	LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING (AUTONOMOUS)
	Accredited by NAAC with 'A' Grade and NBA (ECE,EEE,ME,CSE & IT)
	Approved by AICTE, New Delhi and Affiliated to JNTUK, Kakinada
	L.B.Reddy Nagar, Mylavaram-521230, N.T.R Dist, Andhra Pradesh, India.
	Internal Quality Assurance Cell (IQAC)

ACADEMIC AND ADMINISTRATIVE AUDIT(AAA) BY EXTERNAL AGENCY

ACADEMIC YEAR: 2022-23 **Date of Audit: 17-02-2024**

Audit Member-1 : Dr.A.Venu Gopal, Professor, Mechanical Engineering, NIT. Warangal
Audit Member-2 : Dr.A.Subbarami Reddy, Professor, Department of ECE, JITS, Karimnagar

(The activities are to be graded on the following scale)

Excellent	**Good**	**Satisfactory**	**Needs improvement**
4	**3**	**2**	**1**

Details of Programmes in the institution:

	Name of the Programme	**Sanctioned Seats**	**Students Admitted**
UG: B.Tech.	1. Artificial Intelligence & Data Science	**132**	**131**
	2. Aerospace Engineering	**66**	**49**
	3. Civil Engineering	**66**	**34**
	4. Computer Science and Engineering	**198**	**197**
	5. Computer Science and Engineering (AI&ML)	**66**	**65**
	6. Electronics and Communication Engineering	**198**	**198**
	7. Electrical and Electronics Engineering	**132**	**108**
	8. Information Technology	**132**	**132**
	9. Mechanical Engineering	**132**	**40**
	UG: B.Tech., Total	**1122**	**954**
PG: M.Tech.	1. Computer Science and Engineering	**6**	**0**
	2. Thermal Engineering	**6**	**0**
	3. Power Electronics and Drives	**6**	**0**
	4. VLSI and Embedded Systems	**6**	**0**
	PG: M.Tech., Total	**28**	**0**
PG: MBA	5. Master of Business Administration	**132**	**132**
	PG: M.Tech. & MBA	**156**	**132**
	UG and PG Total	**1278**	**1086**

CRITERION 1	Curricular Aspects	150

S.No	Metric Type	Metric No	Metric	Weightage	AI&DS	ASE	CE	CSE	ECE	EEE	EIE	IT	ME	MBA	HEI Input	Grade Point	Weighted Grade Point
1	QL	1.1.1	Curricula developed and implemented have relevance to the local, regional, national, and global developmental needs, which is reflected in the Programme outcomes (POs) and Course Outcomes(COs) of the Programmes offered by the institution	20	• The curricula developed have relevance to the regional/national/global developmental needs with well-defined learning objectives and outcomes at programme and course level. • The department and the institute are guided and monitored in the preparation of course curriculum by two bodies, namely Board of Studies and Academic Council and typically undergoes with the following: • The Institute follows the guidelines issued by the regulatory bodies such as UGC, AICTE, affiliated university JNTUK, Kakinada and Andhra Pradesh State Council of Higher Education (APSCHE) while designing the curricula. • A series of all faculty meetings are conducted in correlation to the stated Programme Outcomes (POs), Programme Specific Outcomes (PSOs) and Course Outcomes (COs). • For the effective design of curriculum structure feedback is collected from students, faculty, alumni, parents and employers. • The set of courses which require modifications (deletion/addition) are prepared and programme curricula adopted at other leading academic institutes in India and abroad are compared.											3	60
2	QL	1.1.2	The programmes offered by the institution focus on employability/entrepreneurship/ skill development and their course syllabi are adequately revised to incorporate contemporary requirements	30	• Curriculum revision is a continuous process with respect to elective and laboratory courses as per the need of the industry and regulatory bodies from time to time even though the normal cycle of revision is 3 years for all programs offered by the institution. • To cope with technological advancements and to bridge the gap between the Institution and industry, LBRCE established Industry - Institute Interaction Cell and the Skill Development centres in collaboration with International organizations like Indo-Euro Synchronization, Aachen, Germany and Andhra											4	120

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Pradesh State Skill Development Corporation (APSSDC). The APSSDC is offering skill development courses in the latest technologies such as Industry 4.0, Robotics and Automation, PLC, AR and VR, IoT, machine learning, cloud computing, etc., for all branches of engineering students.
- The APSSDC is conducting skill-oriented training programmes in the college itself to make the students to industry ready and it helps students to get fully trained as per National Skills Qualification Framework (NSQFs).
- In R20 UG regulations, skill-oriented courses (SOC) are introduced in the curriculum. The skill courses are being offered from the 3rd semester to the 7th semester. The weightage of each skill course is 2 credits.
- The institution has undertaken a comprehensive approach towards promotion of innovation, incubation, and entrepreneurship. LBRCE has established Centre for Innovation, Incubation and Entrepreneurship (CIIE) for nurturing and encouraging students with innovative business ideas. Also, this centre organizes awareness programs on entrepreneurship liaisons with industry bodies and other agencies in incubating and facilitating start-up ventures by students.

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3	Qn	1.2.1	Percentage of new courses introduced out of the total number of courses across all programmes offered during the A.Y	30	-	16	16	14	21	19	-	15	19	23	26	4	120
4	QL	1.3.1	Institution integrates cross-cutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability and other value framework enshrined in Sustainable Development Goals and National Education Policy – 2020 into the Curriculum	15	• All the programmes offered in the institution include courses that deal with cross-cutting issues relevant to Professional Ethics, Gender, Human values, Environment and Sustainability. Such crosscutting issues are integrated into the curriculum as Core, Mandatory and Elective courses in the undergraduate as well as post graduate programmes. • The institution offers courses on Professional ethics and Human values, Business ethics and Corporate Governance, Human Resource Management, Environmental Science, Environmental Engineering, Renewable Energy Sources, Renewable Energy Technologies, Green buildings, Water and Wastewater Engineering, Environmental Sanitation, Energy Environment and Pollution, and Energy Conservation and Management.												3	45

S.No	Metric Type	Metric No	Metric	Weightage	AI&DS	ASE	CE	CSE	ECE	EEE	EIE	IT	ME	MBA	HEI Input	Grade Point	Weighted Grade Point
5	Qn	1.3.2	Number of certificate/value added courses/Diploma Programmes offered by the institutions and online courses of MOOCs, SWAYAM/e-PG Pathshala/ NPTEL etc. where the students of the institution have enrolled and successfully completed during the A.Y	25	1	1	--	3	7	2	--	3	3	2	22	4	100
6	Qn	1.3.3	Percentage of programmes that have components of field projects /research projects / internships during the A.Y	10	100%											4	40
7	Qn	1.4.1	Structured feedback for curriculum and its transaction is regularly obtained from stakeholders like **Students, Teachers, Employers, Alumni, Academic peers** etc., and Feedback processes of the institution may be classified as follows A. Feedback collected, analysed, action taken& communicated to the relevant bodies and feedback hosted on the institutional website B. Feedback collected, analysed, action has been taken and communicated to the relevant bodies C. Feedback collected and analysed D. Feedback collected E. Feedback not collected	20	**A. Feedback collected, analysed, action taken& communicated to the relevant bodies and feedback hosted on the institutional website**											4	80
Total				**150**													**565**
CGPA-I																	**3.77**

S.No	Metric Type	Metric No	Metric	Weightage	AI&DS	ASE	CE	CSE	CSM	ECE	EEE	EIE	IT	ME	MBA	FED	HEI Input	Grade Point	Weighted Grade Point
1	Qn	2.1.1	Enrolment percentage **(First Year % of Admissions)**	10	99	74	51	99	98	100	82	--	100	30	100	--	85	3	30
2	Qn	2.1.2	Percentage of seats filled against reserved categories (SC, ST, OBC etc.) as per applicable reservation policy for the first year admission during the A.Y	10						88.38								3	30
3	QL	2.2.1	The institution assesses the learning levels of the students and organises special Programmes to cater to differential learning needs of the student	15	The learning levels of the students are identified by the interaction of the faculty with students in the class and based on that, mentoring will be done by the respective mentor. Special care is given to slow learners by conducting additional classes and suggested to follow the standard pre-requisite books to understand the basics. **1. Slow Learners:** • Students who secure less than 50% of marks in continuous assessments, and have one or more backlogs in the semester end examinations are considered as slow learners. • The identified slow learners will be considered for bridge classes, and monitored by respective counsellor. • In order to support and motivate the slow learners, the following measures are taken. Bridge Classes Remedial Classes **2. Advanced Learners:** • Those who secure CGPA of more than 7.75 are considered as advanced learners. The following choices are offered for their higher levels of learning. • Concentrate on job-oriented trainings to get better placements. • Opportunities to participate in various conferences, seminars, quiz competitions and paper or poster presentations. Crash course on competitive examinations (GATE, GRE TOFEL, IELTS) for higher studies.															3	45
4	Qn	2.2.2	**Student - Full time teacher ratio (Total Number of Students/Number of Faculty)**	15						16.86								4	60

CRITERION 2 — Teaching- Learning and Evaluation — **300**

5	QL	2.3.1	Student centric methods, such as experiential learning, participative learning and problem-solving methodologies are used for enhancing learning experience and teachers use ICT- enabled tools including online resources for effective teaching and learning process	30	In addition to traditional teaching-learning methods, the institution is highly interested in providing innovative methods for enriching the learning experience. The facilities arranged by the institution are: **1. EXPERIENTIAL LEARNING**: • Curriculum component Every UG and PG programs are designed with minimum of two laboratory components in each semester • Internship: Tool Based Training Programs • Industry Driven National/Global Student Competitions: Field Visits **2. PARTICIPATIVE LEARNING**: • Seminar/Workshops: • Group Assignments/Mock Interviews: • Case studies: • Student Association and Professional Society chapters: **3. PROBLEM SOLVING LEARNING**: • Project–based Learning: • Project work is mandatory for all the programs offered at the institution. • Tutorials: • Developing innovative models: • Hands-on training programs: • In every semester, training activities covering advanced courses, and latest technology industry are held for students. **ICT- enabled tools** • All classrooms, seminar halls, laboratories, and auditoriums are equipped with ICT facilities which include Interactive Pannel, LCD projectors, computers with internet connection. • ICT tools and campus LAN are used widely to conduct laboratory experiments virtually. • All faculty members are effectively using the available ICT enabled tools for effective implementation of teaching-learning process.	3	90
6	QL	2.3.2	The institution adopts effective Mentor-Mentee Schemes to address academics and student-psychological issues	10	For an effective mentoring of the students, 20 to 25 students are assigned to a faculty mentor.	3	30
7	QL	2.3.3	Preparation and adherence of Academic Calendar and Teaching plans by the institution	10	• The Institution follows a well-planned academic calendar which is given by College Advisory Board (CAB) members. • The academic calendar is prepared with minimum number of working days, duly taking the national & public holidays, festival breaks, summer vacation, in addition to the college fests, training programmes, and placement activities into cognizance.	3	10

					• The academic calendar provides adequate balance between academic and non-academic activities, teaching, and examination schedule. • The academic calendar is approved by the Academic Council. • Then calendar is uploaded in the institution website, and communicated through the webmail to all the relevant functionaries for adherence. • Every faculty member prepares a 'Lesson Plan' for every course as per academic calendar and it is uploaded in the website at the beginning of the semester and is duly approved by the Head of the department.		
8	Qn	2.4.1	Percentage of full time teachers against sanctioned posts during the A.Y	15	**100**	4	60
9	Qn	2.4.2	Percentage of full time teachers with Ph.D./D.Sc. / D.Litt./ L.L.D during the A.Y	25	**32.81**	0	0
10	Qn	2.4.3	Average teaching experience of full time teachers **(Over All)**	5	**15.75**	4	20
11	Qn	2.4.4	Average teaching experience of full time teachers **in the same institution**	5	**7.95**	1	5
12	Qn	2.5.1	Average number of days from the date of last semester-end/ yearend examination till the last date of declaration of results during the A.Y	20	**15.83**	4	80
13	Qn	2.5.2	Percentage of student complaints/ grievances about evaluation against total number appeared in the examinations during A.Y	15	**4.01**	1	15
14	QL	2.5.3	IT integration and reforms in the examination procedures and processes including Continuous Internal Assessment (CIA)/ Formative Assessment have brought in considerable improvement in Examination Management System (EMS) of the Institution	15	The following significant reforms are implemented in the Examination Management System (EMS). • Examination schedules are prepared by adhering to institution academic calendar. • In continuous assessment, a couple of midterm examinations, and assignments are conducted as per the schedules. • The marks obtained by the students are posted in ERP(i-Campus) and it is made visible to both students and parents. • All the permissible pre-examination and post-examination tasks have been integrated with Examination Management System using ERP. The college has been involving electronic processes in publishing the examination schedules in the college website, preparing database of eligible candidates, conducting examinations on pre-printed	3	45

					bar-coded and OMR answer booklets, and post-examination task- declaration of results, and issue of grade cards. • The question paper for the Semester End Examinations (SEE) is also set by external members from premier institution. • Special squad team comprises of internal faculty to take prompt actions by against malpractices		
15	QL	2.6.1	The institution has stated learning outcomes (programme and course outcome)/graduate attributes which are integrated into the assessment process and widely publicized through the website and other documents and the attainment of the same are evaluated by the institution	30	The Programme outcomes (POs), Program Specific Outcomes (PSOs) and Course Outcomes (COs) of all the programs offered by the institution are framed through discussion with course instructor, Course Coordinator, Module Coordinator, Program Assessment Committee (PAC), Department Academic Committee (DAC) and finally approved in BoS meetings. The COs are published in academic regulations and curriculum book, and departmental website. The course outcomes of each course are mapped to the POs and PSOs with a level of emphasis being substantial, moderate and slight. **Attainment of Program Outcomes and Program Specific Outcomes:** **a) Direct assessment:** • The performance of the students in the examinations during the semester in each course is used to compute the level of attainment of the POs and PSOs through the mapping of questions to COs and COs to POs and PSOs. • Rubrics are formulated for the assessment of laboratory, mini project, major project, seminar and internship courses. • Threshold value is taken as either class average mark or 60% of the marks allocated to the question whichever is maximum. **b) Indirect assessment:** The following indirect assessment tools are used for calculating PO & PSO attainments. Programme exit survey & Student portfolio The overall PO & PSO attainments are calculated by considering 70% of direct attainment and 30% of indirect attainment through surveys.	3	90

S.No	Metric Type	Metric No	Metric	Weightage	AI&DS	ASE	CE	CSE	ECE	EEE	EIE	IT	ME	MBA		HEI Input	Grade Point	Weighted Grade Point
16	Qn	2.6.2	Percentage of Successfully graduation students during A.Y	20	--	87.04	63.64	97.14	90.57	86.07	79.41	94.12	71.75	96.97		91.61	4	80
17	Qn	2.7.1	Online student satisfaction survey regarding the teaching learning process.	50	3.08	3.08	3.4	3.38	3.31	3.4	3.42	3.41	3.43	3.46		3.37	3.37	169
Total				**300**														**938**
CGPA-II																		**3.13**

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<tr><td colspan="2">CRITERION 3</td><td colspan="15">Research, Innovations and Extension</td><td colspan="2">150</td></tr>
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S.No	Metric Type	Metric No	Metric	Weightage	AI&DS	ASE	CE	CSE	ECE	EEE	EIE	IT	ME	MBA	FED	HEI Input	Grade Point	Weighted Grade Point
1	QL	3.1.1	The institution's research facilities are frequently updated and there is well defined policy for promotion of research which is uploaded on the institutional website and implemented	6	• The institution has a well-defined R&D Policy in place to promote research by the faculty and students in tune with the requirements of the corporate world. • Research Centres and Advanced laboratories are established in various departments of the institution with necessary software and computing facilities for carrying out research activities. • Four departments (CSE,ECE,EEE,ME) are recognized as research centres by JNTUK, Kakinada • The institution governing body reviews the complete research activity and takes the required budget allocation to upgrade the research facilities every year.											3	18
2	Qn	3.1.2	The institution provides seed money to its teachers for research	8	0	0	0	2.0	0	0	0	1.1	0	0	0.9	4	3	24
3	Qn	3.1.3	Percentage of teachers receiving national/ international fellowship / financial support by various agencies for advanced studies/ research during the A.Y	6	00											0	0
4	Qn	3.2.1	Research funding received by the institution and its faculties through Government and non-government sources such as industry, corporate houses, international bodies for research project, endowment research chairs during the A.Y	5	0	0	0	0	27.96	0	0	0	3.5	0	0	27.96	4	20
5	Qn	3.2.2	Percentage of teachers having research projects during the A.Y	2	0	0	0	0	2.3	0	0	0	0	0	0	2.3	0	0

S.No	Metric Type	Metric No	Metric	Weightage	AI&DS	ASE	CE	CSE	ECE	EEE	EIE	IT	ME	MBA	FED	HEI Input	Grade Point	Weighted Grade Point
6	Qn	3.2.3	Percentage of teachers recognised as research guides as in the latest completed academic year	3	0	8.33	14.29	25	26	27.59	33.33	4.17	20.51	0	0	16.97	2	6
7	QL	3.3.1	Institution has created an ecosystem for innovations, Indian Knowledge System (IKS),including awareness about IPR, establishment of IPR cell, Incubation centre and other initiatives for the creation and transfer of knowledge/technology and the outcomes of the same are evident	10	The institution has undertaken a comprehensive approach towards promotion of innovation, incubation, and entrepreneurship. The manifestation of such eco-system at our institution is as follows. **1. Incubation and Start-up Policy:** An Incubation & Start-up Policy is in place that facilitates students and faculty to carry out innovation activities. **2. Resources** • Centre for Innovation, Incubation and Entrepreneurship (CIIE) is established. • R&D Cell has been actively engaging the faculty and students to carry out research in cutting-edge technologies by establishing advanced research labs • The institution has been making the seed money available for the faculty to undertake Innovative projects with relevant material resources. **3. Collaboration** • NIT Trichy , Atal Incubation Centre, S.K. University, Anantapur, National Instruments DASSAULT Systems, IISc, Bangalore, IITB, Bombay • European Centre for Mechatronics (ECM), Germany													3	30
8	Qn	3.4.1	The Institution ensures implementation of its stated Code of Ethics for research 1. Inclusion of research ethics in the research methodology course work 2. Presence of institutional Ethics committee (Animal, Chemical, Bio-ethics etc.) 3. Plagiarism check through software 4. Research Advisory Committee	5	A. All of the above													4	20

#	Type	Metric	Description	Weight												Total	Grade	Score
9	Qn	3.4.2	Number of candidates registered for Ph.D per teacher (as per the data given w.r.t recognized Ph.D guides/ supervisors provided at 3.2.3 metric) during the A.Y	5	0	0.33	0.14	0.15	0.24	0.41	0.33	0.08	0.33	0	0	1.15	3	15
10	Qn	3.4.3	Number of research papers published per teacher in the Journals as notified on UGC CARE list during the A.Y	5	1	0.33	0.36	0.91	1.02	1.07	1	0.75	0.79	0.07	0.33	0.68	3	15
11	Qn	3.4.4	Number of books and chapters in edited volumes published per teacher during the A.Y	5	0.6	0	0.07	0.11	0.42	0.19	1	0	0.26	0	0	0.17	1	5
12	Qn	3.4.5	Bibliometrics of the publications during the A.Y based on average Citation index in Scopus/ Web of Scienc	5													4	20
13	Qn	3.4.6	Bibliometrics of the publications during the A.Y based on Scopus/ Web of Science – h-index of the Institution	5													4	20
14	Qn	3.5.1	Revenue generated from consultancy and corporate training during the A.Y	10	0	0	0.21	0	0	0	0	0	0	0	0	0.21	0	00
15	QL	3.6.1	Outcomes of extension activities in the neighbourhood community in terms of impact and sensitizing the students to social issues and holistic development, and awards received if any during the A.Y	30	The institution envisions a close and shared bonding with the neighbourhood community through a network of activities and services for its socio-economic development. Our students receive the best training in social service and community engagement through the initiatives of our NSS unit at National and State level. The institution promotes regular engagement of students, faculty and supporting staff with the neighbourhood community for a holistic and sustained community development through various activities listed below. **Advancement in Technology & Social and Community Service Activities** Sensitization: These service activities have made the students understand practical problems of the common people in society and enhance social empathy among them. Such programmes helped our												4	120

students to become more sensitive and responsive to the societal needs.

Public Health and Safety and Environmental Protection Activities

Sensitization: These events createan awareness on healthy environment, cleanliness, and sanitation practices, besides highlighting the values of plantation, environmental protection for reducing land, water and air pollutions.

Adopting Village Activities

The institution has a policy of adopting one nearby village every year.

Awards:

- Siva Raju Uha Jahnavi Delivering a Talk On Democracy and Corporatocracy on 16-09-2022 at 12th Bharatiya Chatra Sansad - Indian Student Parliament, MIT WPU, PUNE.
- Kum. K.Poojitha Gayathri, EEE Student got State Level Best NSS Volunteer Award for A.Y 2021-22 from NSS Cell, Government of Andhra Pradesh on 24th September 2022

16	Qn	3.6.2	Number of extension and outreach programs conducted by the institution through organized forums including NSS/NCC with involvement of community during the A.Y	20	29												4	80
17	Qn	3.7.1	Number of functional MoUs/linkages with institutions / industries in India and abroad for internship, on-the-job training, project work, student / faculty exchange and collaborative research during the A.Y	20	0	0	0	0	4	7	0	1	2	4	0	18	4	80
Total				**150**														**473**
CGPA-III																		**3.15**

			CRITERION 4		Infrastructure and Learning Resources		100

S.No	Metric Type	Metric No	Metric	Weightage	HEI Input	Grade Point	Weighted Grade Point
1	QL	4.1.1	The Institution has adequate infrastructure and other facilities for a. teaching – learning, viz., classrooms, laboratories, computing equipment etc b. ICT – enabled facilities such as smart class, LMS etc. c. Facilities for Cultural and sports activities, yoga centre, games (indoor and outdoor), Gymnasium, auditorium etc.	20	• The college has adequate number of classrooms and laboratories as per norms of UGC and AICTE for effective implementation of the teaching-learning process. • Further, every department is equipped with its own computing resources as well as departmental library. • The Departments have required as well as specialized software in their laboratories. • In addition to the above, the college has a Central Library including a Digital Library which is well equipped with many learning resources. • Each department is provided with one Smart Classroom and one Interactive panel. • All classrooms are provided with necessary ICT facilities for effective implementation of Teaching-Learning. • Digital display systems are made available in each block. • A centralized media centre facility is also added for preparation of learning material and e-content for the benefit of students. • With the availability of 09 acres of land physical education department has arranged facilities for playgrounds, outdoor stadium, and indoor stadium. • At present all these facilities are adequate for conducting outdoor as well as indoor games for both boys and girls. • The institution hosts inter University zonal tournaments regularly on campus. • Yoga & Meditation Centre and Gymnasium	3	60
2	Qn	4.1.2	Percentage of expenditure for infrastructure development and augmentation excluding salary during the A.Y	10	46.85	4	40

S.No	Metric Type	Metric No	Metric	Weightage	HEI Input	Grade Point	Weighted Grade Point
3	QL	4.2.1	Library is automated with digital facilities using Integrated Library Management System (ILMS), adequate subscriptions to e-resources and journals are made. The library is optimally used by the faculty and students	15	Library is fully automated using the following Integrated Library Management System: • Name of the ILMS software: ERP • Nature of automation (fully or partially): Fully • Version: 2018 Year of automation: 2005&2018 • Online Public Access Catalogue (OPAC) is available for remote access. • The ERP software is integrated with Library Management system that is designed and developed by D–Base solutions.	4	60
4	Qn	4.2.2	Percentage of expenditure for purchase of books/ e-books and subscription to journals/e-journals during the A.Y	5	1.96	1	5
5	QL	4.3.1	Institution frequently updates its IT facilities and provide sufficient bandwidth for internet connection	12	• The institute has an IT policy in place which specifies clearly about the procedures to be adopted for all IT facilities that are made available in the campus. Adequate budget allocations are made regularly to establish, maintain, and upgrade these IT facilities. • IT facilities include computing systems, Wi-Fi systems, cyber security, intranet and all other software necessary for handling these systems as well as support systems like website, campus management software, library information system, MOOCs, CCTVs, biometric devices, Learning Management System (LMS), online assessments, access to online learning resources. • Bandwidth: 1820Mbps • Adequate budget allocations are made for these upgradations as and when required	4	60
6	Qn	4.3.2	Student - Computer ratio	10	3:1	4	40

S.No	Metric Type	Metric No	Metric	Weightage	HEI Input	Grade Point	Weighted Grade Point
7	QL	4.3.3	Institution has dedicated audio visual centre, mixing equipment, editing facility, media studio, lecture capturing system (LCS) and related hardware and software for e-content development	8	• Institution has established a Media Centre for e-content development	3	24
8	Qn	4.4.1	Percentage expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component, during the A.Y	10	53.14	4	40
9	QL	4.4.2	There are established systems and procedures for maintaining and utilizing physical and academic support facilities – laboratory, library, sports complex, computers, classrooms etc.	10	• The institution has a well-defined maintenance policy which specifies procedures for maintaining physical, academic and support facilities. • The institution has established a maintenance section with adequate staff.	4	40
Total				**100**			**357**
CGPA-IV							**3.57**

S.No	Metric Type	Metric No	Metric	Weightage	AI&DS	ASE	CE	CSE	ECE	EEE	EIE	IT	ME	MBA	HEI Input	Grade Point	Weighted Grade Point
					CRITERION 5				**Student Support and Progression**								**100**
1	Qn	5.1.1	Percentage of students benefited by scholarships and freeships provided by the institution, government and non-government bodies, industries, individuals, philanthropists during the A.Y	11	**63.65**											4	44
2	QL	5.1.2	Efforts taken by the institution to provide career counselling including e-counselling and guidance for competitive examinations	6	• CCGT classes are conducted for III year B.Tech Students • CCGT hours are included in regular Timetable • GATE classes are conducted for advanced learners											3	18
3	Qn	5.1.3	Following capacity development and skills enhancement activities are organised for improving students' capability	8	A). All of the above 1. Soft skills 2. Language and communication skills 3. Life skills 4. Awareness of trends in technology											4	32
4	Qn	5.1.4	The institution adopts the following for redressal of student grievances including sexual harassment and ragging cases	5	A). All of the above 1.Implementation of guidelines of statutory/regulatory bodies 2.Organisation wide awareness and undertakings on policies with zero tolerance 3.Mechanisms for submission of online/offline students' grievances 4. Timely redressal of the grievances through appropriate committee											4	20

S.No	Metric Type	Metric No	Metric	Weightage	AI&DS	ASE	CE	CSE	ECE	EEE	EIE	IT	ME	MBA	HEI Input	Grade Point	Weighted Grade Point
5	Qn	5.2.1	Percentage of placement of outgoing students and students progressing to higher education during the A.Y	20	--	19.15	76.19	76.47	54.17	60.95	33.33	72.66	76.38	68.75	64.57	3	60
6	Qn	5.2.2	Percentage of students qualifying in state/ national/ international level examinations out of the graduated students during the A.Y	10	--	2.17	2	48.31	10.16	7.21	0	36.67	11.56	0	12.91	4	40
7	Qn	5.3.1	Number of awards/medals for outstanding performance in sports/cultural activities at inter-collegiate / state /national / international events during the A.Y	15	**10**											4	60
8	QL	5.3.2	Presence of an active Student Council & representation of students on academic & administrative bodies/committees of the institution	10	• An active student council and representation of students on academic and administrative bodies is in place at our institution. • The institution promotes value-based education for inculcating social responsibility and good citizenry among its student community. For this, the institution has put in place the necessary infrastructure and encourages active participation of the students in academic, social, and cultural activities. • The institution believes that overall and holistic development is possible only with the participation of students in all spheres of activities. • Keeping this in view as well as statutory recommendations of UGC, and AICTE, the institution has made adequate representation of students in specific cases as members.												3	30

#	Type	No.	Criterion	Max	Details	Score	Marks
9	Qn	5.3.3	The institution conducts / organizes activities: 1.Sports Competitions/ events 2.Cultural competitions/ events 3.Technical fest/ Academic fest 4. Any other events through Active clubs and forums	5	A. All four of the above • No.of Spots and Games Activities Conducted : 26 • No.of Cultural Activities Conducted : 02 • No.of Technical Fest Conducted : 01 • Institutional Club activities Conducted SAHELI-The Girls Club : 08 PRAKRUTHI- The Environmental Club : 12 KRUTHI-The Fine Arts Club : 02 SPOORTHY-The Literary Club : 04	4	20
10	Qn	5.4.1	Alumni contribution during the A.Y to the institution through registered Alumni association	5	0 0 0.4 0.1 0.14 0 0 0 0 0 0.19	0	0
11	QL	5.4.2	Alumni contributes and engages significantly to the development of institution through academic and other support system	5	• The Alumni Association of Lakireddy Bali Reddy College of Engineering (AALBRCE) is a registered society with registration number 154 on 28th April, 2006. • The main objective is to enrol all alumni as members of the association and facilitate active participation of the alumni in appropriate activities, events, and extend help in initiatives taken by the institution. • The AALBRCE also coordinates the networking of all the LBRCE alumni to create a single global LBRCE community for the benefit of our institution as well as current student community. • The alumni-meet is organized every year in the month of February on second Saturday.	3	15
Total				**100**			**339**
CGPA-V							**3.39**

CRITERION 6			**Governance, Leadership and Management**														**100**		

S.No	Metric Type	Metric No	Metric	Weightage	AI&DS	ASE	CE	CSE	ECE	EEE	EIE	IT	ME	MBA	FED	HEI Input	Grade Point	Weighted Grade Point
1	QL	6.1.1	The institutional governance and leadership are in accordance with the vision and mission of the Institution and it is visible in various institutional practices such as NEP implementation, sustained institutional growth, decentralization, participation in the institutional governance and in their short term and long term Institutional Perspective Plan.	15												**Participation of the teachers in the decision-making bodies:** • In the linear structure, Vice-Principal, Deans and Heads of the Department are next in the hierarchy. The Vice-Principal will assist the principal in administrative activities. The deans are senior Professors with significant authority over a specific academic unit or area of concern or both. They help the principal in implementing various administrative and academic processes and provide feedback and suggestions. • The HODs are next in hierarchy and are responsible for effective implementation of Teaching-Learning process and Curriculum development and all other day to day responsibilities of running the department. • The professors, Associate Professors, Assistant Professors are next in the hierarchy. All these members act as conveners of the non-statutory committees and assist the principal on routine administration and academic processes. Faculty plays a proactive role in the academic and administrative activities of the institution. • The institution practices participative management and decentralization in all activities with a balance between transparency and confidentiality. Each of the functionaries has specific roles and responsibilities confining to the policies of the institution. • All the faculty members are actively involved in Teaching-Learning process implementation.	3	45
2	QL	6.2.1	The institutional perspective plan is effectively deployed and functioning of the institutional bodies is effective and efficient as visible from policies, administrative setup, appointment, service rules, and procedures, etc.	6												• The institution has prepared a Strategic Plan in the year in 2018 for a duration of 5 years. • The Institution has a well-structured administrative setup. The governing body is the highest decision-making body, which gives constructive suggestions to the management for effective decision making in line with the Vision, Mission of the institution. A suitable organogram is in place for deciding the administrative hierarchy of the institution. • Various statutory and non-statutory committees are constituted for implementing an orderly functioning of the Institution under the guidance	3	18

					of the Principal. Following are the Statutory and Non-Statutory committees of our institution. • The Committees convene meetings periodically and discuss about issues related to academic and administrative activities. • The Institution has a set of well-defined rules, policies and regulations defined within the framework of UGC, AICTE, State Government and Affiliating University. The Governing Body approves these policies. The service rules are formulated and these rules are periodically reviewed, updated and displayed on the college website.		
3	Qn	6.2.2	6.2.2.1 e-governance is implemented covering the following areas of operations: 1.Administration including complaint management 2. Finance and Accounts 3. Student Admission and Support 4. Examinations	**4**	A. All of the above	4	16
4	QL	6.3.1	The institution has performance appraisal system, effective welfare measures for teaching and non-teaching staff and avenues for career development/progression	**5**	Faculty appraisal is in place for the continuous improvement and up gradation of faculty competencies like effective use of modern interactive communication tools, Journal paper and patent publications, participation in conferences, seminars, workshops and interaction with the outside world.	3	15
5	Qn	6.3.2	Percentage of teachers provided financial support to attend conferences/workshops and towards membership fee of professional bodies during the A.Y	**15**	15.9	4	60
6	Qn	6.3.3	Percentage of teachers undergoing online/ face-to-face Faculty Development Programmes (FDPs)/ Management Development Programmes (MDPs) during the A.Y	**10**	68.3	4	40

7	QL	6.4.1	Institutional strategies for mobilisation of funds other than salary and fees and the optimal utilisation of resources	5	• In every financial year the college will conduct internal audit through departmental staff as well as external audit by the statutory Auditors. The Finance Manager reviews the monthly transactions. While verifying entries, if any mistakes/ short comings identified/noticed the same could be rectified in the same month by the concerned departments. The internal financial audit is conducted at every quarter. • The external statutory auditors shall visit the college office twice in a year for vouching audit and submitting the final audit report. • After completion, the final statutory audit report shall be submitted to the Governing body for approval. After approval, the financial accounts, documents could be used for all statutory purposes.	3	15
8	Qn	6.4.2	Funds / Grants received from government bodies, non-government bodies, and philanthropists during the A.Y	5	7	3	15
9	QL	6.4.3	Institution conducts internal and external financial audits regularly	5	• In every financial year the college will conduct internal audit through departmental staff as well as external audit by the statutory Auditors. The Finance Manager reviews the monthly transactions. While verifying entries, if any mistakes/ short comings identified/noticed the same could be rectified in the same month by the concerned departments. The internal financial audit is conducted at every quarter. The external statutory auditors shall visit the college office twice in a year for vouching audit and submitting the final audit report. • After completion, the final statutory audit report shall be submitted to the Governing body for approval. After approval, the financial accounts, documents could be used for all statutory purposes.	4	20
10	QL	6.5.1	Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes visible	10	At LBRCE, the IQAC has contributed significantly for institutionalizing the quality assurance strategies and process in terms of • Periodical conduct of external AAA • Timely submission of AQAR • Conduct of SSS • Analysis of feedback from all stakeholders on quality related institutional processes • Conduct of workshops, seminars on quality related themes • Conduct of Pedagogy Training for improvement of teaching-learning • Participation in institutional Accreditations and rankings.	3	30

11	QL	6.5.2	Internal Quality Assurance Cell (The institution reviews its teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals through IQAC set up as per norms	**10**	IQAC deployed standard structure and methodologies for the review of teaching learning process and learning outcomes at periodic intervals. Regarding the review of teaching learning process, the IQAC has setup the following practices at our institution. **(i)Internal Academic Audit:** In a semester, every department is audited thrice in every semester by two auditors from other departments nominated by the Chairperson of IQAC (Principal). The auditors will verify the following parameters and submit the compliance to IQAC / Dean of Academics. **(ii) Pedagogy Techniques for Effective Teaching Learning:** • Faculty Performance Index (FPI) is calculated on 10-point scale. This FPI is measured after completion of every semester with 60% weightage from student feedback analysis, 25% weightage from pass percentage in the course taught, and 15% weightage for all contributions at departmental, institution level and R&D. • Online student feedback for faculty is being practiced in all departments. Feedback is collected in middle and the end of semester to assess teaching proficiency of the faculty.	3	30
12	Qn	6.5.3	Quality assurance initiatives of the institution include: 1. Regular meeting of Internal Quality Assurance Cell (IQAC); quality improvement initiatives identified and implemented 2. Academic and Administrative Audit (AAA) and follow-up action taken 3.Collaborative quality initiatives with other institution(s) 4. Participation in NIRF and other recognized rankings 5.Any other quality audit recognized by state, national or international agencies	**10**	A. Any 4 or more of the above	4	40
			Total	**100**			**349**
			CGPA-VI				**3.49**

CRITERION 7		Governance, Leadership and Management				100	

S.No	Metric Type	Metric No	Metric	Weightage	HEI Input	Grade Point	Weighted Grade Point
1	QL	7.1.1	Institution has initiated the Gender Audit and measures for the promotion of gender equity during the A.Y	5	• The institution aims to groom students to be self-reliant, respectful for cultural diversity, aware of their social and civic responsibilities and gender sensitive. These have the highest regard for women safety, security, and environmental consciousness. • A secure parking lot nearer to Academic Blocks is earmarked for girl students. • Separate Canteen space for girl students. • Both general and individualised counselling has been accorded to the students. Health awareness programs for girl students are arranged in Hostels and during the induction program. Counselling programs are arranged for women safety by Saheli-The Girls Club which is associated with ICC aims to empower women and girl students. It plans for diversified social and economic activities involving women. • Every Department has an exclusive waiting hall for girls with wash room facilities. There are 14 common rooms available on the campus.	3	15

S.No	Metric Type	Metric No	Metric	Weightage	HEI Input	Grade Point	Weighted Grade Point
2	Qn	7.1.2	The Institution has facilities for alternate sources of energy and energy conservation measures 1. Solar energy 2. Biogas plant 3. Wheeling to the Grid 4. Sensor-based energy conservation 5. Use of LED bulbs/ power efficient equipment 6. Wind mill or any other clean green energy	6	A. Any 4 or more of the above	4	24
3	QL	7.1.3	Describe the facilities in the Institution for the management of degradable and non-degradable waste	6	The institution has Prakruthi-The Environmental Club to promote awareness on environmental issues. **Solid waste management:** • Metal and wooden waste is stored and given to authorized scrap agents. • The biological reusable waste is processed as organic manure for the plants in campus, while other solid waste generated in the campus is dumped in the community bin of Mylavaram municipality. **Liquid Waste Management:** • Proper drainage system is found in all buildings of the campus • Sprinklers are used to develop the lawns/greenery in the campus. **E-Waste Management:** • The e-waste generated from hardware is being disposed to third party recyclers. • The low configured computers are donated to nearby schools and institutions. **Waste Recycling System:** • Wet waste from the canteen and hostels is collected and converted into compost.	3	18

					• The compost plant for solid waste management was placed in the campus. • A Plastic shredder is used to splinter the plastic into tiny pieces that makes waste management smoother. **Hazardous chemicals management:** • Department of Chemistry fixes the concentrations of solutions to very low levels. • Necessary precautions are taken to store chemicals safely in a separate room.		
4	Qn	7.1.4	Water conservation facilities available in the Institution: 1. Rain water harvesting 2. Borewell /Open well recharge 3. Construction of tanks and bunds 4. Waste water recycling 5. Maintenance of water bodies and distribution system in the campus	5	A. Any 4 or more of the above	4	20
5	QL	7.1.5	Green campus initiatives include	4	1.Restricted entry of automobiles 2.Use of bicycles/ Battery-powered vehicles 3.Pedestrian-friendly pathways 4.Ban on use of plastic 5.Landscaping	3	12
6	Qn	7.1.6	7.1.6.1.The institutional environment and energy initiatives are confirmed through the following 1. Green audit / Environmental audit 2. Energy audit 3.Clean and green campus recognitions/awards 4. Beyond the campus environmental promotion and sustainability activities	5	A. All of the above	4	20
7	QL	7.1.7	The Institution has Differently-abled (Divyangjan) friendly, barrier free environment	5	• Ramps/lifts for easy access to classrooms and centres • Disabled-friendly washrooms Signage including tactile path lights, display boards and signposts Assistive technology	4	20

8	QL	7.1.8	Describe the Institutional efforts/initiatives in providing an inclusive environment i.e., tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and such other diversities	5	- Kruthi – The Fine Arts and Cultural Club has been established to provide a platform for the students to bring out hidden talents. - LBRCE is undertaking various initiatives such as conducting the birth anniversary of eminent personalities as well as National Festivals. - NSS, NCC and Club activities provide an inclusive environment by bringing students and teachers with diverse backgrounds. - Yoga classes are conducted for people in adopted village create awareness on health.	3	15
9	QL	7.1.9	Sensitization of students and employees of the Institution to the constitutional obligations: values, rights, duties and responsibilities of citizens	4	- The institution designed the curriculum with mandatory courses like "Professional ethics and human values", "Constitution of India" as a small step to inculcate constitutional obligations among the students. - Guest lectures are regularly organized by departments to deliver lectures by prominent people on ethics, values, duties, and responsibilities. - Topics on Ethical Values, rights, duties, and responsibilities are included in the Elocution activities and debates as part of department association activities. - Every year Republic Day is celebrated by organizing activities highlighting the importance of the Indian Constitution. Similarly, constitution day and Independence Day are also celebrated every year.	3	12
10	Qn	7.1.10	The Institution has a prescribed code of conduct for students, teachers, administrators and other staff and conducts periodic programmes in this regard. 1. The institutional Code of Conduct principles are displayed on the website 2. There is a committee to monitor adherence to the institutional Code of Conduct principles	5	A. All of the above	4	20

			3. Institution organizes professional ethics programmes for students, teachers, administrators and other staff 4. Annual awareness programmes on Code of Conduct are organized Options:			
11	QL	7.2.1	Describe two best practices successfully implemented by the Institution as per NAAC format provided in the Manual.	30	**Best Practice – I** Effective Implementation of Outcome Based Education (OBE) in Teaching-Learning Process **Best Practice – II** Ensuring holistic development of students	3	90
12	QL	7.3.1	Portray the performance of the Institution in one area distinctive to its priority and thrust	20	**"Giving Back to the Society and Environment"** The major thrust in all these activities is to improve the rural society in and around Mylavaram. Providing technical education of good standards to the young students at affordable level specifically happens to be one such important dimension. Not only providing technical education but also many other dimensions are taken into consideration during the progress of LBRCE. Through these following activities some dimensions are taken care. • Employability enhancement programs • Fee concession to economically weaker students • Financial support to incubate innovative ideas • Generous rural development activities • Adoption of nearby village	3	60
Total				**100**			**326**
CGPA-VII							**3.26**

	Criteria and Key Indicators	Weightage	Weighted Grade Point
Criterion 1:	Curricular Aspects	150	565
Criterion 2:	Teaching-learning and Evaluation	300	938.5
Criterion 3:	Research, Innovations and Extension	150	473
Criterion 4:	Infrastructure and Learning Resources	100	357
Criterion 5:	Student Support and Progression	100	339
Criterion 6:	Governance, Leadership and Management	100	349
Criterion 7:	Institutional Values and Best Practices	100	326
	Total	**1000**	**3347.5**

Suggestions for improvement:

- Efforts may be put in to motivate the faculty to apply research projects for funding from Govt./external agencies.
- Efforts may be put in to improve intake quality
- Interactions with alumni shall further be increased. Alumni base needs to increased.
- Efforts may be put in to improve success index and placements

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