### 3.3.2 – Ph. Ds awarded during the year (applicable for PG College, Research Center)

Name of the Department	Number of PhD's Awarded
0	0

3.3.3 – Research Publications in the Journals notified on UGC website during the year

Type	Department	Number of Publication	Average Impact Factor (if any)
National	CSE / ECE / EEE /ME / CIVIL / MBA / PHYSICS / CHEMISTRY / MATHS	4	3.98

3.3.4 – Books and Chapters in edited Volumes / Books published, and papers in National/International Conference Proceedings per Teacher during the year

Department	Number of Publication
Mechanical Engineering Books Published	3
CSE, ECE, EEE, CIV, ME and MBA Conference Proceedings	28

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3.3.5 – Bibliometrics of the publications during the last Academic year based on average citation index in Scopus/ Web of Science or PubMed/ Indian Citation Index

Title of the Paper	Name of Author	Title of journal	Year of publication	Citation Index	Institutional affiliation as mentioned in the publication	Number of citations excluding self citation
Experimental Analysis of solar Air Heater with Broken Ribs absorber Plate for Fruits Drying applications	Shekar K, Ravi G, Gavisiddesha P, Banakara Nagaraja	International journal of Innovative research in Science , Engineering and Technology Vol 5, Issue 8 Aug 2016	2016	0	BITM	0
Offline Data Synchronization with Occasionally Connected Database using Smart	R.M. Jagadish	LNEE, Springer	2017	0	BITM	0
Performance Evaluation Of MANET Protocols	Dr. V.C.Patil	ICATCCT-2016	2016	5	BITM, Ballari	0
Design and Implementation of wireless water	Dr. V.C.Patil	IJIRSET	2017	5	BITM, Ballari	0

level management system using ZigBee technology						
Eye blink controlled robot using EEG technology	Dr. U Eranna	ISETE	2017	0	BITM, Ballari	0
Design and analysis of circular MPA using multi-layer Substrate sandwich for bandwidth enhancement	Dr. K.M. Sadyojatha	ICICES	2017	0	BITM, Ballari	0
Bandwidth Enhancement Techniques for MPA for Wideband and Multiband Applications	Dr. K.M. Sadyojatha	IJIRSET	2017	0	BITM, Ballari	0
Energy Detection with different Digital Modulation Techniques over Rayleigh Fading Channels in Cognitive Radio Networks	Mr. Rohitha U.M	IEEE i PACT 2017	2017	0	BITM, Ballari	0
Fast Optimal and explorative FOX Sensing and Power	Mr. Rohitha U.M	IEEE RTEICT 17	2017	0	BITM, Ballari	0



Allocation Scheme for Non-Cooperative Cognitive Radio Networks						
Efficient Privacy Aware Routing Technique for Monitoring Assets with WSNs	Ms. Manjula. R	ACM, New York	2017	0	BITM, Ballari	0
Application of the Chinese Remainder Theorem for Source Location Privacy in Wireless Sensor Networks	Ms. Manjula. R	Student Technology Symposium, IIT Kharagpur	2016	10	BITM, Ballari	0
Performance Evaluation Of MANET Protocols A Propagation Model Perspective	Mr. Naseer uddin	iCATccT	2017	0	BITM, Ballari	0
Design and analysis of circular MPA using multi-layer Substrate sandwich for bandwidth enhancement	Mr. Naseer uddin	ICICES	2017	0	BITM, Ballari	0
Design and Implementation of Modified clock generation.	Mrs. Nayana M	IJRET	2016	0	BITM, Ballari	0

Basic Operation Performed on Arithmetic Logic Unit ALU For 32 Bit Floating Point Numbers	Mrs. Nayana M	IJAER	2017	0	BITM, Ballari	0
Performance Evaluation of 10mwp solar power plant at Shiva Samudram power station.	Mrs. Nayana M	IJEER	2017	0	BITM, Ballari	0
Implementation of test architecture for 64 bit Walsh sequence generator	Mrs. Nayana M	IJAREM	2017	0	BITM, Ballari	0
Design and analysis of circular MPA using multi-layer Substrate sandwich for bandwidth enhancement	Mr. Manjunath. G.	ICICES	2017	0	BITM, Ballari	0
Bandwidth Enhancement Techniques for MPA for Wideband and Multiband Applications	Mr. Manjunath. G.	ICCIC 2017	2017	0	BITM, Ballari	0
A Framework	Mr. Manjunath.	IJIRSET	2017	0	BITM, Ballari	0

for Data Utility Cost Reduction in Internet of Things Employing Vehicle Nodes	G.					
Eye blink controlled robot using EEG technology	Mr. Ulaganathan J	ISETE	2017	0	BITM, Ballari	0
Versatile optics imaging of retinal microstructures	Mr. Ulaganathan J	IJIRCCE	2017	0	BITM, Ballari	0
A Scalable embedded system for medical signal processing	Mr. Ulaganathan J	IJIRCCE	2017	0	BITM, Ballari	0
Biofeedback Acquisition using EMG	Mr. Ulaganathan J	ISETE-ICEEC	2017	0	BITM, Ballari	0
Design and Implementation of shortest path and Fault Tolerant Algorithm in NOC	Mr. Ulaganathan J	ISETE-ICEEC	2017	0	BITM, Ballari	0
Design and Verification of Improved Hamming code using Verilog	Mr. Ulaganathan J	ISETE-ICEEC	2017	0	BITM, Ballari	0
Fast Optimal and explorative	Mr. Fareduddin J.S	IEEE RTEICT 17	2017	0	BITM, Ballari	0
A Novel Image Localization Methods	Mr. Vishnukanth .K	IJIRCCE,	2017	0	BITM, Ballari	0

for Image Forgery						
The Impact of Reality Shows of Television on the Youth of Ballari	D. Christopher Raj	IJBARR Impact	2016	0	BITM	0
Design of low power programmable PRPG with test comparison capabilities using FPGA	Mrs. Nayana M	IJAREM	2017	0	BITM, Ballari	0
Multiple detection and dynamic tracking using upgraded kalman filter	Mr. Hemantha Kumar R	IJRSI	2017	0	BITM, Ballari	0
Eye blink controlled robot using EEG technology	Mr. Ulaganathan J	ISETE-ICEEC	2017	0	BITM, Ballari	0
Eye blink controlled robot using EEG technology	Mr. Abdul Lateef Haroon, Mr. Raymond Irudayaraj. I	ISETE	2017	0	BITM, Ballari	0
Noise optimization using FIR Filters	Mrs. Nilam Chheda	IJ OF VLSI	2017	0	BITM, Ballari	0
Verilog Implementation of 64 bit redundant binary product generator using MBE	Mr. Mallikarjuna. A	IJARIIE	2017	0	BITM, Ballari	0
Smart Garbage Collection	Mr. Mallikarjuna. A	IJARIIE	2017	0	BITM, Ballari	0

Routing application using IOT						
Photo forgery identification by adaptive over segmentation	Mr. Prabhakar. K	IJIRSET	2017	0	BITM, Ballari	0
Design and implementation of arbitrary waveform generator on FPGA and High speed DAC with real time interface	Mr. Pramod Mutalik	IJIRSET	2017	0	BITM, Ballari	0
Real time management of traffic congestion using image processing	Mr. Pramod Mutalik	NCRAET	2017	0	BITM, Ballari	0
A Comparative study on AODV, DSR and DSDV routing protocols for ITS in metro cities for road traffic safety using VRTA	Mr. Pramod Mutalik	IEEE paper	2017	0	BITM, Ballari	0
Role of IoT in Agriculture	Mrs. Geetha H Y	IJARSE	2017	0	BITM, Ballari	0
Non-Exhaustible Solar-Power Based Insecticide or Bio-fertilizer Sprayer for Use in Agronomics	Mrs. Geetha H Y	IJERA	2017	0	BITM, Ballari	0

With Bluetooth Enabled Control						
Design and Implementation of Multi-Modulus Multipliers using Radix 2 2 and Radix 2 3 Booth Encoding Scheme	Mr. Sekhar Bentipalli	IJIRCCE	2016	0	BITM, Ballari	0
An Efficient Reverse Converter Design for Five Moduli set RNS.	Mr. Sekhar Bentipalli	IJIRCCE	2016	0	BITM, Ballari	0
A Survey on Secure Communication Protocols for IoT Systems	Mr. Aswath anarayana	IJECS	2017	0	BITM, Ballari	0
Waste Management in IOT-enabled	Mr. Aswath anarayana	IJECS	2017	0	BITM, Ballari	0
Design of NoC Router to Achieve High- Throughput, compact, Delay insensitivity	Mrs. Nayana M	IJAREEIE	2016	0	BITM, Ballari	0
Design of low power programmable PRPG with test comparison capabilities using FPGA	Mrs. Nayana M	IJAREM	2017	0	BITM, Ballari	0
Design and Implementation of	Mr. Sekhar Bentipalli	IJIRCCE	2016	0	BITM, Ballari	0

Multi Modulus Multipliers using Radix 2 2 and Radix 2 3 Booth Encoding Scheme						
An Efficient Reverse Converter Design for Five Moduli set RNS.	Mr. Sekhar Bentipalli	IJIRCCE	2016	0	BITM, Ballari	0
Vibration Based Condition Monitoring Of Shaft Motor For Generator	Pavan Kumar B K, Dr. Yadavalli Basavaraj	National Conference on progress and research in Mechanical Engineering	2016	0	BITM	0
Aerodynamic Characteristic Analysis of UAV By Using CFD	Dr. V Ravi	International Journal for Research in Applied Science	2016	0	BITM	0
Importance of Condition Based Maintenance An Overview	Dr. Yadavalli Basavaraj, Pavan Kumar B K	International Journal of Innovative Research in Science, Engineering And Technology. Vol.	2016	0	BITM	0
Finite Element Analysis of Two Wheeler Disc Brake Rotor	Shivarama Krishna, Pavan Kumar B K, Mayur Pawar, Manjunath E, Vijay Kumar B P	Imperial Journal of Interdisciplinary Research Vol. 2 ,Issue 7 ,2016	2016	0	BITM	0
Study of Microstructure	Shivarama Krishna A, Dr.	National Conference on	2016	0	BITM	0

	Yadavalli Basavaraj	progress and research in Mechanical Engineering				
Study of Mechanical Properties and Drilling Behaviour of Al7075 reinforced with B4C	Shivarama Krishna A, Dr. Raghavendra Joshi, Manjunath TH	Materials today Science Direct 2017	2016	1	BITM	0
Restructuring of Legacy	Dr. R N Kulkarni	ICRTEST	2016	3	BITM	0
Eagilla	Dr. R.V. Biradar	AEJ	2017	6	BITM	0
Energy utilization and security enhancement using practical swam optimization	Dr. R.V. Biradar	ICAT	2016	0	BITM	0
Synthesis, Characterization and Liquid Petroleum Gas sensing of ZnFe <sub>2</sub> O <sub>4</sub> Nanoribbons, Doped Poly aniline Nanocomposites	Khened B. S.	SENSOR LETTER	2016	2	BITM	2
High Sensitivity and selectivity of LPG Gas by three dimensional molecular ordered polyaniline / CeO <sub>2</sub> Nanocomposites	Khened B. S.	SENSOR LETTER	2016	0	BITM	1



Testing The Stability Of Beta In Indian Stock Market	Dr. Janet Jyothi Dsouza	International Journal Of Management And Social Science Research	2016	0	BITM	2
Financial Performance Of Public Sectors Banks In India- An Evaluation	Dr. Janet Jyothi Dsouza	International journal of Business Administration Research Review	2016	0	BITM	1
Quarterly Earnings And Stock Prices Reactions,- A study of BSE-500 Companies	Dr. Janet Jyothi Dsouza Dr. Mallikarjunappa T	Amity Journal of Finance	2016	0	BITM	6
Stock Price Reactions to Earnings Announcements in Indian Stock Market	Dr. Janet Jyothi Dsouza Dr. Mallikarjunappa T	AIMS International	2017	0	BITM	3
The Impact of the Perception of Films on the Behavioural Aspects of Audiences in Ballari City - An Empirical Study	D. Christopher Raj	ISSN -2395-1877	2017	0	BITM	0
Effect of tool pin profile on dissimilar friction stir welding of aluminium alloy AA 7075 T651 and AA	H M Anil Kumar	International journal of latest trends in engineering and technology vol 8, issue, may 2017	2017	1	BITM	1

6061 T6						
Validation of Centralised Data Processing Unit for a Manufacturing setup through Simulation	Poovi Arasan,	International journal of Innovative research in Science , Engineering and Technology Vol 5, Issue 7 July 2016	2016	0	BITM	0
Design and Numerical Studies on Clamping Fixture for Machining an Automotive Pump Body	Dr.Raghavendra Joshi,	International journal for Research in Applied Science Engineering Technology Vol 4 issue7 July 2016	2016	0	BITM	0
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3.3.6 – h-Index of the Institutional Publications during the year. (based on Scopus/ Web of science)

Title of the Paper	Name of Author	Title of journal	Year of publication	h-index	Number of citations excluding self citation	Institutional affiliation as mentioned in the publication
Effect of tool pin profile on dissimilar friction stir welding of aluminium alloy AA 7075 T651 and AA 6061 T6	H M Anil Kumar	International journal of latest trends in engineering and technology Vol 8, issue, may 2017	2017	2	1	BITM, BALLARI
Validation of Centralised Data Processing Unit for a Manufacturing setup through Simulation	Poovi Arasan,	International journal of Innovative research in Science, Engineering and Technology Vol 5, Issue 7	2016	0	0	BITM, BALLARI

		July 2016				
Design and Numerical Studies on Clamping Fixture for Machining an Automotive Pump Body	Dr. Raghavendra Joshi,	International journal for Research in Applied Science Engineering Technology Vol 4 issue7 july 2016	2016	0	0	BITM, BALLARI
Experimental Analysis of solar Air Heater with Broken Ribs absorber Plate for Fruits Drying applications	Shekar K, Ravi G, Gavisiddesha P, Banakara Nagaraja	International journal of Innovative research in Science, Engineering and Technology Vol 5, Issue 8 Aug 2016	2016	0	0	BITM, BALLARI
Vibration Based Condition Monitoring Of Shaft Motor For Generator	Pavan Kumar B K, Dr. Yadavalli Basavaraj	National Conference on progress and research in Mechanical Engineering	2016	0	0	BITM, BALLARI
Aerodynamic Characteristic Analysis of UAV By Using CFD	Dr. V Ravi	International Journal for Research in Applied Science	2016	0	0	BITM, BALLARI
Finite Element Analysis of Two Wheeler Disc Brake Rotor	Shivarama Krishna, Pavan Kumar B K, Mayur Pawar, Manjunath E, Vijay Kumar B P	Imperial Journal of Interdisciplinary Research Vol. 2, Issue 7, 2016	2016	0	0	BITM, BALLARI
Drilling Parameters Optimization and Cha	Manjunath T H, Raghavendra Joshi, Dr.	Materials today Science Direct	2017	0	0	BITM, BALLARI

racterization of Al 7075 reinforced with Al203	Yadavalli Basavaraj, Anil Kumar H M	2017				
Study of Microstructure	Dr. Yadavalli Basavaraj	National Conference on progress and research in Mechanical Engineering	2016	0	0	BITM, BALLARI
Study of Mechanical Properties and Drilling Behaviour of Al7075 reinforced with B4C	Shivarama Krishna A, Dr. Raghavendra Joshi, Manjunath TH	Materials today Science Direct 2017	2017	0	0	BITM, BALLARI
Restructuring of Legacy	Dr. R N Kulkarni	ICRTEST	2016	3	0	BITM, BALLARI
Eagilla an Enhanced mobile Agent Middleware for WSN	Dr. R.V. Biradar	AEJ	2017	3	5	BITM
Energy utilization and security enhancement using practical swam optimization	Dr. R.V. Biradar	ICAT	2016	0	0	BITM, BALLARI
Offline Data Synchronization with Occasionally Connected Database using Smart	R.M. Jagadish	LNEE, Springer	2017	0	0	BITM, BALLARI
Assortment of MANET routing protocols	Dr. V.C.Patil	ICEECCOT IEEE	2017	5	0	BITM, BALLARI

and its parameters for different environments						
Design and Simulation of Low Drop out Voltage using 180nm CMOS Technology	Mr. Premachand D.R, Dr. U Eranna	ICEECCOT	2017	5	0	BITM, BALLARI
Paradoxical Monitoring of Urban Areas and Mailbags Tracking system using RFID	Dr. U Eranna, Mr. Ulaganathan J	ICEECCOT IEEE	2017	5	0	BITM, BALLARI
Signal Processing based diagnosis of cardiovascular Anomalies	Dr. U Eranna, Mr. Abdul Lateef Haroon	ICEECCOT IEEE	2017	5	0	BITM, BALLARI
An Enhanced Source Location Privacy Protection Technique for Wireless Sensor Networks using Randomized Routes	Ms. Manjula. R	IETE Journal of Research	2017	108	0	BITM, BALLARI
A Three Phase Explorative Sensing and Power Allocation Scheme for Non- Cooperative Cognitive Radio Networks	Mr. Fareduddin J.S	IJRASET	2017	232	0	BITM, BALLARI

Location based hybrid spectrum sensing and power allocation in cognitive radio networks	Mr. Fareduddin J.S	IEEE SMART ECHCON August 2017	2017	5	0	BITM, BALLARI
Assortment of Manet routing protocols and its parameters for different environments	Mr. Mallik arjuna. A	IEEE/ICEEC COT	2017	5	0	BITM, BALLARI
A Comparative Analysis on the Power Consumption Due to Carry Input in Adder Architectures	Mr. Naseer uddin	IEEE	2017	110	0	BITM, BALLARI
Bandwidth Enhancement Techniques for MPA for Wideband and Multiband Applications	Mr. Naseer uddin	ICCIC	2017	509	0	BITM, BALLARI
A survey on VANETs protocol for improving safety in urban area	Mr. Pramod Mutalik	IEEE SMART ECHCON August 2017	2017	110	0	BITM, BALLARI
Design and Implementation of Front End Biological Signal Con	Mr. Ulagan athan J, Dr. K.M. Sadyojatha	ICEECCOT	2017	5	0	BITM, BALLARI

ditioning						
Smart Home Based user Data Prediction Algorithm model	Dr. K.M. S adyojatha, Mr. Ulagan athan J, Mr. Abdul Lateef Haroon, Mr. Raymond I	ICEECCOT	2017	5	0	BITM, BALLARI
Design and Implementation of Front End Biological Signal Conditioning	Mr. Abdul Lateef Haroon, Mr. Raymond I	ICEECCOT	2017	5	0	BITM, BALLARI
Paradoxical Monitoring of Urban Areas and Mailbags Tracking system using RFID	Mr. Abdul Lateef Haroon, Mr. Raymond I	ICEECCOT	2017	5	0	BITM, BALLARI
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### 3.3.7 – Faculty participation in Seminars/Conferences and Symposia during the year :

Number of Faculty	International	National	State	Local
Attended/Seminars/Workshops	7	159	9	0
Presented papers	99	25	0	0
Resource persons	1	5	0	0
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### 3.4 – Extension Activities

3.4.1 – Number of extension and outreach programmes conducted in collaboration with industry, community and Non- Government Organisations through NSS/NCC/Red cross/Youth Red Cross (YRC) etc., during the year

Title of the activities	Organising unit/agency/ collaborating agency	Number of teachers participated in such activities	Number of students participated in such activities
Leadership Camp	NSS UNIT	3	7
Swaach Bharath Mission 2017 Awareness Programme On Wall Painting	NSS UNIT	3	5
Issue Of NSS Diary Certificates Badges	NSS UNIT	3	100

Independence Day 15.08.2016	NSS UNIT	3	70
Essay Writing	NSS UNIT	3	25
Akshaya Uraj Diwas Renewable Source	NSS UNIT	3	30
Ozone Day - World Environment Day	NSS UNIT	3	300
Use of Crackers- Pollution Awareness Programme	NSS UNIT	3	20
Use of Plastics Awareness Programme Collection	NSS UNIT	3	20
Gandhi Jayanthi	NSS UNIT	3	65
Karnataka Rajyotsava	NSS UNIT	3	74
Helping Hands To Orphanages Swatch Bharath	NSS UNIT	3	40
Worlds Aids Day	NSS UNIT	3	25
National Youth Day	NSS UNIT	3	30
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3.4.2 – Awards and recognition received for extension activities from Government and other recognized bodies during the year

Name of the activity	Award/Recognition	Awarding Bodies	Number of students Benefited
Blood Donation Camp	Highest Units of Blood Donated	Red Cross Society	280
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3.4.3 – Students participating in extension activities with Government Organisations, Non-Government Organisations and programmes such as Swachh Bharat, Aids Awareness, Gender Issue, etc. during the year

Name of the scheme	Organising unit/Agency/collaborating agency	Name of the activity	Number of teachers participated in such activities	Number of students participated in such activities
NSS	BITM-NSS Unit	Worlds Aids Day	3	25
NSS	BITM-NSS Unit	National Youth Day	3	30
NSS	BITM-NSS Unit	Voluntary Blood Donation Camp	3	230
NSS	BITM-NSS Unit	Matribhasha Diwas	3	8
NSS	BITM-NSS Unit	Leadership Camp	3	7
NSS	BITM-NSS Unit	Swaach Bharath Mission 2017Awareness Programme On Wall Painting	3	5



NSS	BITM-NSS Unit	Issue Of NSS Diary Certificates Badges	3	100
NSS	BITM-NSS Unit	Independence Day 15.08.2016	3	70
NSS	BITM-NSS Unit	Essay Writing	3	25
NSS	BITM-NSS Unit	Akshaya Uraj Diwas Renewable Source	3	30
NSS	BITM-NSS Unit	Ozone Day - World Environment Day	3	300
NSS	BITM-NSS Unit	Use of Crackers	3	20
NSS	BITM-NSS Unit	Use of Plastics Awareness Programme Collection	3	20
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### 3.5 – Collaborations

#### 3.5.1 – Number of Collaborative activities for research, faculty exchange, student exchange during the year

Nature of activity	Participant	Source of financial support	Duration
Publications	CSE-103, ECE-24, ME-12	BITM-R and D Fund	180
Wipro Technology learning centre inter disciplinary projects	CSE,ECE,ME,EEE-30	BITM	360
Student Exchange	Sharana Basava	BITM	90
Faculty Exchange	CSE,ECE,ME,EEE-5	BITM	2
E-Yantra Lab	ECE-15	BITM	120
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#### 3.5.2 – Linkages with institutions/industries for internship, on-the- job training, project work, sharing of research facilities etc. during the year

Nature of linkage	Title of the linkage	Name of the partnering institution/ industry /research lab with contact details	Duration From	Duration To	Participant
On-Job Training	Infosys Campus Connect	Infosys Ltd.,	01/02/2017	20/05/2017	148
On-Job Training	IBM Speciality Labs	IBM India Pvt. Ltd.,	17/04/2017	22/04/2017	38
On-Job	IBM	IBM India	11/05/2017	20/05/2017	41

Training	Speciality Labs	Pvt. Ltd.,			
On-Job Training	E-Yantra Robotics Lab.	IIT-Mumbai	01/03/2017	30/05/2017	16
Internship	Steel Industry	JSW Steels Ltd.,	25/01/2017	24/02/2017	10
Internship	VTU Internships	Banking / Finance / Marketing and HR Industries	28/12/2016	01/03/2017	124
Internship	VTU Internships	JSW / BTPS	25/01/2017	24/02/2017	02
Sharing of Research Facility	Physics and Chemistry Research Lab,	VSK University and Veerashaiva College Ballari	15/07/2016	30/06/2017	14
Sharing of Research Facility	FMS Lab.	Local Small Scale Industries-SGP	15/07/2016	30/06/2017	117
Skill Development	Surya Mitra	Govt. of India, Ministry of Renewal Energy	15/07/2016	30/06/2017	30
Project Work	VTU Projects	Banking / Finance / Marketing and HR Industries	01/03/2017	30/06/2017	124

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3.5.3 – MoUs signed with institutions of national, international importance, other universities, industries, corporate houses etc. during the year

Organisation	Date of MoU signed	Purpose/Activities	Number of students/teachers participated under MoUs
IBM Specialty LAB	27/12/2016	Certification for Cloud Computing, Big Data Analytics and Mobile Computing	22
Renewal of Infosys Campus Connect	16/12/2016	Certification for Infosys Foundation Program and Soft skills	148
J /Q Spiders	26/12/2016	Skill Development in the area of Manual and automated testing	143

		and JAVA programming	
Harita Techserv A Unit of TVS Group of Companies	30/05/2017	To train students on Siemens PLM Software in 3D Modelling	30
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## CRITERION IV – INFRASTRUCTURE AND LEARNING RESOURCES

### 4.1 – Physical Facilities

4.1.1 – Budget allocation, excluding salary for infrastructure augmentation during the year

Budget allocated for infrastructure augmentation	Budget utilized for infrastructure development
214	212.59

4.1.2 – Details of augmentation in infrastructure facilities during the year

Facilities	Existing or Newly Added
Campus Area	Existing
Class rooms	Existing
Laboratories	Newly Added
Seminar Halls	Existing
Classrooms with LCD facilities	Newly Added
Classrooms with Wi-Fi OR LAN	Existing
Seminar halls with ICT facilities	Existing
Value of the equipment purchased during the year (rs. in lakhs)	Newly Added
Number of important equipments purchased (Greater than 1-0 lakh) during the current year	Newly Added

### 4.2 – Library as a Learning Resource

4.2.1 – Library is automated {Integrated Library Management System (ILMS)}

Name of the ILMS software	Nature of automation (fully or patially)	Version	Year of automation
EASY-LIB	Fully	4.4.2	2008

4.2.2 – Library Services

Library Service Type	Existing		Newly Added		Total	
Text Books	86535	18015000	5418	1976000	91953	19991000
Reference Books	9167	2353000	268	102000	9435	2455000
e-Books	35	72084	0	0	35	72084
Journals	91	322000	0	0	91	322000
e-Journals	8	1349000	0	0	8	1349000

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4.2.3 – E-content developed by teachers such as: e-PG- Pathshala, CEC (under e-PG- Pathshala CEC (Under

Graduate) SWAYAM other MOOCs platform NPTEL/NMEICT/any other Government initiatives & institutional (Learning Management System (LMS) etc

Name of the Teacher	Name of the Module	Platform on which module is developed	Date of launching e-content
Pavan Kumar B K	Awareness on usage of Condition Monitoring Equipment VIBXPRT	Vibration Measurement	17/09/2016

#### 4.3 – IT Infrastructure

##### 4.3.1 – Technology Upgradation (overall)

Type	Total Computers	Computer Lab	Internet	Browsing centers	Computer Centers	Office	Departments	Available Bandwidth (MGBPS)	Others
Existing	947	709	40	40	28	32	98	64	0
Added	83	40	0	0	12	18	13	0	0
<b>Total</b>	<b>1030</b>	<b>749</b>	<b>40</b>	<b>40</b>	<b>40</b>	<b>50</b>	<b>111</b>	<b>64</b>	<b>0</b>

##### 4.3.2 – Bandwidth available of internet connection in the Institution (Leased line)

64 MBPS/ GBPS
---------------

##### 4.3.3 – Facility for e-content

Name of the e-content development facility	Provide the link of the videos and media centre and recording facility
VTU E-Learning	<a href="http://10.0.150.11/econtent">10.0.150.11/econtent</a>
NPTEL	<a href="http://www.nptel.ac.in">www.nptel.ac.in</a>
NDL	<a href="http://ndl.iitkgp.ac.in">ndl.iitkgp.ac.in</a>

#### 4.4 – Maintenance of Campus Infrastructure

##### 4.4.1 – Expenditure incurred on maintenance of physical facilities and academic support facilities, excluding salary component, during the year

Assigned Budget on academic facilities	Expenditure incurred on maintenance of academic facilities	Assigned budget on physical facilities	Expenditure incurred on maintenance of physical facilities
15.7	14.95	133	129

##### 4.4.2 – Procedures and policies for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, classrooms etc. (maximum 500 words) (information to be available in institutional Website, provide link)

The College has clear policies and procedures to create, maintain and upgrade the Infrastructure for enhancing the Teaching Learning process. We provide impetus on utilizing the budgets in creating and maintaining state of the art Facilities in terms of Buildings, Student spaces, Laboratory equipment, Teaching aids, Learning resources, etc., to enhance the overall student experience at our institution. Classrooms We have adequate number of spacious Classrooms with proper ventilation and natural lighting for conducting Theory classes. Ergonomically designed benches have been provided for students. 1. White Boards and Green boards are available in the Campus 2. Classrooms with LCD Projectors 3. Classrooms with Wi-Fi LAN enabled Internet connectivity in the Classrooms 4. Seminar halls with state of the art ICT facilities to conduct

Collegellevel Events, State, National and International Conferences, Workshops and Symposia. All the Laboratories or Workshops are wellequipped with stateoftheart equipments and materials not only to cater towards imparting of Curriculum related aspects to students as well go a level above in acting as a catalyst to motivate students to engage in Research related activities and innovative student projects. The Labs and Workshops are maintained well with regular/periodical upkeep done by professionals. All the labs are equipped with UPS and regularly scheduled maintenance is taken up. The Library setup consists of the Main Library KNOWLEDGE CENTRE along with Departmental Libraries attached to the respective Departments, which collectively support the educational needs of students belonging to all the programmes and specializations being offered on campus. The Library contains a vast collection of text books, Reference books, Competitive exam books, general books on philosophy, psychology, auto biographies, etc., Journals, Conference proceedings, eBooks, CDs DVDs, student project thesis, Dissertations, Periodicals, eJournals, etc. The Library is fully automated by implementing EasyLib software for all Library related activities. eJournals eResources eJournals eResources have been subscribed to by the college through the VTU Consortium. Students and staff can access library through OPAC. Library subscribes to eResources for all the Programmes, namely.. UG PG, through the V.T.U eResources Consortium. Issuance and return of books Issuance Circulation of Books - Text books for UG and PG sections will be issued for students and staff. Reference books are for reference only inside the respective Libraries and not issued to students. The book facility is provided exclusively for SC ST students additional books are issued apart from the books in the stack area each semester. Library facility and services orientation programme is given for the new students and faculties. Reprographic Services are centralized. The has sports complex with foot ball ground, tennis court, basket ball court, hockey, table tennis, volley ball facilities. The college gives importance to allround development of its students by encouraging them to participate in sports and cultural activities to stay physically fit as well as improve their creativity, interpersonal and organizing skills. In addition to labs Central Computing facility, language lab is augmented. Computers and Peripherals, Network Infrastructure Preventive Routine maintenance is handled by the respective department technical staff.

[www.bitm.edu.in](http://www.bitm.edu.in)

## CRITERION V – STUDENT SUPPORT AND PROGRESSION

### 5.1 – Student Support

#### 5.1.1 – Scholarships and Financial Support

	Name/Title of the scheme	Number of students	Amount in Rupees
Financial Support from institution	Fee Concession and Economical Scholarship	29	287000
Financial Support from Other Sources			
a) National	Govt. of Karnataka OBC, SC, ST Scholarships	2380	57094000
b) International	NIL	0	0

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5.1.2 – Number of capability enhancement and development schemes such as Soft skill development, Remedial coaching, Language lab, Bridge courses, Yoga, Meditation, Personal Counselling and Mentoring etc.,

Name of the capability	Date of implemetation	Number of students	Agencies involved
------------------------	-----------------------	--------------------	-------------------

enhancement scheme		enrolled	
Heat Convection and Heat-Exchangers, Problems and Solutions. Heat and Mass Transfer	11/03/2017	25	BITM
Velocity and acceleration analysis of 4Bar and Slider crank Mechanisms Klein	25/05/2017	40	BITM
Aptitude and Soft skills training.	13/07/2016	129	Bizotic Talent solutions.
Aptitude and Soft Skills Training	12/07/2016	127	Innovation Unlimited Solutions
Queuing theory. Operations Research	12/08/2016	58	BITM
Velocity Diagrams for the analysis of Hydraulic and Francis Turbines. Turbo machines	22/10/2016	25	BITM
Balancing of Reciprocating masses Gyroscope problems and Solutions. Dynamics of Machines	25/11/2016	74	BITM
Columns, problems and Solutions Shear Force and Bending moment Diagrams. Mechanics of Materials	25/11/2016	50	BITM
Entropy and Pure substances. Basic Thermodynamics	27/11/2016	57	BITM
Air Standard Cycles, Gas turbines, and Jet propulsions IC Engines, Psychometric. Applied Thermodynamics	16/02/2017	65	BITM
Remedial Coaching	20/08/2016	717	BITM
Bridge Course for Lateral Entry	03/09/2016	224	BITM
C plus plus Programming Lab	03/02/2017	173	BITM
Project Entrepreneurship	22/11/2016	220	DIC BALLARI

Program			
NEXT Manufacturing Destination Skill India	04/03/2017	158	ISTE DEPT OF ME
Two days workshop on MultiCore Architecture and programming	17/02/2017	21	DEPT OF CSE BITM
Two days workshop on Introduction to Python	11/04/2017	47	DEPT OF CSE BITM
Two days workshop on PC Assembling and Networking	15/04/2017	28	DEPT OF CSE BITM
Student development program on Cloud Computing Blue Mix	17/04/2017	38	DEPT OF CSE BITM
Student development program on Cloud Computing Blue Mix	11/05/2017	41	DEPT OF CSE BITM
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5.1.3 – Students benefited by guidance for competitive examinations and career counselling offered by the institution during the year

Year	Name of the scheme	Number of benefited students for competitive examination	Number of benefited students by career counseling activities	Number of students who have passed in the comp. exam	Number of students placed
2016	Soft Skills	10	40	5	370
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5.1.4 – Institutional mechanism for transparency, timely redressal of student grievances, Prevention of sexual harassment and ragging cases during the year

Total grievances received	Number of grievances redressed	Avg. number of days for grievance redressal
1	1	10

## 5.2 – Student Progression

5.2.1 – Details of campus placement during the year

On campus			Off campus		
Name of organizations visited	Number of students participated	Number of students placed	Name of organizations visited	Number of students participated	Number of students placed
Capgemini Mind Tree CGI Tech Mahindra SLK Software L and T Technology	402	225	Bajaj Finance, Ballari Teamlease Dilip Associates, Toranagallu	177	145

Torry harris EDS Technologies Suzlon L and T Infotech TCS 24 7 Customer Pvt. Ltd. Applied Tech nosystems Attrra InfoTech Pvt. Ltd. BOSCH BEL Cognizant EASi Test Yantra Software Solut			Flipkart, Bengaluru Teamlease ABB, Bengaluru Accurate Engg. Pvt. Ltd., Bengaluru Aishwarya Healthcare, Sikkim Altisource Business Solutions Pvt. Ltd. Anawave Systems and Solutions Pvt. Lt		
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5.2.2 – Student progression to higher education in percentage during the year

Year	Number of students enrolling into higher education	Programme graduated from	Depratment graduated from	Name of institution joined	Name of programme admitted to
2016	2	BE	EEE	BITM – Ballari	M.Tech Power Electronics
2016	1	BE	EEE	AIMIT, Bangalore	M.B.A.
2016	1	BE	ME	VTU Regional Center, Gulbarga	M.Tech- Machine Design
2016	1	BE	ME	SIT, Tumkur	M.Tech- Thermal Power Engg.
2016	1	BE	ME	U V College of Engg., Bengaluru	M.Tech- Advanced Material Technology
2016	1	BE	ME	BITM, Ballari	M.Tech- Design Engg.
2016	1	BE	ME	KLE Technological University, Hubballi	MBA
2016	1	BE	ME	Ramaiah Institute of Technology, Bengaluru	M.Tech- Industrial Engg.
2016	1	BE	ME	Dayanand Sagar College Of	M.Tech- Design Engg.



				Engg., Bengaluru	
2016	1	BE	ME	RYM Engg College, Ballari	M.Tech- Production Management
2016	3	BE	ME	BITM, Ballari	MBA
2016	1	BE	ME	Western Michigan University, USA	MS- Engg. Management
2016	1	BE	ME	PDA College of Engineering	Thermal Power Engg.
2016	1	BE	CSE	Acharya Institute of Management and Science, Bangalore	M.B.A
2016	1	BE	CSE	Adarsh Institute of Management and Information Technology, Bangalore	M.B.A
2016	1	BE	CSE	Ballari Institute of Technology and Management, Ballari	M.Tech
2016	1	BE	CSE	Dayananda Sagar College of Engineering, Bangalore	M.B.A
2016	1	BE	CSE	JNTUA College of Engineering, Anantapur	M.Tech
2016	1	BE	CSE	KLE Technolo gical University, Hubballi	M.Tech
2016	1	BE	CSE	Reva Institute of Science and Management, Bangalore	M.B.A
2016	1	BE	CSE	Riga Technical University,	M.S

				Lativa	
2016	1	BE	CSE	RNSIT, Bangalore	M.Tech
2016	1	BE	CSE	RYMEC, Ballari	MBA
2016	1	BE	CSE	RYMEC, Ballari	M.Tech.
2016	2	BE	CSE	Siddaganga Institute of Technology, Tumkur	M.Tech
2016	1	BE	CSE	Siddaganga Institute of Technology, Tumkur	M.B.A
2016	1	BE	ECE	Annapurna In ternational School of Film and Media	MA (Advertising and Digital Marketing)
2016	5	BE	ECE	BITM/ VTU, Belagavi	M.Tech. in VLSI Design & Embedded Systems
2016	1	BE	ECE	PESIT/ VTU, Belagavi	M.Tech. in Signal Processing
2016	1	BE	ECE	M S Ramaiah Institute of Technology/ VTU, Belagavi	M. Tech in Digital Comm unication Engineering
2016	1	BE	ECE	Nitte Meenakshi Institute of Technology/ VTU, Belagavi	M.Tech. in VLSI
2016	1	BE	EEE	R.V. College, Bangalore	M.Tech Power Electronics
2016	1	BE	EEE	SDM College - Dharwad	M.Tech Power Electronics
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5.2.3 – Students qualifying in state/ national/ international level examinations during the year  
(eg:NET/SET/SLET/GATE/GMAT/CAT/GRE/TOFEL/Civil Services/State Government Services)

Items	Number of students selected/ qualifying
Any Other	1
Any Other	1

Any Other	1
Any Other	1
Any Other	1
Any Other	1
Any Other	1
Any Other	1
Any Other	1
Any Other	1
Any Other	1
Any Other	1
Any Other	1
GATE	1
GATE	1
GRE	1
<a href="#">View File</a>	

#### 5.2.4 – Sports and cultural activities / competitions organised at the institution level during the year

Activity	Level	Number of Participants
BADMINTON Men	VTU-GULBARGA ZONE	7
BADMINTON Women	VTU-GULBARGA ZONE	7
BASKET BALL MEN	VTU-GULBARGA ZONE	12
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### 5.3 – Student Participation and Activities

#### 5.3.1 – Number of awards/medals for outstanding performance in sports/cultural activities at national/international level (award for a team event should be counted as one)

Year	Name of the award/medal	National/ Internaional	Number of awards for Sports	Number of awards for Cultural	Student ID number	Name of the student
2016	0	National	0	0	0	NIL

#### 5.3.2 – Activity of Student Council & representation of students on academic & administrative bodies/committees of the institution (maximum 500 words)

The College creates a platform for the active participation of the students in the various academic and administrative bodies including other activities. This empowers the students in gaining leadership qualities, rules, regulations and execution skills. Selection, Constitution, Activities and Funding Class representatives will be selected from each section from 1st year to Final year, based on merit and leadership quality, who are selected by the classmates. Students are represented in various academic and administrative bodies viz IQAC, Prevention of Sexual harassment committee, Hostel committees, College magazine committee, cultural committee, sports committee, NSS, student professional bodies such as, IEEE, IETE, ISME, ISCE, CSI and various clubs and forums such as Vaisheshika, TechVruksha, Mechanical Engineering Forum, Nirman Forum, EEE Forum, FINWIZZ, Manav Club, Maverick, The student representative brings forward the views and suggestions of the entire class with respect to the faculty, subjects, syllabus and other things related to cocurricular activities. The student representatives share ideas and interact with teaching faculty, principal and management. The student representatives also help to raise funds for activities including Social events, Community projects, helping

people in need and college reforms. Various programs like paper presentations, workshops and Seminars are organized by these bodies every year. The funding for various activities of the internal college bodies is provided by the College Management.

#### 5.4 – Alumni Engagement

5.4.1 – Whether the institution has registered Alumni Association?

Yes

BITM Alumni Association Registered BITM Alumni Association is a Registered under the Karnataka Societies Registration Act 21 of 1960, under Registration No.BLY-S287-2015-16, Dt-14-12-2015 and its office is located at BITM Campus. The Aims and Objectives- A. To provide a forum for the old students of the College to meet and discuss the matters of common interest. B. To promote the interests of the College and its past and present students. C. To promote goodwill and mutual assistance among the members. D. To contribute to the cause of technical education by sharing the experience of those in the field. E. To help the authorities to improve the academic and cultural activities of the college. F. To co-operate with the students in literary, cultural and sports activities of the college. G. To help the members in employment and service matters without interfering in the policies of their employers. H. To arrange and conduct programmes of general and technical nature. I. To co- operate with other such bodies for the same ends. J. To promote other matters beneficial to prospects of the association. K. To extend financial help to economically backward and deserving students in form of scholarship for UG and PG of the institution. L. Any other activities that the general body may decide from time to time.

5.4.2 – No. of enrolled Alumni:

612

5.4.3 – Alumni contribution during the year (in Rupees) :

487000

5.4.4 – Meetings/activities organized by Alumni Association :

5

### CRITERION VI – GOVERNANCE, LEADERSHIP AND MANAGEMENT

#### 6.1 – Institutional Vision and Leadership

6.1.1 – Mention two practices of decentralization and participative management during the last year (maximum 500 words)

Vision To contribute valuable graduates for industry and society through excellence in technical and management education and research. Mission To offer stateoftheart undergraduate, postgraduate and doctoral programmes. To empower the students with Technical, Managerial Skills and professional ethics. To collaborate with academia and industries for skill development The institution has an effective leadership in tune with the vision and mission to create premierclass professionals by imparting valuable education, exposing students to new ideas and inculcating in them a sense of professionalism. The leadership of the institution believes in participative management and strives to bring in a structured system of practice involving all the stakeholders. The institute has a welldefined perspective plan to achieve the vision and mission of the institution. The institution has the highest standard of transparency and accountability. Nature of Governance The Governing council members are decided as per the rules and in accordance with AICTE. The GC members form the supreme body, which monitors and evaluate the functions as a policy maker of the

institution to impart quality education at the Institution. The GC approves the mission and strategic vision of the institution, long term business plans and annual budgets in accordance with the interests of the stakeholders. The GC monitors the institution's performance against the plans approved. GC approves the annual Budget Plan for effective implementation and monitors the same. GC approves the purchases Ratifies appointments, promotions and any HR related matters. The Chairperson supports the head of the institution in the execution of the programmes. The frequency of meetings of the GC is minimum twice a year or whenever needed. Perspective Plans To take decisions regarding the increase or reduction in intake, closure of any program. GC recommends to principal to take a final step with the affiliation bodies and to put them into the action. Fixation of Fee Structure for UG and PG program are reviewed on yearly basis and accordingly Fees is Structured. Improving UG and PG education by incorporating modern teaching and learning methods. Initiative to be taken to get a funds from the funding agencies. Focus on developmental aspects such as curriculum improvement, Infrastructure enhancement and accreditation with bodies. Improving R and D, Industry interaction, internal revenue generation, collaboration with industry and university, alumni interaction, entrepreneurship and social responsibility initiatives. Envisioning for autonomous status and aiming to offer world class education and research. The plans and policies of the institution are framed as per the collective inputs given by the management, principal and staff are implemented effectively. Various support committees like the, IQAC, library committee, BITM Alumni Association, Building Maintenance Committee, Magazine Committee, Proctoring Committee, EDC Committee, Finance Committee, Budget Committee, Hostel Committee, Industry Advisory Board, Board of Appointments, Planning, Monitoring and Purchase Committee, SC ST Grievance Cell, NSS Committee, Cultural Committee, IT Cell etc., are created by the Management. Any suggestions or recommendations of the committee will be made to the Principal and decisions are taken accordingly. Faculties also participate actively in decision making.

6.1.2 – Does the institution have a Management Information System (MIS)?

Yes

## 6.2 – Strategy Development and Deployment

6.2.1 – Quality improvement strategies adopted by the institution for each of the following (with in 100 words each):

Strategy Type	Details
Curriculum Development	Identification of Curriculum gaps and specific courses taught to fulfil the same. Design based experiments and additional labs are conducted beyond the syllabus.
Teaching and Learning	Outcome based education is practiced across the institution with real emphasis on student centric learning by catering to the different learning styles of the students.
Examination and Evaluation	Internal examinations are conducted on the basis of external exams, rules and regulations such as issuing of hall tickets for IA tests, intimation of attendance and IA marks to the parents via SMS. Evaluation is completed within a week and their IA books is given to the students for verification and self-evaluation. The answer key is well

	debated with the students.
Research and Development	Departments are continuously applying for Research and Development projects through VGST and KCTU. Staff and Students are sponsored from institution for paper publications and presentations. Faculty pursuing Ph.D., have given contingency amount and support for the research work.
Library, ICT and Physical Infrastructure / Instrumentation	State of the Art Library with EJournal and Digital ELearning facilities are augmented for selflearning. The college has high speed internet connectivity for access to educational contents. Firewall is augmented for secure and safe access. In our institution 993 computers are available for all the Staff and Students.
Human Resource Management	Objective base appraisal is carried out in a very systematic manner taking into account related to academics, research, personal development and leadership aspects.
Industry Interaction / Collaboration	College has setup an IndustryInteraction cell for industry institute interaction and collaborations.
Admission of Students	Management provided scholarship for poor and meritorious students in management quota. Career counselling was carried out to the students of Ballari and scope and opportunities in Engineering was highlighted.

#### 6.2.2 – Implementation of e-governance in areas of operations:

E-governace area	Details
Administration	Robosoft and Eduwize ERP Software is used for overall administration and monitoring.
Planning and Development	Proper Budgeting is carried at the beginning of the financial year and the same data and information is maintained on electronic platform. The expenditures are constantly verified against the budget for effective utilisation. Development activities are carried out based on the budget.
Finance and Accounts	Tally Accounting Software is used for all the accounting purpose. Financial aspects are closely monitored through ebanking facility and all the financial transactions are carried out through digital payments such as NEFTRTGS, Paytm, PhonePe, BHIM, POS Machines and

	etc. College has Government Scheduled bank to cater to its banking operations.
Student Admission and Support	RoboVidya by RoboSoft Software used to manage the Students information for Admission, Fee payment, communication, transport maintenance and Hostel.
Examination	IA performance and their attendance is communicated through SMS by SMS Gateway software. Student update their profiles in the VTU examination Portal every year. Students after applying for examinations their hall tickets are automatically generated for semester end examinations and the results are also announced on online in VTU portal.

### 6.3 – Faculty Empowerment Strategies

6.3.1 – Teachers provided with financial support to attend conferences / workshops and towards membership fee of professional bodies during the year

Year	Name of Teacher	Name of conference/ workshop attended for which financial support provided	Name of the professional body for which membership fee is provided	Amount of support
2016	Mr. Virupaksha Gowda	Foundation Program 5.0	SIT, Tumkur	1800
2016	Mr. Naveen Kumar G	FDP on ETL and Data Analytics using informatica and Python	B.M.S.I.T., Bangalore	4306
2016	Mr. William Thomas	Workshop on Matlab, Bangalore	Matlab Expo 2016, Bangalore	640
2016	Mr. Naseeruddin	IEEE Conference Applied and Theoretical Computing and Communication Technology	SJBIT, Bengaluru	2056
2016	Mr. Pramod Mutalik	IJETCSE on Comparison of the AODV, DSR and DSDV routing protocols in Urban/ Rural Areas using VANET Route Traffic Analysis	IJETCSE, Kalaburgi	3400
2016	Mr. Bimanna A	Design and Analysis of algorithms JAVA	SVIT, Bangalore	4330

		and Microprocessor Laboratory		
2016	Mrs. Sheetal J	Data Analytics	SDM, Dharwad	2120
2016	Mr. Premachand D .R.	Workshop on Research Methodology, Bangalore	Rajarajeswari Engineering Collge, Bangalore	3776
2016	Mrs. Swetha N.	FDP on Signals, Systems and Transform Techniques Theory with MATLAB	NIT Warangal	4435
2016	Mr. Premachand	Workshop On Brain Wave Robot at IIT Bombay.	IIT Bombay.	4391
2016	Mr. Naseeruddin	IEEE International Conference on Electrical, Computer and Communication Technologies at Coimbatore	SVSCE, Coimbatore	2289
2016	Mr. Abdul Lateef	International Conference Electrical, Electronics, Computer, Information, Communication and Mechanical Engineering Bengaluru	ISETE, Bengaluru	4100
2016	Mr. Hemantha Kumar	International Publication International journal of advancement in Engineering Technology, Management and applied Science Identification of color based texture features of agricultural and nonagricultural area using wavelets in satelite image	Basavakalyan Engineering College, Basavakalyana	600



2016	Mr. Fareduddin	IEEE Conference on Innovations in Power and Advanced Computing Technologies at VIT, Vellore	VIT, Vellore	4000
2016	Mr. T M Hayath	ARM XKEIL Workshop	GAT, Bangalore	2850
2016	Mr. Dadapeer	FDP on Pervasive and Mobile Computing	NITK, Surathkal	4600
2017	Mr. Ravi Kumar J S	Emotional Intelligence for Teaching and Academic Leadership	BITM	500
2017	Mr. Dinesh K	FDP on Capital Market Analytics	National Institute of Securities Market NISM-Kristu Jayanti School of Management, Bangalore	5000
2017	Dinesh K	FDP on Using Blended MOOCs In Management Education	Indian Institute of Management IIM-B, Bangalore	3000
2017	Dinesh K	FDP on Derivatives	National Institute of Securities Market NISM-IES Management College and Research Centre, Mumbai	5000
2016	Mr. Pavan Kumar B K	Research methodology and Latex	Raja Rajeswari College of Engg., Bangalore	3000
2016	Mr. Raghavendra Setty	Dynamic vibration analysis of gear box using ANSYS software	MIT Manipal	6000
2016	Dr. R N Kulkarni	Partnership Reinforcement and Development Engagement PRIDE TCSion	TCS, Bangalore	2000
2016	Prof. Paniram	Partnership	TCS, Bangalore	2000

	Prasad	Reinforcement and Development Engagement PRIDE TCSion		
2016	Prof. C K Srinivas	Partnership Reinforcement and Development Engagement PRIDE TCSion	TCS, Bangalore	2000
2016	Mrs. Pratibha Mishra	Data Analytics	SDM, Dharwad	2120
2016	Dr. R V Biradar	National level Advanced Workshop on NS3 Simulator NS32017	BITM, Ballari	3495
2016	Prof. Muhibur Rahman	National level Advanced Workshop on NS3 Simulator NS32017	BITM, Ballari	3495
2016	Prof. Venkateshwar	National level Advanced Workshop on NS3 Simulator NS32017	BITM, Ballari	3495
2016	Mrs. Pratibha Mishra	National level Advanced Workshop on NS3 Simulator NS32017	BITM, Ballari	3495
2016	Mr. Sudhakar Avareddy	National level Advanced Workshop on NS3 Simulator NS32017	BITM, Ballari	3495
2016	Mr. Jagadish R M	National level Advanced Workshop on NS3 Simulator NS32017	BITM, Ballari	3495
2016	Mr. Sridhar S K	National level Advanced Workshop on NS3 Simulator NS32017	BITM, Ballari	3495
2016	Prof. Anita Patil	National level Advanced Workshop on NS3 Simulator NS32017	BITM, Ballari	3495
2016	Mr. H Hari Krishna	National level Advanced	BITM, Ballari	3495

		Workshop on NS3 Simulator NS32017		
2016	Mr. Azhar Baig	National level Advanced Workshop on NS3 Simulator NS32017	BITM, Ballari	3495
2016	Mr. Kiran A M	National level Advanced Workshop on NS3 Simulator NS32017	BITM, Ballari	3495
2016	Mrs. Sheetal J	National level Advanced Workshop on NS3 Simulator NS32017	BITM, Ballari	3495
2016	Ms. Pooja Kulkarni	National level Advanced Workshop on NS3 Simulator NS32017	BITM, Ballari	3495
2016	Mr. Abdul Lateef	Workshop on Research Methodology, Bangalore	Rajarajeswari Engineering Collge, Bangalore	3776
2016	Ms. Poornima	FDP on Signals, Systems and Transform Techniques Theory with MATLAB	NIT Warangal	4435
2016	Ms. Sarala	FDP on Signals, Systems and Transform Techniques Theory with MATLAB	NIT Warangal	4435
2016	Mr. Raymond I.	Workshop On Brain Wave Robot at IIT Bombay.	IIT Bombay.	4000
2016	Mr. Ulaganathan	Workshop On Brain Wave Robot at IIT Bombay.	IIT Bombay.	4000
2016	Mr. Ranjit Pyati	Workshop On Brain Wave Robot at IIT Bombay.	IIT Bombay.	4000
2016	Mr. Md. Shafiulla	Big Data and Analytics	BITM, Ballari	4600

		Workshop IBM		
2016	Mr. Hemantha Kumar	International Paper Presentation Information and communication technology NCICT2016 on Issues of gray level image segmentation using region growing segmentation	Basavakalyan Engineering College, Basavakalyana	600
2016	Mr. Raymond I.	International Conference Electrical, Electronics, Computer, Information, Communication and Mechanical Engineering Bengaluru	ISETE, Bengaluru	4100
2016	Mr. Ulaganathan	International Conference Electrical, Electronics, Computer, Information, Communication and Mechanical Engineering Bengaluru	ISETE, Bengaluru	4100
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6.3.2 – Number of professional development / administrative training programmes organized by the College for teaching and non teaching staff during the year

Year	Title of the professional development programme organised for teaching staff	Title of the administrative training programme organised for non-teaching staff	From date	To Date	Number of participants (Teaching staff)	Number of participants (non-teaching staff)
2016	Seminar on Entrepreneurship Development Program EDP	NOT APPLICABLE	22/11/2016	22/11/2016	40	0
2016	Out Come Based Education of NBA Accreditation	Outcome based education and NBA Accreditation	18/07/2016	20/07/2016	214	90

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6.3.3 – No. of teachers attending professional development programmes, viz., Orientation Programme, Refresher Course, Short Term Course, Faculty Development Programmes during the year

Title of the professional development programme	Number of teachers who attended	From Date	To date	Duration
Four day FDP on IBM CE-Enablement program-Enterprise Application Development and Deployment Using IBM work light	8	20/02/2017	23/02/2017	4
IEEE 802.11ax Wireless Networking in High-Density WLANS	1	05/06/2017	05/06/2017	1
Introduction to Electronics	1	19/06/2017	19/06/2017	1
IPR Copyrights Tutorial	1	22/10/2016	22/10/2016	1
IRP PLAGIARISM TUTORIAL	1	04/11/2016	04/11/2017	1
Managing Student Teams	1	11/11/2016	11/11/2017	1
MIMO Beam forming Multisponsor Webinar	1	11/06/2016	11/06/2016	1
Mobile Web Technologies For The Developing World	1	22/10/2016	22/10/2016	1
NPTEL- Wireless Ad HOC and Sensor Networks	1	01/01/2017	01/03/2017	60
NPTEL-Basic Electronics	1	01/01/2017	30/04/2017	120
NPTEL-EMBEDDED SYSTEMS DESIGN	1	01/01/2017	30/04/2017	120
One Week Workshop on Advancements In MATLAB and ITS APPLICATION	8	26/09/2016	01/10/2016	6

Perspectives on 5G Standard For 5G Part 3 Of 3	1	18/06/2016	18/06/2016	1
Processing of material characterization and testing organized my mechanical engineering	1	16/01/2017	21/01/2017	6
REALIZING New Potentials in Miniature Subsea Robotics	1	10/11/2016	10/11/2016	1
Sensor Networks and IOT	1	29/12/2016	03/01/2017	6
Signal Processing For 5G Massive MIMO Wireless Systems	2	28/01/2017	30/01/2017	3
Six days Faculty development program on IOT FOR EMERGING ENGINEERING APPLICATION	4	23/01/2017	28/01/2017	6
Six days FDP on Signals Systems And Transform Techniques Theory With Matlab	1	26/12/2016	31/12/2016	6
Sustainable Electrification Solutions For Developing Countries	1	17/11/2016	17/11/2016	1
Theoretical and computational mechanics	1	19/01/2017	21/01/2017	3
Three day Workshop on NS-3 Simulator NS3-2017	3	26/01/2017	28/01/2017	3
Three days workshop on Research Methodology and Latex	1	20/12/2016	22/12/2016	3
Two day workshop on	4	14/03/2017	15/03/2017	2

Brain wave robot				
Two day workshop on IOT- INTERNET OF THINGS	2	24/10/2016	25/10/2016	2
Two days workshop on ETHICAL HACKING and CYBER SECURITY	1	11/03/2017	12/03/2017	2
Two days workshop on Research Methodologies	2	12/05/2017	13/05/2017	2
Two Week workshop on CMOS, MIXED SIGNAL and RADIO FREQUENCY VLSI DESIGN	1	23/01/2017	04/02/2017	14
XILINX Webiner Series - Vision with Precision	1	03/06/2017	03/06/2017	1
ALTAIR-Hyper works	1	17/01/2017	21/01/2017	5
Antennas 1-Basics and Mechanical Scanning Techniques	1	18/11/2016	18/11/2016	1
Antennas 2- Electronic Scanning and Hybrid Scanning Techniques	1	03/12/2016	03/12/2016	1
Emerging Topics in Computational Intelligence and its application	1	18/01/2017	20/01/2017	3
Engineering For Human Rights	1	02/11/2016	02/11/2016	1
Faculty development program - Mobility Workshop IBM WORKLIGHT	18	26/03/2017	30/03/2017	5
Faculty development program-Cloud	14	20/02/2017	23/02/2017	4

Computing IBM BLUEMIX				
Faculty development program-Data Analytics INFOSPHERE INSIGHT	11	20/06/2017	23/06/2017	4
Five day FDP on IBM CE-Enablement program-Enterprise Application Development and Deployment Using IBM work light	3	26/03/2017	30/03/2017	5
Five days Workshop on Digital Signal Processing and Application	2	27/02/2017	03/03/2017	5
Five days workshop on Microcontroller Application	1	20/02/2017	24/02/2017	5
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6.3.4 – Faculty and Staff recruitment (no. for permanent recruitment):

Teaching		Non-teaching	
Permanent	Full Time	Permanent	Full Time
46	46	12	12

6.3.5 – Welfare schemes for

Teaching	Non-teaching	Students
EPF, Group gratuity, ESI, CL-15, El-30, 10-vacation staff, GGS-LIC, Accidental Insurance, Transport, PhD-Contingency, WS-Conf, Fees, Salary Advance facility.	EPF, Group gratuity, ESI, CL-15, Accidental Insurance, Subsidized Transport Facility, Salary Advance facility.	Group Accidental Insurance, Workshops

**6.4 – Financial Management and Resource Mobilization**

6.4.1 – Institution conducts internal and external financial audits regularly (with in 100 words each)

Experienced and efficient personnel conduct internal audit regularly on the receipts and the payments. External audits are done by Proficient financial auditors and signed by the Chartered Accountant. In the Audits, Experts verify all transactions. There were no major observations noticed and the reports of the same are available.

6.4.2 – Funds / Grants received from management, non-government bodies, individuals, philanthropies during the year(not covered in Criterion III)



Name of the non government funding agencies /individuals	Funds/ Grnats received in Rs.	Purpose
ADYA TECHNOLOGIES, BALLARI	300000	Software training and development by department of CSE
<a href="#">View File</a>		

6.4.3 – Total corpus fund generated

0
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**6.5 – Internal Quality Assurance System**

6.5.1 – Whether Academic and Administrative Audit (AAA) has been done?

Audit Type	External		Internal	
	Yes/No	Agency	Yes/No	Authority
Academic	Yes	Intertek Agency	Yes	ISO Coordinator
Administrative	Yes	Intertek Agency	No	ISO Coordinator

6.5.2 – Activities and support from the Parent – Teacher Association (at least three)

<p>The management arranges for a parent teachers meet once in a semester during a weekend. The parents are invited by faculty of all the departments. Student s academic performance, university results, attendance and other related issues are discussed. At the inaugural function of UG and PG, the parents are invited and academic expectations are informed to the parents. The parents are informed with respect to rules and regulations, scholarships, value added courses provided by the institution from time to time. Parents are part of IQAC and Grievance Cells.</p>
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6.5.3 – Development programmes for support staff (at least three)

<p>For the supportive staff at college level Training programmes are organized periodically. Orientation programme Computer and skillbased training Improvement programme The support staff are provided with health facilities, uniform. Training on Swaach Bharath Abhiyaan. Given information about ill effects of tobacco. Regular health checkups.</p>
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6.5.4 – Post Accreditation initiative(s) (mention at least three)

<p>Continuous assessments of POs and PSOs based on the results of every student in internal and external examination. Recruitment of faculty with higher qualification Ph.D. Arrangement of National Conferences. FDP for teaching faculty.</p>
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6.5.5 – Internal Quality Assurance System Details

a) Submission of Data for AISHE portal	Yes
b)Participation in NIRF	Yes
c)ISO certification	Yes
d)NBA or any other quality audit	Yes

6.5.6 – Number of Quality Initiatives undertaken during the year

Year	Name of quality initiative by IQAC	Date of conducting IQAC	Duration From	Duration To	Number of participants
2016	Two days SDP on Signal	01/08/2016	12/02/2017	13/02/2017	33

	Systems Transformer Techniques using MAT Lab				
2016	Advancements in MAT lab and its applications	01/08/2016	26/09/2017	01/10/2017	40
2016	IoT under out reach program of TECHNEX	01/08/2016	24/10/2016	25/10/2016	99
2016	PCB Design and NI Lab View Simulations	01/08/2016	04/03/2017	06/03/2017	42
2016	Faculty development program Mobility Workshop IBM WORKLIGHT	01/08/2016	26/03/2017	30/03/2017	18
2016	Faculty development program Cloud Computing IBM BLUEMIX	01/08/2016	20/02/2017	23/02/2017	14
2016	Faculty development program on Data Analytics on IBM Infoshpere insight.	01/08/2016	20/06/2017	23/06/2017	11
2016	Five day Faculty development program on IBM CE enabled program enterprise application development and deployment using IBM Worklight	01/08/2016	26/03/2017	30/03/2017	3

## **CRITERION VII – INSTITUTIONAL VALUES AND BEST PRACTICES**

### **7.1 – Institutional Values and Social Responsibilities**

7.1.1 – Gender Equity (Number of gender equity promotion programmes organized by the institution during the year)

Title of the programme	Period from	Period To	Number of Participants	
			Female	Male
International Womens Day	08/03/2017	08/03/2017	264	0
Debate on Competition on Crime against Women	20/08/2016	20/08/2016	10	0
Talk on Great Kitturu Rani Channamma	22/10/2016	22/10/2016	53	0
Self Defence Programme	31/10/2016	31/10/2016	615	0

7.1.2 – Environmental Consciousness and Sustainability/Alternate Energy initiatives such as:

Percentage of power requirement of the University met by the renewable energy sources
TEN PERCENT

7.1.3 – Differently abled (Divyangjan) friendliness

Item facilities	Yes/No	Number of beneficiaries
Physical facilities	Yes	0
Provision for lift	Yes	0
Ramp/Rails	Yes	0
Braille Software/facilities	No	0
Rest Rooms	Yes	0
Scribes for examination	Yes	1
Special skill development for differently abled students	No	0

7.1.4 – Inclusion and Situatedness

Year	Number of initiatives to address locational advantages and disadvantages	Number of initiatives taken to engage with and contribute to local community	Date	Duration	Name of initiative	Issues addressed	Number of participating students and staff
2016	2	2	25/10/2016	2	Engineering as a Career	Scopes and opportunities in Engineering	317

7.1.5 – Human Values and Professional Ethics Code of conduct (handbooks) for various stakeholders

Title	Date of publication	Follow up(max 100 words)
Student Code of Ethics	01/08/2016	Every student is expected to represent him or herself honestly and respectfully in all situations. Students are expected to maintain the highest standards of academic integrity. Students are expected to adhere to the rules and regulations set at/by the National / State / District / College. Students are prohibited in using mobile phones in the class and during any other academic activity. Students should compulsorily wear College IDCard and should be visible. Students shall be guaranteed that their Freedom of Speech will be observed by all college members. Students must behave respectfully toward their peers, teaching and nonteaching Staff.
Service Rules Policies Procedures	01/07/2016	Service Rules Policies and procedures is clearly defined and the same is circulated to all the staff. The details are available in the following link: <a href="https://www.bitm.edu.in/studentcodeofethics">https://www.bitm.edu.in/studentcodeofethics</a>

7.1.6 – Activities conducted for promotion of universal Values and Ethics

Activity	Duration From	Duration To	Number of participants
Induction Program for First year B.E. Students	29/07/2016	31/07/2016	723
Introduction to General Aptitude	08/08/2016	09/08/2016	541
Lecture by HOD on Honesty, Integrity and Patriotism	12/08/2016	12/08/2016	510
Awareness on Anti Ragging and Prevention of Sexual Harassment on Women	16/08/2016	16/08/2016	592

### 7.1.7 – Initiatives taken by the institution to make the campus eco-friendly (at least five)

10 KWp Rooftop Solar Energy Park. Sewage Water Treatment Plant at cost of Rs.61.97 Lakhs. Rain Water Harvesting System. E-Waste segregation. Energy Efficient LED Lighting System. Presence Sensors in Rest Rooms. Solar Water Heating at Hostels.

## 7.2 – Best Practices

### 7.2.1 – Describe at least two institutional best practices

Each staff is allocated 1820 students, who counsel and mentor them for their academic and cocurricular progress. Each student provided with proctoring book, where the proctor will discuss with the student and log all his previous academic details and his personal details. Students meet the proctors to discuss any problems faced by them both academically and personally faced by them. Proctors also log their examination details and look into the revaluation results aspects for the weaker students. Proctors regularly call the student parents as and when needed. Remedial classes are conducted for students. Every subject or course as a remedial class which is utilized for training the academically weak students and also clarifying the doubts. The concepts are brushed up and practice problems are given to increase the confidence as well as the academic ability of the students. OBE process is implemented across the institution and lesson plans are framed using Blooms Taxonomy, Learning Styles. The delivery of the lecture is done using combination of modern teaching and pedagogic methods. Curricular gaps are identified through gap analysis and the same is addressed through contents beyond the syllabus, Design Based Experiments, Guest Lectures, Industry Oriented Programs, etc.

Upload details of two best practices successfully implemented by the institution as per NAAC format in your institution website, provide the link

<http://www.bitm.edu.in>

## 7.3 – Institutional Distinctiveness

### 7.3.1 – Provide the details of the performance of the institution in one area distinctive to its vision, priority and thrust in not more than 500 words

MoUSCOE and Associations Realizing the need to increase the employability by skilling the staff and students, the college made a strategic effort and emphasized on industry collaborations through MoU, Skill Development, value added, certificate programs in line with the requirements of the industry. > Infosys campus Connect Recognized as an Advanced Partner College. Foundations program on computers is imparted to nonIT branches and soft skill training and certification is facilitated. Faculty members are regularly deputed to upgrade their skills and the same industry oriented methods and techniques are imparted to the students. Faculties have got recognitions and awards. > Flexible Manufacturing and Conditioning Monitoring Robotics Lab in Collaboration with MTAB. In order to cater the local manufacturing units as well as the students of this region, this lab is built at a cost of 1.08 crores to teach the stakeholders with respect to industry 4.0. > Surya Mitra Solar Energy Lab under the Collaboration of PMKVY. In lieu with the central government policy to train the graduates was opted by our institution to train the ITI / Diploma graduates and place them in various solar energy plants across different parts of Karnataka. > Wipro Mission 10X Technology Learning Center Set up. To enable the students to develop products. Students carry out interdisciplinary projects and several projects have won recognition and students have been certified. This lab has helped to upskill the students in problem solving and 90 of the students who have undergone this training have placed in various MNCs. > Texas Instrument University Program Set up VLSI and Embedded System Lab. This lab has enabled the M.Tech., as well as BE students to work on latest equipments, which in turn

helped in improving the skills of the faculty as well as the students. > Confederation of Indian Industries CII Permanent Member of CII. Regular Meetings are attended by the placement and training officers to understand the needs of the industry and the same is communicated to the management and to the HODs to fine tune as well as provide courses in lieu with the industry requirements. > All India Management Association Permanent Member of AIMA. Association with AIMA has helped the MBA Department to network with various colleges and professionals from management. Resource persons from AIMA have delivered talks and workshops to upskill the students and staff members. > J Spiders and Q Spiders Java and Testing Centre of Excellence Finishing School. This finishing school has helped the on campus nonplaced students to get upskilled and have been placed in off campus recruitment. > NI Lab View Academy National Instruments Lab View Centre of Excellence. Faculty and students simulate the circuits using this highend software has helped faculty to publish articles as well as students to relate and understand subjects with respect to VLSI and embedded systems. > Harita Techserve A unit of TVS Group of companies. To upskill the students as well as to provide a placement opportunity, the final year mechanical students were trained in 3D modelling and were recruited by Harita Techserve.

Provide the weblink of the institution

<http://www.bitm.edu.in>

### **8.Future Plans of Actions for Next Academic Year**

Future Plans Fostering to start Incubation center. Improving the Placement Activity while having more collaborations and center of excellence. Conducting FDP Programs for Faculty. Improvement in the publications in quality journals like Scopus index, Web of Science, etc., To build state of the Art New Electrical Block. To improve the Academic Results by adopting new teaching methodologies and through remedial classes. To promote branding of the institution through social media enabling improvement in admissions.