

## The Annual Quality Assurance Report (AQAR) of the IQAC

All NAAC accredited institutions will submit an annual self-reviewed progress report to NAAC, through its IQAC. The report is to detail the tangible results achieved in key areas, specifically identified by the institutional IQAC at the beginning of the academic year. The AQAR will detail the results of the perspective plan worked out by the IQAC. (Note: The AQAR period would be the Academic Year. For example, July 1, 2012 to June 30, 2013)

### Part – A

#### I. Details of the Institution

1.1 Name of the Institution	Padmasri Dr. B.V.Raju Institute of Technology
1.2 Address Line 1	Vishnupur
Address Line 2	Narsapur
City/Town	Medak Dist
State	Andhra Pradesh
Pin Code	502313
Institution e-mail address	bvrit@bvrit.ac.in
Contact Nos.	08458 222000
Name of the Head of the Institution:	Ch. Venkateswarlu
Tel. No. with STD Code:	08458 222000
Mobile:	9949418745

Name of the IQAC Co-ordinator:

Prof. Ashok Shigli

Mobile:

8466942999

IQAC e-mail address:

bvrit@bvrit.ac.in

1.3 NAAC Track ID (For ex. MHC0GN 18879)

1.4 NAAC Executive Committee No. & Date:

(For Example EC/32/A&A/143 dated 3-5-2004.

This EC no. is available in the right corner- bottom of your institution's Accreditation Certificate)

EC/56/A&A/047 dated: 16.09.2011

1.5 Website address:

www.bvrit.ac.in

Web-link of the AQAR:

<http://bvrit.ac.in/images/Articles/Academics/Annual%20Quality%20Assurance%20Report%202015-2016.pdf>

1.6 Accreditation Details

Sl. No.	Cycle	Grade	CGPA	Year of Accreditation	Validity Period
1	1 <sup>st</sup> Cycle	B	2.72	2011	5
2	2 <sup>nd</sup> Cycle				
3	3 <sup>rd</sup> Cycle				
4	4 <sup>th</sup> Cycle				

1.7 Date of Establishment of IQAC :

DD/MM/YYYY

03/03/2011

1.8 AQAR for the year (for example 2010-11)

2015-16

1.9 Details of the previous year's AQAR submitted to NAAC after the latest Assessment and Accreditation by NAAC ((for example AQAR 2010-11 submitted to NAAC on 12-10-2011)

- i. AQAR 2011-12 submitted to NAAC on 21/01/2017
- ii. AQAR 2012-13 submitted to NAAC on 21/01/2017
- iii. AQAR 2013-14 submitted to NAAC on 21/01/2017
- iv. AQAR 2014-15 submitted to NAAC on 21/01/2017

1.10 Institutional Status

University State  Central  Deemed  Private

Affiliated College Yes  No

Constituent College Yes  No

Autonomous college of UGC Yes  No

Regulatory Agency approved Institution Yes  No

(eg. AICTE, BCI, MCI, PCI, NCI)

Type of Institution Co-education  Men  Women

Urban  Rural  Tribal

Financial Status Grant-in-aid  UGC 2(f)  UGC 12B

Grant-in-aid + Self Financing  Totally Self-financing

1.11 Type of Faculty/Programme

Arts  Science  Commerce  Law  PEI (Phys Edu)

TEI (Edu)  Engineering  Health Science  Management

Others (Specify)

1.12 Name of the Affiliating University (for the Colleges)

JNTU, Hyderabad

### 1.13 Special status conferred by Central/ State Government-- UGC/CSIR/DST/DBT/ICMR etc

Autonomy by State/Central Govt. / University

UGC

University with Potential for Excellence

UGC-CPE

DST Star Scheme

UGC-CE

UGC-Special Assistance Programme

DST-FIST

UGC-Innovative PG programmes

Any other (*Specify*)

UGC-COP Programmes

## **2. IQAC Composition and Activities**

2.1 No. of Teachers

9

2.2 No. of Administrative/Technical staff

3

2.3 No. of students

1

2.4 No. of Management representatives

1

2.5 No. of Alumni

1

2.6 No. of any other stakeholder and  
community representatives

1

2.7 No. of Employers/ Industrialists

1

2.8 No. of other External Experts

1

2.9 Total No. of members

18

2.10 No. of IQAC meetings held 2

2.11 No. of meetings with various stakeholders: No.  Faculty   
Non-Teaching Staff  Students  Alumni  Others

2.12 Has IQAC received any funding from UGC during the year? Yes  No

If yes, mention the amount

2.13 Seminars and Conferences (only quality related)

(i) No. of Seminars/Conferences/ Workshops/Symposia organized by the IQAC

Total Nos.  International  National  State  Institution Level

(ii) Themes

1. Two day seminar on Publication of papers in good journals
2. Two day workshop on Improvement of Teaching-Learning Process with CBCS Curriculum

2.14 Significant Activities and contributions made by IQAC

1. Seminar on preparation of NBA reaccreditation in the new format
2. Awareness Program on NAAC Accreditation for 2<sup>nd</sup> Cycle
3. Conduction of technical conferences/seminars/workshops/guest lectures
4. Assistance in Campus Placement Training activities
5. Holding the Parents meets, Alumni Meet
6. Submission of research Proposals to DST
7. Monitoring of counselling system

2.15 Plan of Action by IQAC/Outcome

The plan of action chalked out by the IQAC in the beginning of the year towards quality enhancement and the outcome achieved by the end of the year \*

Plan of Action	Achievements
Focus on Faculty training activities	Extensive faculty training through an exclusive Faculty training centre established in 40 acres campus at Aziz Nagar, Hyderabad.
Introducing CBCS regulations	The regulations have been revised

	as per the Choice Based Credit System with the approval of BOS members of each department and successfully implemented the same.
Internships to students	Internships are provided for in reputed organizations for majority of students
Student training programmes	In each department students are trained in add on courses related their respect domains
Enhancement of Infrastructure	New separate hostel block for boys was constructed. A new IT deptment block and Examination Section Block was constructed.
Focus on Research	The college is providing support in termsof infrastructure, fund, FIP leave, etc to the Faculty.
Scholar on campus	Every month a well known personality was invited to the campus and he talked about a subject
To employ career guidance and placement measures for final year students.	Arranged campus interviews CRT Training, Gate training, AMCAT
To encourage various departments to apply for major and minor projects.	Two DST projects and UGC minor have been sanctioned

*\* Attach the Academic Calendar of the year as Annexure.*

2.15 Whether the AQAR was placed in statutory body      Yes       No

Management       Syndicate       Any other body

Provide the details of the action taken

AQAR was placed before the Governing body; after active discussions, incorporated valid suggestions. Governing body has approved the final report and gave sanction to forward the AQAR to NAAC.

## Part – B

### Criterion – I

#### I. Curricular Aspects

##### 1.1 Details about Academic Programmes

Level of the Programme	Number of existing Programmes	Number of programmes added during the year	Number of self-financing programmes	Number of value added / Career Oriented programmes
PhD				
PG	9	0		
UG	8	1		
PG Diploma				
Advanced Diploma				
Diploma				
Certificate				
Others				
<b>Total</b>	17	1		
Interdisciplinary				
Innovative				

##### 1.2 (i) Flexibility of the Curriculum: **CBCS/Core/Elective option / Open options**

(ii) Pattern of programmes:

Pattern	Number of programmes
Semester	18
Trimester	
Annual	

1.3 Feedback from stakeholders\* Alumni  Parents  Employers  Students   
(On all aspects)

Mode of feedback : Online  Manual  Co-operating schools (for PEI)

*\*Please provide an analysis of the feedback in the Annexure*

1.4 Whether there is any revision/update of regulation or syllabi, if yes, mention their salient aspects.

Yes, BVRIT introduced R15 Syllabus under CBCS scheme

1.5 Any new Department/Centre introduced during the year. If yes, give details.

Yes- 1) B.Tech(PHE) with intake of 60.

## Criterion – II

### 2. Teaching, Learning and Evaluation

2.1 Total No. of permanent faculty

Total	Asst. Professors	Associate Professors	Professors	Others
325	273	23	29	0

2.2 No. of permanent faculty with Ph.D.

38

2.3 No. of Faculty Positions Recruited (R) and Vacant (V) during the year

Asst. Professors		Associate Professors		Professors		Others		Total	
R	V	R	V	R	V	R	V	R	V
64	0	3	0	2	0	0	0	69	0

2.4 No. of Guest and Visiting faculty and Temporary faculty

34

21

0

2.5 Faculty participation in conferences and symposia:

No. of Faculty	International level	National level	State level
Attended	13	14	0
Presented papers	20	25	0
Resource Persons	0	1	0

2.6 Innovative processes adopted by the institution in Teaching and Learning:

LCD & OHP Projectors, Digital Library, Hospital visits, NPTEL Videos, Conducted VMOOC, Plant visits, Creative writing exercises. Video Lectures, Guest Lectures, workshops.

2.7 Total No. of actual teaching days during this academic year

182

2.8 Examination/ Evaluation Reforms initiated by the Institution (for example: Open Book Examination, Bar Coding, Double Valuation, Photocopy, Online Multiple Choice Questions)

Bar Coding, Double Evaluation

2.9 No. of faculty members involved in curriculum restructuring/revision/syllabus development

80

115

0

as member of Board of Study/Faculty/Curriculum Development workshop

2.10 Average percentage of attendance of students

81



2.11 Course/Programme wise  
distribution of pass percentage :

Title of the Programme	Total no. of students appeared	Division				
		Distinction %	I %	II %	III %	Pass %
B.Tech	834	62.48	37.36	0.16	0	77.34
M.Tech	144	85.425	14.575	0	0	97.2
MCA	29	96	4	0	0	86.20
MBA	55	9.09	87.272	3.636	0	100

2.12 How does IQAC Contribute/Monitor/Evaluate the Teaching & Learning processes:

- Every Department shall have a Quality Cell for continuously up dating information and supplying the same to IQAC at the central level.
- Quality circles to share department best practices
- The Departmental Quality cell shall have one Professor (who will act as the Coordinator), one Associate Professor and one Assistant Professor.
- The Quality Cell at the departmental level shall prepare the roadmap of qualitative teaching and Research.
- Feedbacks are studied and improvements are suggested
- Syllabus coverage is monitored
- The members shall be nominated by the PPC of the department

2.13 Initiatives undertaken towards faculty development

<i>Faculty / Staff Development Programmes</i>	<i>Number of faculty benefitted</i>
Refresher courses	2
UGC – Faculty Improvement Programme	1
HRD programmes	3
Orientation programmes	98
Faculty exchange programme	0
Staff training conducted by the university	16
Staff training conducted by other institutions	74
Summer / Winter schools, Workshops, etc.	137
Others	

## 2.14 Details of Administrative and Technical staff

Category	Number of Permanent Employees	Number of Vacant Positions	Number of permanent positions filled during the Year	Number of positions filled temporarily
Administrative Staff	24	0	0	0
Technical Staff	43	0	9	0

## Criterion – III

### 3. Research, Consultancy and Extension

#### 3.1 Initiatives of the IQAC in Sensitizing/Promoting Research Climate in the institution

The following initiatives are suggested by the IQAC to sensitize / promote research climate in the institution.

❖ **Autonomy to the principal Investigator**

The Principal investigators of various sanctioned projects are given full autonomy in executing the project as per the guidelines of the funding agencies.

❖ **Well-timed availability of resources**

College provides all facilities and maintains timely release of project funds for completion of the project and also supported with adequate infrastructure and human resources College recruited senior faculty possessing Ph.D degree who are competent to take up and guide research projects.

❖ **Enhancement of library facilities**

Library is equipped with online national and international journals, digital library, hand books, reference books and material related to research activity.

❖ **Reduced teaching load**

For effective completion of projects within the stipulated time frame, faculty members working on research projects are given reduced teaching work load and academic leave for attending the workshops/seminars relevant to their research projects.

❖ **Incentives**

To encourage the faculty towards research activities certain incentives are introduced like Cash awards, permission to utilize the laboratories, library, computer centre and software for carrying out their research projects, assistance in patent submission, subscribes to research journals to strengthen the library with latest journals, reference books and text books etc.

3.2 Details regarding major projects

	Completed	Ongoing	Sanctioned	Submitted
Number	3	2	3	1
Outlay in Rs. Lakhs	4.75	65.2	167.09	

3.3 Details regarding minor projects:

	Completed	Ongoing	Sanctioned	Submitted
Number		4	1	
Outlay in Rs. Lakhs		7.88	2.9	

3.4 Details on research publications

	International	National	Others
Peer Review Journals	45	34	
Non-Peer Review Journals	-		
e-Journals		1	
Conference proceedings	46	117	

3.5 Details on Impact factor of publications:

Range  Average  h-index  Nos. in SCOPUS

3.6 Research funds sanctioned and received from various funding agencies, industry and other organisations

Nature of the Project	Duration Year	Name of the funding Agency	Total grant sanctioned	Received
Major projects	2012-15	DST-WOSA	-	
	2015-20	DST-CHE	25	6.5
	2016-19	DST-BME	-	24
	2015-18	DST-BSH	65.2 36.03	44.82 20.61
Minor Projects	2014-16	UGC		2.76
	2015-18	SVES	4	2.9
Interdisciplinary Projects				
Industry sponsored				
Projects sponsored by the University/ College				
Students research projects <i>(other than compulsory by the University)</i>				
Any other(Specify) Brain storming session			32.88	26.16
<b>Total</b>			<b>163.11</b>	<b>127.75</b>

3.7 No. of books published i) With ISBN No.  Chapters in Edited Books

ii) Without ISBN No.

3.8 No. of University Departments receiving funds from

UGC-SAP  CAS  DST-FIST   
DPE  DBT Scheme/funds

3.9 For colleges

Autonomy  CPE  DBT Star Scheme   
INSPIRE  CE  Any Other (specify)

3.10 Revenue generated through consultancy

3.11 No. of conferences

organized by the Institution

Level	International	National	State	University	College
Number	2	3			
Sponsoring agencies	SVES	SVES			

3.12 No. of faculty served as experts, chairpersons or resource persons

3.13 No. of collaborations International  National  Any other

3.14 No. of linkages created during this year

3.15 Total budget for research for current year in lakhs :

From funding agency  From Management of University/College

Total

3.16 No. of patents received this year

Type of Patent		Number
National	Applied	1
	Granted	
International	Applied	
	Granted	
Commercialised	Applied	
	Granted	

3.17 No. of research awards/ recognitions received by faculty and research fellows  
Of the institute in the year

Total	International	National	State	University	Dist	College
10	7	2	1			

3.18 No. of faculty from the Institution who are Ph. D. Guides and students registered under them

11

18

3.19 No. of Ph.D. awarded by faculty from the Institution

5

3.20 No. of Research scholars receiving the Fellowships (Newly enrolled + existing ones)

JRF  SRF  Project Fellows  Any other

3.21 No. of students Participated in NSS events:

University level  State level   
National level  International level

3.22 No. of students participated in NCC events:

University level  State level   
National level  International level

3.23 No. of Awards won in NSS:

University level  State level   
National level  International level

3.24 No. of Awards won in NCC:

University level  State level   
National level  International level

3.25 No. of Extension activities organized

University forum  College forum   
NCC  NSS  Any other

3.26 Major Activities during the year in the sphere of extension activities and Institutional Social Responsibility

- Donated amount for medical and educational need.
- Donated daily needs for the people of Sai Ashram

## Criterion – IV

### 4. Infrastructure and Learning Resources

#### 4.1 Details of increase in infrastructure facilities:

Facilities	Existing	Newly created	Source of Fund	Total
Campus area	38576	1499	BVRIT	40075
Class rooms	5923	--	BVRIT	5923
Laboratories	7273	274	BVRIT	7547
Seminar Halls	1353	303	BVRIT	1656
No. of important equipments purchased ( $\geq$ 1-0 lakh) during the current year.	70	11	BVRIT, Sponsored agencies	81
Value of the equipment purchased during the year (Rs. in Lakhs)	125.41	13.1 (20.47)	BVRIT, Sponsored agencies	158.98
Others	-	-	-	-

#### 4.2 Computerization of administration and library

Central Library is housed in a spacious building with the carpet area of 1030 sqm. At present we have 52930 volumes and access to 1449 International Journals. Library house keeping operations are computerized with SOUL Software and barcode is used for fast transactions. OPAC is available to search availability and status of books. Indexing is available. e-books and online journals are available and library is kept open from 08am to 11pm for hostellers. They can access all the International journals within the campus with unlimited number of users because the access is IP based.

#### 4.3 Library services:

2015-16	Existing	Newly added	Total
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	No.	Value	No.	Value	No.	Value
Text Books	46983	14527074	5947	2190352	52930	16717426
Reference Books	8977	4389433	1037	408899	10014	4798332
e-books	1148		411		1559	
Journals	1242	2119342	207	376138	1449	2495480
e-journals	3982	2771474	232	767145	4214	3538619
Digital Database	1	20000			1	20000
CD & Video	2283		467		2750	
Others (Specify)			1 (LCD Projector)	36700	1	36700

#### 4.4 Technology up gradation (overall)

	Total Computers	Computer Labs	Internet	Browsing Centres	Computer Centres	Office	Departments	Others
Existing	1230	15	1230	15	1	10	---	--
Added	0	3	0	3	---		--	--
Total	1230	18	1230	18	1	10	--	--

#### 4.5 Computer, Internet access, training to teachers and students and any other programme for technology upgradation (Networking, e-Governance etc.)

- CC CAMERAS: They are used in class rooms for monitoring the Examinations, Placed in administration office and some important places of the campus for monitoring the system have been installed in all prominent places.
- Information and Communication Technology services (ICTS) is an integral part of the institute, providing computing resources for all academic, research, and administrative needs.
- Computer labs with adequate number of desktop systems, networked with high speed fast Ethernet and wireless LAN enabling 1:1 student-system ratio ensures individual participation and results in practical learning experience.
- Each faculty member is provided with individual cubicles along with easy and free access to computer and internet facility.

4.6 Amount spent on maintenance in lakhs :

i) ICT	5.05
ii) Campus Infrastructure and facilities	39.88
iii) Equipments	30.64
iv) Others	5.09
<b>Total :</b>	<b>80.66</b>

## Criterion – V

### 5. Student Support and Progression

5.1 Contribution of IQAC in enhancing awareness about Student Support Services

The student support systems were brought under Dean Academics and all the student support systems related activities are monitored by Dean Academics under IQAC. The following activities are reviewed by IQAC:

- Training and Placement Activities. In the academic year, institute could achieve a staggering 532 placements for students.
- Anti-Ragging Committee
- Canteen food is regularly monitored and other cafeterias and gym for students are established upon students request.

5.2 Efforts made by the institution for tracking the progression

- The institution has revised the syllabi – Choice Based Credit System.
- The institute monitors the regularity of the students to classes and their academic performance using E-Cap. The Head of Department and Class In-charges can monitor the students' performance and intimate the same to the parents through SMS.
- The mid-term examinations and end semester examinations are conducted by the Controller of Examinations and the progressions of the students are monitored at the department level by the head of department (through Department Evaluation Committee) and the special care is taken on slow learners.
- The remedial classes are conducted for the slow learners and bridge classes are conducted for the Lateral Entry Students



- The performance of the students is communicated to parents through SMS and parent-faculty meetings are held. In some extreme cases, parents are summoned by the Head of Department.
- The institute provides intensive training for the recruitment drives and also introduced V-Cap in the regular time table for the II, III and IV B.Tech students.

5.3 (a) Total Number of students

UG	PG	Ph. D.	Others
1137	179	-	-

(b) No. of students outside the state

1
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(c) No. of international students

-
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Men	No	%	Women	No	%
	803	61.02		513	38.98

Last Year						This Year					
General	SC	ST	OBC	Physically Challenged	Total	General	SC	ST	OBC	Physically Challenged	Total
506	92	41	459	0-	1098	623	123	40	530	0	1316

Demand ratio As per the norms of EAMCET counselling Dropout % Nil

5.4 Details of student support mechanism for coaching for competitive examinations (If any)

- Along with the CRT classes conducted to the IV B.Tech Students, special technical classes are also conducted by the senior faculty.
- The institute also introduced a special class (V-Cap) for the II and III B.Tech Students to provide them the additional knowledge all the courses required for the placements.
- The Mentor-Mentee system is maintained and each mentor is assigned 20 students. The mentor monitors the academic performance as well as the additional interests of the student.
- Guest lectures are conducted to students on Career Guidance and invited talks are also arranged.

No. of students beneficiaries

194
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5.5 No. of students qualified in these examinations

NET	-	SET/SLET	-	GATE	44	CAT	1
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IAS/IPS etc  State PSC  UPSC  Others

#### 5.6 Details of student counselling and career guidance

- The mentor-mentee system facilitates the students in addressing their academic problems, encouraging them to excel and motivates them towards higher education and career development.
- Parents of these students are updated about the performance by their respective mentors by meetings and communication through SMS and Mails.
- The III and IV B.Tech Students are given intensive training on GRE/TOEFL

No. of students benefitted

#### 5.7 Details of campus placement

<i>On campus</i>			<i>Off Campus</i>
Number of Organizations Visited	Number of Students Participated	Number of Students Placed	Number of Students Placed
56	620	469	111

#### 5.8 Details of gender sensitization programmes

- Awareness program for girl students by a chief Guest on Anti-Ragging and Sexual Harassment.
- The institute has introduced a course “Gender Sensitization” on the directions of JNTUH.

#### 5.9 Students Activities

##### 5.9.1 No. of students participated in Sports, Games and other events

State/ University level  National level  International level

No. of students participated in cultural events

State/ University level  National level  International level

##### 5.9.2 No. of medals /awards won by students in Sports, Games and other events

Sports : State/ University level                      National level                      International level

Cultural: State/ University level                       National level                       International level

#### 5.10 Scholarships and Financial Support

	Number of students	Amount
Financial support from institution		
Financial support from government	693	25535000
Financial support from other sources	-	-
Number of students who received International/ National recognitions	-	-

#### 5.11 Student organised / initiatives

Fairs : State/ University level                       National level                       International level

Exhibition: State/ University level                       National level                       International level

5.12 No. of social initiatives undertaken by the students

5.13 Major grievances of students (if any) redressed: \_\_\_\_\_

## Criterion – VI

### **6. Governance, Leadership and Management**

6.1 State the Vision and Mission of the institution

#### **Vision**

To create and nurture competent engineers and managers who would be enterprise leaders throughout the world with a sound background in ethics and societal responsibilities.

#### **Mission**

We are committed to providing a positive and professional learning environment where all students are inspired to strive for excellence in becoming competent engineers, technology innovators and leaders in a global society through a cohesive network of parents, students, college staff and industry.

6.2 Does the Institution has a management Information System

Yes.

- a. **Administrative procedures including finance:** includes student and staff profiles, fee management, accounting, issue of certificates (bonafide, transfer certificate, grade sheet, degree certificate, etc.), etc.
- b. **Student records:** apart from personal profiles, this includes student registration records, marks & grades, student progression data, progress reports, hostel information, etc.
- c. **Evaluation & Examination procedures:** the entire gamut of activities from registration through results, including attendance and other data are captured and maintained with appropriate access levels to students, faculty, management, administrative personnel, parents, and other stakeholders.

d. **Others:** E-learning module – this provides an excellent suite of tools for the teaching-learning process, including the provision to set up question banks, conduct online exams, share teaching materials & resources, course-related performance reports, etc.

6.3 Quality improvement strategies adopted by the institution for each of the following:

#### 6.3.1 Curriculum Development

During this year, the Institute adopted Choice Based Credit System (CBCS) and hence it has introduced electives in its UG & PG programmes. The institute follows a systematic process in the design and development of the curriculum. Syllabus is subjected to periodic updates. Feedback from each course teacher is collected by the respective departments which is consolidated and forwarded to the Board of Studies to be considered at the time of revision. Feedback from employers and alumni gives direction on the required modifications to be made in the syllabus. Subject experts both from academia (Professors from other Universities) and industry who are on the Board of Studies are consulted before revision of syllabus.

The Board of Studies frames the curriculum and the detailed syllabi of each program, after the discussion among its members. The suggestions of the board will be taken up by higher bodies such as Academic Council.

- Departments introduce new electives in emerging areas on a regular basis as per current and projected needs.
- Faculty members are asked to maintain a separate file regarding the changes needed to be made in the next curriculum revision based on their day-to-day experience with the course content & current issues.
- Internships for majority of UG students
- Courses comprise Lectures/Tutorials/Labs.
- Seminars/Group Discussions/Presentations are highly encouraged
- Enrichment courses to support regular academic courses
- Soft skills training programme for final year UG students
- Cultural education classes to inculcate social, ethical and moral values
- Special guidance given to students for qualifying exams like GATE/GRE

#### 6.3.2 Teaching and Learning

The institute's teaching, learning and assessment strategies are continually reviewed, ideas for improvement identified, and implemented. Some of these include:

- ❖ Outcome-based learning.

- ❖ Greater importance for continuous assessment, creatively implemented as per the needs of each course (with appropriate combination of homework assignments, collaborative projects, in-class discussions, presentations, research papers, creation of models and videos, etc.).
- ❖ Hiring well qualified staff as available, rather than just as per need (to go well beyond minimum requirement).
- ❖ A new comprehensive faculty appraisal procedure implemented that addresses research, teaching, and administrative aspects of duties for faculty – this enabled clear setting of goals and expectations for faculty, and subsequent evaluation for developmental action.
- ❖ Significant increase in staff strength over the last four years.
- ❖ Fully qualified and competent faculty members with a back ground of academia and Industry.
- ❖ Healthy faculty-student ratio (university-level it is 1:15)
- ❖ Detailed *course plan* in line with the prescribed syllabus for every theory course and a separate *labcycle* for lab courses ensures smooth conduct of classes.
- ❖ Periodic Class Committee meetings: Chairperson, Faculty Advisor, class teachers and two student representatives of the class meet to ensure transparency in curriculum delivery and evaluation pattern.
- ❖ Objective assessment of teachers through student feedback administered in the middle of the semester helps in improved content delivery
- ❖ Faculty development programs are conducted regularly, and faculty members are encouraged to attend FDPs at other eminent institutions as well
- ❖ Continuous evaluation system is followed
- ❖ Classrooms are equipped with audio-visual aids to enhance the quality of the teaching-learning process

### 6.3.3 Examination and Evaluation

All the institute examinations are conducted under the supervision of the Examination Section headed by the Controller of Examinations. The centralized paper evaluation is undertaken in the office of the Exam Control Division itself and the results are declared after the approval of the concerned evaluation committee of the college.

Some of the features include:

- Three tier evaluation system (One external evaluation, one internal evaluation and third external evaluation if first two evaluation marks are differed by 10%)
- Question paper setting by the external examiner and auditing after the exam
- Transparent Revaluation by external examiner.
- Monitoring the performance of the students by means of Internal Exams, End Semester Exams, and Continuous Evaluation
- Communication of evaluation methods to the students by faculty at the beginning of each semester
- Mini Projects
- Declaration of Results and conducting supplementary / arrear examination for failed students
- Timely result publication within 15-25 days from the last day of the end semester examination
- Student progress report sent thrice a semester and inform to parent through counsellor

### 6.3.4 Research and Development

In an effort to further enhance the research structure and output, the university initiated the formation of Research Area Groups (RAGs). These groups within each department, work together in focused areas, and provide regular reports, which are then reviewed by management for the following reasons:

1. To provide any support (additional infrastructure, facilities, instruments, stipends, etc.)
2. To help in case of any roadblocks and challenges faced by researchers
3. To monitor progress and output

The institute has a Research Committee to monitor and address issues related to research. Each school also has a research committee to facilitate, monitor and encourage the research activities. It meets regularly to discuss various plans to promote research and motivate the faculty for academic advancement.

There is a chairman in each campus with overall responsibility for the research programme. The Principal of the institute is also involved closely in the overseeing of the research activities.

Teachers are informed about the various fellowships available and they are encouraged to apply for the same. Faculty members that do not have a doctoral degree are encouraged to register for PhD.

Monitory assistance and incentives provided to faculty members for publication and attending conferences.

- Institute is directly funding many research projects
- Research publications and guiding research is counted for promotion
- Special Laboratories have been setup for research
- Institute is funding teachers to participate in conferences /workshops/symposia.
- Support students in participate in International/National competitions.
- Few research centres have been setup attached to each department.
- Annual reviews with researchers
- Arrange invited talks of experts from reputed International/National institutions.
- Thrust areas for research within the departments are identified and faculty members are grouped to work on the thrust areas, based on their expertise. Students and members of the faculty are encouraged to publish papers in journals and conferences.
- Conducted faculty seminars on their research areas

Research proposals are reviewed by the Research Advisory Committee/Ethics Committee before implementation.

### 6.3.5 Library, ICT and physical infrastructure / instrumentation

The college had provided all infrastructures which in turn provide a conducive physical ambience for the faculty in terms of adequate library, research laboratories, ICT, computing facilities and allied services. The faculty can access on-line teaching and learning resources and other knowledge and information database/packages provided to the staff and students for quality teaching, learning and research through internet and intranet facilities. Teachers have access to internet, can download teaching materials and resources and take copies through the reprographic centre, free of cost. The college provides the basic necessities for research also in terms of lab facilities, instruments and open access library facilities which provides good atmosphere for effective teaching and research.

- Library is fully automated with software a package
- The E-Learning Centre in the library provides access to Digital Knowledge Archive.
- Classrooms, Seminar Halls and Conference Rooms are equipped with Computers and Video Projectors / LED Panels.

- Round the clock internet connectivity with 54 mbps (leased line) speed both for staff and students
- Wi-Fi connectivity to the staff members & students
- An Effluent treatments plant is was installed in the campus
- Uninterrupted power supply is arranged to the systems in the campus
- The campus is located in 100 acres of land
- Subscription to research databases (Science Direct, Scopus, Springer, jGate, JSTOR, ASCE, Access-Engineering)

### 6.3.6 Human Resource Management

- The institution has sincere, dedicated and committed faculty and visionary management.
- The college has an adequate number of qualified and competent teachers to handle the courses.
- The faculty members have access to the computer and internet facility that are available in the departments.
- Workshops and training programmes are arranged for the faculty to enrich their knowledge in handling the computers effectively
- Encouragement and support are provided to faculty members for participating and organizing of faculty development programmes.
- Orientation is given to all teaching and non teaching staff.
- Faculty members are sponsored for attending two national/ International conferences.
- A few faculty members are supported by the transportation, computer and accommodation facilities.

Feed backs are taken periodically so that the appropriate work culture is maintained. The institute has a well monitored biometric identification system.

### 6.3.7 Faculty and Staff recruitment

- The Strategic HR planning Process includes assessing the current HR capacity, Forecasting HR requirements, Gap analysis, and Developing HR strategies to support organizational strategies. The knowledge, skills and abilities of staff are identified using skills inventory for each employee for the current as well as beyond the skills needed for the particular position. An employee's performance assessment form is reviewed to determine if the person is ready and willing to take on more responsibility and to look at the employee's current development plans. HR requirements are forecasted based on the ongoing and futuristic project the lab is pursuing and will be in near future. Forecasts are mainly analyzed based on how many staff will be required to achieve the deliverables, what jobs will need to be filled and what skill sets will people need. The gap between the future and the current position is analyzed and HR strategies for meeting the organization's needs in the future is determined.
- On the basis of the availability of faculty requirement for new programmes new faculties in the emerging areas of study were selected and appointed in the university. Based on the educational qualification, previous experience and personal interview short listed candidates are selected.
- The college gives financial help to the existing faculty in attending various training programmes and national as well as International programmes/Conferences Symposia/ Seminars/FDPs organized in the emerging fields of their respective subjects and thus makes the faculty apt for reaching such programmes. Moreover study leave is provided for carrying out higher studies.
- The staff requirement is assessed on the basis of the students strength, vacancies arising due to retirement and as per the workload norms prescribed by UGC

- The qualifications for teachers of various courses are prescribed by the AICTE
- Faculty and staff are recruited as per the recommendations of the selection committee/board where representative of the management is also ensured.
- Recruitment based on requirement especially for well qualified individuals with significant preference for those with already secured funded research projects.
- New recruits encouraged to provide exposure of respective areas of expertise to students to gain advantage
- Faculty student Ratio of 1:15 is maintained
- The faculty and staff are recruited based on merit. The institute has staff from different parts of India
- Assessment of knowledge and attitude and commitment as part of evaluations

### 6.3.8 Industry Interaction / Collaboration

An Industry-Institute Interaction cell focuses on achieving the following functions:

- To build and maintain excellent rapport with the top management of various organizations and industries and forge collaborative industry-academia alliances.
- Initiating Memoranda of Understanding with major companies, research agencies and institutions to fetch funded projects and bring about improvement in infrastructure and teaching methodologies to enhance exposure of students and faculty to industry practices and developments in technology.
- Facilitating visits by senior industry leaders for interaction with faculty and students.
- Securing sponsorships from industry for technical events like conferences, seminars, symposia, workshops and student contests through strategic relationships.
- Seeking the help of companies to spare working products / prototypes for academic demonstration purposes.
- Facilitating in-plant training, industry visits, summer and final semester internship for students across all disciplines and campuses.
- Soliciting support from highly reputed companies each year for the Corporate Action Plan with respect to engineering, management, biotechnology and other disciplines.
- Each department has signed several win-win Memoranda of Understanding (MoUs) with the industry, leading to mutual collaboration of college and various companies.

### 6.3.9 Admission of Students

#### **B.TECH**

70% of the seats are filled through Category-A/Convener Quota (GQ) through EAMCET by the State Government.

30% of the seats are filled through Category-B/Management Quota (MQ) through the process prescribed by the State Council of Higher Education / JNTUH.

#### **MBA/ MCA**

70% of the seats are filled through Category-A/Convener Quota (GQ) through ICET by the State Government.



30% of the seats are filled through Category-B/Management Quota (MQ) through the process prescribed by the State Council of Higher Education / JNTUH.

**M.Tech.**

70% of the seats are filled through Category-A/Convener Quota (GQ) through PGECET by the State Government.

30% of the seats are filled through Category-B/Management Quota (MQ) through the process prescribed by the State Council of Higher Education / JNTUH.

6.4 Welfare schemes for

Teaching	Yes
Non teaching	Yes
Students	Yes

- ❖ Medical facilities are easily available to the staff of college. Suitable arrangements are made to take the students to the hospital whenever advanced medical assistance becomes necessary.
- ❖ Free Breakfast scheme for all the staff and students throughout the year.
- ❖ Staff: Subsidized food, accommodation and health care benefits, Staff quarters, Transportation, maternity leave, sabbatical leave.
- ❖ Orientation program for newly joined faculty
- ❖ Teaching skill enhancement programs at VEDIC, staff training centre.
- ❖ Cash Incentive for Publications– based on Journal Impact factor
- ❖ Sabbatical leave for Thesis/book writing
- ❖ Reduction of workload for faculty involved in research projects
- ❖ Students: Health care benefits, Motivation and support to attend conferences, Industrial visits, Job oriented training programs, Presentation skill (seminars) enhancement programs, Support for International travel to attend conference, Group Medical Insurance
- ❖ Non teaching : Training & Skill Development, Motivation for acquiring higher qualification, Multi tasking capability enhancement initiative by providing exposure in diverse technological domains

6.5 Total corpus fund generated

6.6 Whether annual financial audit has been done

Yes  No

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

Audit Type	External		Internal	
	Yes/No	Agency	Yes/No	Authority
Academic	Yes	JNTUH	Yes	IQAC
Administrative	Yes	JNTUH	Yes	Internal Audit team

6.8 Does the University/ Autonomous College declares results within 30 days?

For UG Programmes Yes  No

For PG Programmes      Yes       No

#### 6.9 What efforts are made by the University/ Autonomous College for Examination Reforms?

The IQAC constantly endeavours to collect feedback from various sources on exam policies, procedures, and student performance, and based on that various meetings are arranged (department level, UG Programs Committee, PG Programs Committee, Academic Council, etc.) to discuss and make improvements. This has led to numerous reforms including changes in the grade point system (letter grades and points) weights associated with evaluation components of a subject, components of continuous assessment in a course, structure of a question paper, etc.

#### 6.10 What efforts are made by the University to promote autonomy in the affiliated/constituent colleges?

- Periodical inspections
- Participation of the college teachers in the events organized by the university
- Inviting the university experts for project reviews and other programs.

#### 6.11 Activities and support from the Alumni Association

The Alumni Association contributes various services to the institution in general and to the students opting for higher studies and getting employment in particular.

##### Involvement of Alumni

- It involves in curriculum development
- It Conducts seminars for the students
- It Conducts interactive sessions for students and provides opportunities for students in worldwide universities
- It offers support in obtaining the projects for students
- Feedback for the Alumni is being continuously received for academic development and career opportunities for students
- It contributes books to the central and department libraries
- It offers information about placement/ job openings across the country
- It offers recommendations for curriculum modifications based on industry requirements
- It arranges Invited talks
- It offers internships for students
- It enables industrial visits of students
- Alumni entrepreneurs motivate students to take up entrepreneurship.

#### 6.12 Activities and support from the Parent – Teacher Association

There is constant interaction between counsellors and parents which helps to provide timely support and encouragement to students in times of need. The faculty coordinators and other faculty counsellors are often in touch with the parents. Additionally, when there is a disciplinary problem or if there is poor performance in the examinations, the parents are contacted over the phone and counselling is held with parents

#### 6.13 Development programmes for support staff

Support Staff Development Programmes (lectures/workshops/training programmes) are conducted regularly by the institution as a whole and by the individual departments. The areas covered by the training programmes include the following:

- Computer training
- Internet
- Audio-visual aids
- Computer aided packages
- New laboratory practices
- Spirituality, yoga, and meditation
- Fire and safety
- Office etiquette
- Development programmes, workshops, conferences, symposia etc., are conducted for knowledge update and skill enhancement

#### 6.14 Initiatives taken by the institution to make the campus eco-friendly

The Initiatives taken by the institution to make the campus eco-friendly include the following:

- Huge landscapes are maintained by the institution in the sprawling campus.
- Hundreds of fruit and flower bearing plants/trees are grown in the campus
- Waste bins are placed throughout the campus
- In order to promote the use of alternative energy resources, solar energy and wind mill energy systems were installed in the campus.
- Awareness programs were conducted for the students.
- Signboards bearing the messages of the importance of keeping the campus eco-friendly are placed inside the campus.

## Criterion – VII

### **7. Innovations and Best Practices**

7.1 Innovations introduced during this academic year which have created a positive impact on the functioning of the institution. Give details.

- Development of FPGA Based Robot for Indoor Environment Services
- Snore Controller
- Weathering the Storm
- Image Processing Based Gesture Capture

7.2 Provide the Action Taken Report (ATR) based on the plan of action decided upon at the beginning of the year

- Setup of Cyient Incubation center.
- Setup of Center for Computer Vision (CCV) and Speech Processing special labs.

7.3 Give two Best Practices of the institution (*please see the format in the NAAC Self-study Manuals*)

- An independent faculty training centre named VEDIC
- Add- on Courses and Industrial Training & Collaboration
- Centre for Computer Vision (CCV) and Speech Processing special labs are established

***\*Provide the details in annexure (annexure need to be numbered as i, ii, iii)***

#### 7.4 Contribution to environmental awareness / protection

Direct participation in Mission Kakatiya started by State Government of Telangana by contributing Rs.50 Lakhs per annum for three years continuously and also providing technical knowledge from the Civil engineering department of the college. Installed STP Sewage Treatment Plant with a capacity of 250KLD. Eco friendly activities already establish were taken forward for this year also.

7.5 Whether environmental audit was conducted? Yes  No

7.6 Any other relevant information the institution wishes to add. (for example SWOT Analysis)

7.6 Any other relevant information the institution wishes to add. (for example SWOT Analysis)

### **SWOC Analysis of Institute**

#### **Strengths**

- ❖ One of the premier engineering college in the state of Telangana
- ❖ College is established and managed by reputed Sri Vishnu Educational Society.
- ❖ A visionary and pro-active management which cater the needs and aspirations of all stake holders towards quality education, placements and good governance.
- ❖ College was accorded permanent affiliation by J.N.T. University, Hyderabad. National Board of Accreditation (NBA) accorded the status of Accreditation to the eligible UG B.Tech programs. Accredited by NAAC in the year 2011 for 5 years. Autonomy is sanctioned by UGC in the year 2014
- ❖ College has received “ISTE, Telangana Section Best Engineering College Award for its Overall Performance” for the year 2014.
- ❖ Worth of 4.5 crore sanctioned research projects
- ❖ Admission of student quality is good (Approximately within 10 positions in the state based on EAMCET Counselling)
- ❖ Highest Number of placements (Approximately within 4 position in the state)
- ❖ Feedback taken periodically from students, parents, Alumni and other stake holders is given due weight age for taking corrective measures to strengthen the teaching learning process.
- ❖ Linkages with premier academic and R&D organizations
- ❖ A faculty Training Centre (VEDIC) is established for the training of the staff members in the group of institutions.

#### **Weaknesses**

- ❖ Demographically located in rural region.
- ❖ Collaborative research with industry and R&D organizations may be improved.
- ❖ Not yet provided fully residential facilities for students and staff.

#### **Opportunities**

- ❖ Sponsoring faculty on QIP for higher studies and research.
- ❖ Establishing research centres for departments to enhance research activity.
- ❖ Improvement of research activities through financial assistance from Central Government under TEQIP and other organizations.
- ❖ Collaboration with industry, R&D organizations and educational institutes of eminence.

- ❖ Extending the consultancy services with external organizations and scope for revenue generation.
- ❖ Activating Entrepreneur Development Cell to inculcate the culture of entrepreneurship to rural youth.
- ❖ Involving Alumni in institutional development and placement opportunities.

**Challenges**

- ❖ Establishment of reputed private/foreign universities may affect the admission of students
- ❖ Declining of student quality at entry level
- ❖ Deterioration of learning aptitude in engineering education
- ❖ Availability and retention of senior faculty
- ❖

**8. Plans of institution for next year**

1. More Focus on faculty training through an Faculty Training centre (VEDIC)
2. Conducting more number of conferences/seminars
3. Internships to majority of students
4. Expansion of infrastructure facilities
5. Focus on Placement & Training Activities
6. Establishment of special labs in Mechanical and Civil Engineering

