

DETAILED PROJECT REPORT

KONERU LAKSHMAIAH EDUCATION FOUNDATION (KLEF)

VIJAYAWADA

11.1 Preamble

This gives a clear picture related to the existing industrial scenario and the education facilities available in the Andhra Pradesh State for offering Engineering and Management programs with different intake capacities by Koneru Lakshmaiah Education Foundation (KLEF) Deemed to be University Campus at Vijayawada.

11.1.a Introduction

The Andhra Pradesh State is one of the fastest growing States in the country especially the capital city of the State, i. e. Amaravati which is fast growing and is known as Education hub, a prospective place for research & industry. The capital city is connected globally. The KLEF Deemed to be University is located very near to the capital city and is known for its research culture and Excellency in offering Engineering and management education for the past 37 years.

11.1.b Background of the consultant

KLEF has not engaged any consultant for the submission of DPR.

11.1.c Technical Education & Industrial Scenario

Andhra Pradesh has managed to literally double its engineering base in ten years and has pulled ahead of traditionally more prosperous and more industrialized states such as Gujarat and Maharashtra. It is the significantly higher concentration of science and engineering graduates in Southern India that is attracting the world's leading technological companies to set up software developments centres in Bengaluru, Chennai and Hyderabad. Presently there are 328 Engineering colleges offering 1,72,476 Under Graduate seats in the state of Andhra Pradesh.

After the State is separated from the combined Andhra Pradesh it is focusing on the concentration of industries in and around Amaravati, even skill development agencies and incubating institutions are being established in and around Amaravati only. The State Government has been encouraging quality education in general and technical education in particular by insisting on standards/norms as per the norms of statutory organizations. Every year more than four Lakhs of Intermediate and its equivalent qualified students are coming out.

A large number of students from AP State are migrating to join in reputed institutions like IITs, NIITs and other Universities. Hence there is a dearth for the reputed institutions which offer quality education in Engineering and Management.

After analysing all these facts, Koneru Lakshmaiah Education Foundation (KLEF) with 37 years of pioneering experience is proposing approval for various Engineering and Management courses to operate on par with top 10 global universities.

11.2. The Promoting body

This part gives a detailed insight into the details of the promoting body.

11.2.a Introduction to its Genesis Including its Registration Status

Inspired by the need of quality and disciplined education the promoters started the first educational institution KONERU LAKSHMAIAH COLLEGE OF ENGINEERING in the year 1980 at Green Fields, Vaddeswaram, Guntur District, Andhra Pradesh. The society is non profit organization to the development of education at all levels. It was registered under Andhra Pradesh Societies Registration ACT XXI of 1860 with certificate of Registration on 19/07/1996 bearing registration number 270 of 1996 issued by Register of Societies, Vijayawada.

11.2.b Details of its Promoters Including Their Background

The promoting body comprises the following Academicians, Industrialists and Businessmen.

S. No.	Name of Promoter	Designation
1	Er. Koneru Satyanarayana	President
2	Mr. Edupuganti Buchi Babu	Vice-President
3	Er. Koneru Lakshmana Havish	Secretary
4	Smt. Koneru Siva Kanchana Latha	Jt. Secretary
5	Sri Kalagara Naga Lingeswara Rao	Treasurer
6	Sri Yarlaagadda Lakshmana Rao	Member
7	Dr. Boddapati Chidambareswara Rao	Member
8	Er. Koneru Raja Harin	Member
9	Sri Kanuru Koteswara Rao	Member

The Koneru Lakshmaiah Charities was established as a trust in the year 1980 and started K L College of Engineering in the Academic year, 1980-81.

The Trust was converted into a Society by the name Koneru Lakshmaiah Education Foundation (KLEF) in the year 1996. The K L College of Engineering has attained autonomous status in the year 2006 and in February 2009, the Koneru Lakshmaiah Education Foundation Society was recognized as Deemed to be University.

Built within a rural setting of lush green fields, the institute is a virtual paradise of pristine nature and idyllic beauty. The campus has been aptly named "Green Fields" and the splendid avenue of trees and gardens bear testimony to the importance of ecology and environment. The campus ambience is most befitting for scholastic pursuits.

The Deemed to be University is located on the banks of river Krishna near Vijayawada City in the state of Andhra Pradesh. The city has been historically a cultural, political and educational centre. It is well connected by National Highway and Rail with Chennai (440 km), Hyderabad (275 km), Vizag (385 km) and is a central junction for trains running from North to South India. Daily flights operate from Delhi, Mumbai, Chennai, Bengaluru and Hyderabad.

11.2.c Activities of the Promoting Body including a listing of major educational promotion activities undertaken by it in the past

The Promoting body has been in the field of Under-Graduate and Post-Graduate educational activities since 1980. The Koneru Lakshmaiah Charities was established as a trust in the year 1980 and started K L College of Engineering in the Academic year, 1980-81. The trust was converted into a Society by the name Koneru Lakshmaiah Education Foundation (KLEF) in the year 1996. The K L College of Engineering has attained autonomous status in the year 2006 and in February 2009, the Koneru Lakshmaiah Education Foundation Society was recognized as Deemed to be University.

11.2.d Mission of Koneru Lakshmaiah Education Foundation (KLEF)

To impart quality higher education and to undertake research and extension with emphasis on application and innovation that cater to the emerging societal needs through all-round development of students of all sections enabling them to be globally competitive and socially responsible citizens with intrinsic values.

11.2.e Vision of KLEF (Promoting body)

To be a globally renowned University.

11.3 Objectives and Scope of the Proposed Institution

11.3.a Objectives of the Institution

The objectives of the Institution are to provide:

1. Quality Education
2. Equip with modern infrastructure and involve the students in the same
3. Good labs and library
4. Placement cell to assist and assure jobs
5. Counselling to benefit, co-ordinate and bring harmony on the campus.

11.3.b General and Technical Education Scenario of the State

Andhra Pradesh is a fast growing State in all aspects. Andhra Pradesh is acquiring importance both at national and international level with so many incoming international projects across the State. As the Engineering, Management, Architecture, Pharmacy and Fine Arts graduates are going to contribute maximum to the growth of a region or a country, the need for their requirement can be met only by establishing and offering quality education in this areas is very crucial.

11.3.c Status at Entry Level

Andhra Pradesh is a place where at present NRIs are investing their money in many industries as the development in the state is very fast. In general, AP is very much in advance educationally. Lot of activity is concentrated in new capital Amaravati where all the industries are taking their shapes.

Minimum qualification is +2 and its equivalent. The Deemed to be University has been using well-drafted and publicized admission procedures and the same are circulated to all the stakeholders in different channels, which include print, media, internet etc., and there by achieving complete transparency in the admission process. Gender balancing is achieved by implementing 33% reservation for women. The national policy related to reservation is considered to determine the composition of the students who are admitted into different programs. Adopted reservation policy ensures accessibility to the educational programs offered by the Deemed to be University to all sections of the people.

11.3.d Status of the Technical Manpower

The Deemed to be University follows UGC norms for recruiting the manpower at all levels and for all categories.

11.3.e Industrial Scenario of the State

A liberal dose of incentives, offering land and ease of doing business are some of the highlights of the 5-year industry policy (2015-20) of the state of Andhra Pradesh.

Besides sectoral policies for textiles, biotechnology and automobiles were also released for specific focus and orientation of the industrial activity in the state. It was decided to create one million acres of land bank for allotment to industries. However, instead of outright sale to investors and promoters, the land would be given on a 99-year lease to them. New projects with an investment of Rs. 500 Crore or the ones which create direct employment to 2,000 people would be accorded mega industry status and will be considered for special package of incentives, the government has clarified. The core thrust of industrial policy also includes a mega plan for 14 new ports, three international airports, separate economic zone for Japanese investors, exclusive automobile cum manufacturing zones, new railway lines and highways. New high-tech capital Amaravati between Guntur and Vijayawada city on the banks of river Krishna will be constructed in a phased manner for which the Singapore government is drafting a master plan.

Budget 2015-16 has set aside Rs. 3,168 Crore for construction activity in Amaravati. In addition to this, Andhra Pradesh has 236 Industrial Parks. The districts of Visakhapatnam, Krishna, East Godavari, West Godavari, Guntur, Nellore and Chittoor are industrially well developed. Visakhapatnam district has 38 Industrial parks, Srikakulam district under Visakhapatnam district has 8 parks and Vizianagaram district has 4 parks. Vizag special Zone has 9 parks which include APSEZ, JN Pharma city, BARC Lands and Parwada Phase II. The development of three Industrial Corridors – Visakhapatnam-Chennai Industrial Corridor (VCIC), Chennai – Bengaluru Industrial Corridor (CHIC) and Bengaluru-Hyderabad Industrial Corridor are bound to boost industrial and infrastructure development in the state, as all districts are covered by either one of the Industrial Corridors. Govt of AP has planned three industrial hubs in the Industrial Corridors – Visakhapatnam industrial hub between Bhogapuram and Kakinada, which envisages development of three airports and three seaports.

11.3.f Scope of the Institution vis-à-vis the Industrial Scenario and Educational Facilities already available in the State

The Deemed to be University has broad scope of techniques to meet the needs of industry. The areas dealt in this university specifically dominate towards software and engineering industry. We propose the courses on Electrical, Computer Science, Electronics, Civil, Mechanical, Management etc. both at UG and PG level. The university is thriving to promote quality education to the students, by which they can qualify in the competitive industrial scenario, such as techno-scientific organizations, BPOs, Multinational Companies.

The Institute has sufficient space for classrooms, Laboratories, Library to start New Courses in B.Tech. and M. Tech. Programmes. With so many Industries setting up their centres nearby Amaravati, it is imperative that colleges take advantage of this development and increase the intake for absorption in the industry. It will be easy to set up linkages with Industry and the students will be able to do live Projects in Industry. Further, interaction will be possible when Industry personnel visit the institute for invited talks and Guest Lectures. Campus recruitment will also be made possible with establishing proper linkages with the industry in and around the Capital and also from other parts of the state.

11.4 Academic Programs

The Campus proposes to seek formal approval for all the programs offered by it in the disciplines of Engineering and Management, Architecture, Pharmacy & Fine Arts.

11.4.a Basic Academic Philosophy of the Institution

The basic academic philosophy is to offer quality education covering innovation and creativity.

11.4.b Types of Programs

Academic and research programs covering Engineering, Management, Architecture, Pharmacy and Fine Arts with a global focus.

11.4.c Identified Programs

- **Engineering and Technology UG Courses:**

1. Computer Science & Engineering
2. Electronics & Computer Engineering
3. Electronics & Communication Engineering
4. Electrical & Electronics Engineering
5. Mechanical Engineering
6. Civil Engineering
7. Bio-Technology

- **Engineering and Technology PG Courses:**

1. Bio-Technology
2. Structural Engineering
3. Construction Technology & Management
4. Computer Science & Engineering
5. Machine Learning & Computing
6. Computer Science & Engineering (Digital Forensic & Cyber Security)

7. VLSI
8. Radar & Communications
9. Atmospheric Science
10. Embedded Systems
11. Power Electronics & Drives
12. Power Systems
13. Thermal Engineering
14. Robotics & Mechatronics
15. Machine Design
16. Geo Informatics

- **Bachelor of Architecture**
- **Bachelor of Pharmacy**
- **Bachelor of Fine Arts**
- **Master of Business Administration**

11.4.d Phase-Wise Introduction of Programmes and Intake

The KLEF deemed to be University has been offering the above identified programs since a long time. This application is meant for seeking formal approval for organising the same as per the latest guidelines issued by AICTE.

11.4.e Target Date for Start of Academic Programmes

The programs are already in vogue and the KLEF is seeking once again the approval for the above programs with proposed intake as per the new guidelines of AICTE.

11.4.f Central Computing Facility

The Deemed to be University will provide the following computing facilities for the students.

- a) Several Computing Laboratories have been established with 2602 Networked Computers. It has software for skill development in C, COBOL, C++, Java and Web Technologies & Visual Programming such as VC++.
- b) DBMS and applications lab with networked systems and Software is Oracle 8i, D2K.
- c) Software Engineering laboratory with Networked Computers and associated software and CASE tools (Rational Rose) will be provided.
- d) OS and Networking laboratory with Windows and Linux system.
- e) Centralized Internet facility is given to all the students of the University.

11.4.g Central Library

The library has 1,68,043 volumes of books with 37,418 titles and stands as backbone of the University. It is also upgraded with Internet facility for the students to explore new horizons during their stay in the institute. Apart from this, a Digital library with 134 systems is also available in the library for the benefit of the students, with e-books and e-Journals as per AICTE Norms.

11.4.h Central Workshop

The institution provides central workshop for Engineering disciplines so as to have practical ability for the theoretical perceptions.

11.4.i Central Instrumentation Facility

The institution has an instrumentation facility to help consistently the students of different branches existing in the college and also for newly identified programmes.

11.4.j Affiliating Body

Not applicable since ours is Deemed to be University.

11.4.k Scholarships

Support is available to identified merit students in the form of Fee remission, Fee concession, Scholarship, Fellowship, etc.

11.4.l Preventive Measures of Ragging

Anti-Ragging committee is constituted with Vice Chancellor as Chairman along with senior faculty members. The students are also made part of the anti-ragging committee. The Students along with parents at the time of admission have to submit an affidavit on non-involvement in ragging activities.

Notices are displayed on campus at different places informing the punitive actions on those who involve in or supporting ragging on campus in any form. Meeting with senior police officers have been arranged frequently to create awareness about ragging menace. KLEF is known for its 100% Ragging-free campus.

11.4.m Welfare Measures for Faculty, Staffs and Students

KLEF Deemed to be University recognizes the contribution of the employees towards the development and progress of the organization. The University offers/provides lucrative welfare schemes to all the employees to ensure and increase their work efficiency. The following welfare schemes are prevalent in the University.

1) Provident Fund:

KLEF is continuing the Employee Provident Fund to the members of both teaching and non-teaching that was initiated since the inception.

2) ESI Facility:

The self-financing social security and health insurance scheme, ESI facility is provided by the University from September 2016 to the employees of KLEF.

3) Gratuity:

The University provides gratuity (group gratuity) facility on the retirement benefit scheme to non-teaching staff.

4) Group Saving Linked Insurance:

The group insurance scheme offered by KLEF meets a variety of needs of the employees.

5) Medical Group Insurance:

The medical and group insurance is one of the welfare measures taken up by KLEF for the benefit of faculty and staff members. It provides cashless medical treatment in case of emergency of illness in corporate hospitals.

6) Reimbursement of Medical Expenses:

KLEF provides the teaching and non-teaching members with the facility to avail medical expenses reimbursement in case of accidents or diseases involving huge expenditure besides sanction of paid leave.

7) Paid Leave:

Under this scheme, the University sanctions paid leave in case of marriage, maternity, bereavement in the employee's family, or health related issues etc.

8) Fee Waiver:

KLEF gives utmost importance to education. To promote this the University provides education fee waiver for self education as well as education of children of faculty and staff education in KLEF.

9) Fee Reimbursement:

In addition to the education fee reimbursement for self education and that of education of children of faculty and staff, the University reimbursement of the fee for education at other institutes.

10) Transportation Fee Concession:

To ensure comfortable travel of all the teaching and non-teaching staff, KLEF provides transportation fee concession.

11) Subsidized Accommodation:

KLEF provides subsidized accommodation facility for faculty and non teaching staff in the University Hostels.

12) Loan Facility:

All the employees of the University are provided loan facility related to a) Purchase of laptop b) Personal loan facility c) Cash advancement in case of construction of house etc.

Besides the above mentioned schemes there are other welfare schemes such as festival cash advances, travel and accommodation allowances for knowledge enhancement etc.

For Students:

Fee waiver and fee concession for meritorious and socially weaker section of students is given. There is a separate reservation policy for Girl students and physically challenged students for admitting them in to all programs. Special coaching and training programs will be arranged for weaker sections.

11.5. In case of PGDM Programmes, comprehensive details in respect of admission procedure, programme structure, curriculum outline and contents, evaluation system etc. should necessarily be submitted. PGDM Programmes shall be regulated as per Appendix 9 of Approval Process Handbook 2018-19.

Not applicable

11.6. Salient features of Academic Programmes

The University is offering the engineering programs in the name of College of Engineering. and Management courses through its school of management.

11.6.a. Classification of Academic Divisions

Various Academic Departments, which offer different UG & PG the courses are as follows:

- A) Dept of Computer Science & Engineering
- B) Dept of Electronics & Communications Engineering
- C) Dept of Electronics & Computers Engineering
- D) Dept of Civil Engineering
- E) Dept of Mechanical Engineering

- F) Dept of Electrical & Electronics Engineering
- G) Dept of Bio-Technology
- H) Dept of Management
- J) Dept of Pharmacy
- K) Dept of Architecture
- L) Dept of Fine Arts.

11.6.b. Details of each Academic Department/ Centre, such as:

11.6.b.i. Academic Objectives:

The common academic objective of the various departments are to become a leading centre of excellence in the respective fields of KLEF (Deemed to be University) offering Graduate, Post Graduate and Research Programs and to offer Industrial Consultancy. The main aspects of activities towards achieving these objectives are:

- a. To impart theoretical and practical knowledge to the students as per the prescribed syllabus.
- b. Provide students with additional skills as per the current requirements of industry by organizing adjunct courses.
- c. To provide avenues for interaction by the students with luminaries from industry/academia through guest lectures on contemporary topics.
- d. To facilitate and guide students in undertaking live projects with the industry.
- e. Maintain liaison with other academic institutions and industry.
- f. Constantly keep the faculty updated by organizing in house Faculty Development Programmes and sponsoring the faculty to participate in national/international seminars.

11.6.b.ii. Areas of Focus

- a. Promotion of in-house research and development capabilities.
- b. To achieve and maintain academic excellence.
- c. Constant improvement in student performance.
- d. Facilitating acquisition of higher qualifications by the faculty.

11.6.b.iii. Academic Programs

The various programmes currently offered by the institution are; B. Tech. (Bio-Technology, CSE, ECE, ECM, EEE, ME & Civil Engg), M. Tech. (various programs as listed below), B. Arch., B. Pharm., BFA & MBA.

S. No.	Department	Intake for 2018-19
I. Engineering & Technology – UG Courses		
1	Bio-Technology	120
2	Civil Engineering	120
3	Computer Science & Engineering	1500
4	Electronics & Communication Engineering	960
5	Electronics And Computer Engineering	120
6	Electrical And Electronics Engineering	60
7	Mechanical Engineering	300
	Sub Total:	3180
II. Engineering & Technology – PG Courses		
1	Bio-Technology	18
2	Structural Engineering	60
3	Construction Technology And Management	30
4	Computer Science & Engineering	18
5	Machine Learning & Computing	18
6	Computer Science & Engineering (Digital Forensic & Cyber Security)	18
7	VLSI	30
8	Radar & Communications	24
9	Atmospheric Science	18
10	Embedded Systems	18
11	Power Electronics & Drives	18

S. No.	Department	Intake for 2018-19
12	Power Systems	18
13	Thermal Engineering	30
14	Robotics & Mechatronics	18
15	Machine Design	18
16	Geo Informatics	18
	Sub Total:	372
III.	Bachelor of Architecture	40
IV.	Bachelor of Fine Arts	60
V.	Bachelor of Pharmacy	60
VI.	Master in Business Administration	300
	Grand Total (3180+ 372+40+60+60+300)	4012

11.6.b.iv. Faculty Requirement & Phase-wise Recruitment

As KLEF (Deemed to be University) has been in existence since 1980 albeit under the name of Koneru Lakshmaiah College of Engineering during 1980–2009, all necessary faculty pertaining to all the academic departments in different cadres such as Professor, Associate Professor & Assistant Professor have been recruited depending on the requirement and are in service.

Following table summarizes the presently working faculty pertaining to all the academic departments in different cadres such as Professor, Associate Professor & Assistant Professor.

S. No.	Department	No. of Faculty			
		Professor	Assoc. Professor	Asst Professor	Total
1	Freshman Engg Dept (English, Maths, Physics & Chemistry)	14	43	82	139
2	Bio-Technology	5	5	14	24
3	Civil Engg.	6	9	37	52

S. No.	Department	No. of Faculty			
		Professor	Assoc. Professor	Asst Professor	Total
4	Computer Science & Engineering	40	41	170	251
5	Electronics & Communication Engineering	26	32	140	198
6	Electronics & Computers Engineering	5	7	20	32
7	Electrical & Electronics Engg	7	8	31	46
8	Mechanical Engg.	21	17	93	131
9	B.Arch.	2	4	6	12
10	B. Pharmacy	1	4	9	14
11	BFA	0	1	9	10
12	MBA	5	11	16	32
13	Physical Education	0	0	2	2
	Total :	132	182	629	943

As could be seen from the above table, there are 132 Professors, 182 Associate Professors and 629 Assistant Professors totalling to 943 permanent faculty, who are already in service.

11.6.b.v. Requirement of Laboratories, space and Equipment(cost)

As KLEF (Deemed to be University) has been in existence since 1980 albeit under the name of Koneru Lakshmaiah College of Engineering during 1980–2009, all necessary laboratories pertaining to all the academic departments have already been established and are being used. Following table summarizes the details of the existing laboratories.

S. No.	Department	Lab Name	Investment till date (Rs.)
1	Biotechnology	Animal Cell Culture Lab	4000000
2		Biochemical Reaction Engineering Lab	1500000

S. No.	Department	Lab Name	Investment till date (Rs.)
3		Fermentation Technology Lab	1400000
4		Animal Biotechnology Lab	1532618
5		Biochemistry & Bat lab	218000
6		Bioinformatics Lab	788000
7		Bioprocess Lab	1500000
8		Chemical Engineering Lab	105300
9		Engineering Chemistry Lab	4352358
10		Genetic Engineering Lab	775500
11		Immunology Lab	320000
12		Microbiology Lab	349225
13		Plant Tissue Culture Lab	430000
14		Down Stream Processing Lab	545000
15	Civil Engg	Geotechnical	1575742
16		Transportation	1007221
17		Surveying	2077949
18		Strength of Materials	587983
19		Engineering Geology	179236
20		Concrete Technology	841748
21		Concrete Technology	4316767
22		CAD Lab-1	3119920
23		CAD Lab-2	1420000
24		Environmental Engineering Lab	970610
25		Engineering Geology	28000
26	CSE	Admin Block Lab [30]	605760

S. No.	Department	Lab Name	Investment till date (Rs.)
27		Adobe & CISCO Lab [234]	4724928
28		Computer Lab	7100250
29		ESF Lab [63]	1725000
30		Fourth Floor Lab [180]	3780000
31		IBM & MIC Lab [228]	7707996
32		PEGA Lab [108]	2592000
33		English Lab	870824
34	ECE	AECD Lab	1212737
35		CMOS Lab	317848
36		Communication Theory - 5 Lab	734436
37		Communication Theory - 1 Lab	3320331
38		Communication Theory - 2 Lab	3320331
39		Communication Theory - 3 Lab	1468872
40		Communication Theory - 4 Lab	1468872
41		Computer Organization & Architecture Lab 1	2382900
42		Computer Organization & Architecture Lab 2	2382900
43		Design With PLD's & FPGA's	317847
44		Digital Image Processing Lab	2561351
45		Digital System Design Lab 2	188900
46		Digital System Design Lab 3	188900
47		Discrete Mathematics Lab	2444000
48		DSP Processors & Architecture	2561351
49		Fields & Networks Lab 1	2382900
50		Fields & Networks Lab 2	2382900

S. No.	Department	Lab Name	Investment till date (Rs.)
51		Measurements	1861806
52		Microprocessor & Microcontrollers Lab	1384560
53		Signal Analysis Lab	2328501
54		Signal Processing Lab	1384560
55		Antenna Measurements Lab	546256
56		HDL & PLD Architecture	384447
57		Micro Wave & Millimetric Wave Circuits Lab	734436
58		Micro Wave Antennas Lab	136000
59	ECM	Computer Centre	2980000
60		Embedded Systems Lab	2801920
61		IOT Lab	2097060
62	EEE	Circuit Theory Lab	611795
63		Control Systems Lab	1042626
64		Electrical Drives Lab	1000000
65		Electrical Machines Lab	2200914
66		Electrical Simulation Lab	2305360
67		Power Electronics Lab	1300000
68		Power Systems Lab	702286
69	Mech. Engg	CAD Lab	7240266
70		CFD	1210650
71		Engineering Materials Lab	2198414
72		Engineering Mechanics Laboratory	65566
73		FM & HM Lab	2226418
74		Heat Transfer	665267

S. No.	Department	Lab Name	Investment till date (Rs.)
75		I C Engines	1343824
76		Machine Tool And Metrology Lab	1944022
77		Manufacturing Technology Lab	4084221
78		Mechatronics & FMS Lab	6674231
79		Metallurgy Lab	2361908
80		Modelling And Analysis Lab	1027500
81		NISA Lab	1951750
82		SAP Lab	7775000
83		System Dynamics & Condition Monitoring Lab	36785132
84		Vapour Power Systems	116000
85		Workshop Practice	612000
86	B. Arch.	Doshi Computer Lab	2975995
87		Model Making Workshop	50600
88	Fine Arts	New Computer Lab	1166666
89		Photography	344628
90		Television Production	1436442
91	B. Pharmacy	Anatomy Physiology & Health Education Lab	541309
92		Pharma Chemistry & Analysis Lab	763059
93		Pharmaceutics Lab	763059
94		Pharmacognosy Lab	251525
Total Investment towards Laboratory Equipment, Rs.			18,94,63,446

11.6.b.vi. Requirement of Other Space, Like Class Rooms, Faculty Rooms Departmental Office.

KLEF (Deemed to be University) functioned as an Engineering College during 1980 (Year of establishment) till 2009. KLEF became a Deemed to be University during 2009. Hence all the infrastructure facilities pertaining to instructional area, administrative area, amenities area & circulation areas required for the courses were established in the last 37+ years. As of today KLEF has created the following areas:

S. No.	Type of Area	Area (Sq.m.)
Program (s): Engineering & Technology, Management, Architecture, Pharmacy and Fine Arts		
1	Instructional Area	42045
2	Instructional Area - Common Facilities	8296
3	Administrative Area	9765
4	Amenities Area	43312
5	Circulation Area	70220
Total Area (Sq.m.):		1,73,638

As could be seen from the above figures, KLEF has already created 1,73,638 Sq.m. area for taking care of various Academic, administrative, amenities and other area requirements.

11.7. Quality and Human Resource Development

11.7.a. Academic Values

The values to be nurtured in academics are excellence in teaching-learning process, with an emphasis on providing the requisite stimuli to the student for original thinking and acquiring the ability to correlate the topics studied to real life whenever possible. Honesty, fairness in evaluation and reward for merit would be some of the other academic values.

11.7.b. Recruitment strategies for attracting and retention of faculty personnel for excellence, promotional avenues, career ladder

KLEF (Deemed to be University) has been recruiting faculty through nationwide advertisements followed by evaluation through committees constituted for the purpose. Efforts are also be made to establish professional contacts with academicians in premier institutions and their referrals are being actively considered. Every year recruitment will be made twice before starting the semester. Subject interviews will be conducted by the panel of experts. Personal interview will be taken to elicit the attitude, nature, character family background and psychology. Apart from that, class room demonstrators will be taken to judge the teaching skills, mannerism and motivation etc.

Recruited personnel would be encouraged to acquire higher educational qualifications and pursue doctoral, Post Doctoral research, as the case may be. Those who are academically active will be preferred in up-gradations and promotions.

11.7.c Policies for Teaching & Non-Teaching Staff Development

The policy can be summed up as:

- a) Encouraging staff to publish research papers.
- b) Encouraging staff to attend conferences, seminars and workshops.
- c) Encouraging staff to write books, publish monographs and manuals, as well as treatises on subjects of their choice.
- d) May also be sponsored for admission to higher degree courses to premier places of learning like I.I.Sc, I.I.T's., N.I.T's. etc.
- e) Non-Teaching faculty will be encouraged to improve educational qualifications and will be exposed to industry.
- f) Faculty will be sponsored for industrial exchange programs and specific quality improvement programs.
- g) Faculty will be encouraged to attend international events in which they are active authors of papers.

11.7.d. Permanent and Contract Service for Teaching, Non-Teaching and other Support Personnel

The policy of the institute is to only employ personnel on a permanent basis. However, depending on needs and specific short-term requirements if any, faculty may be employed on a contract basis for relatively short terms.

11.7.e. Total Quality Management

This is being done by encouraging faculty to contribute in their areas of interest. Faculty will be allowed to choose their premier area of activity and future developments will be linked to their contributions interest and perceptions. Goal setting, performance evaluation etc. will be done taking into account the specific strengths and characteristics of the individual staff members. All the staff members will be trained by arranging seminars by eminent professional to improve teaching skills and update their subject.

11.7.f Overall Teaching and Non Teaching Staff Requirements

The overall teaching and non-teaching staff is recruited as per the prescribed norms. At present the existing teaching and supporting staff is sufficient to cater to the present needs of the college. Additional faculty is recruited as and when necessary. It is a continuous process.

11.8. Linkages in Technical Education

11.8.a. Introduction:

The Philosophy of KLEF (Deemed to be University) is to create an ambience where faculty teach, research, practice and advise in order to fulfill the envisaged objectives so it is natural that this institution is already having links with industry, R & D organizations, in one hand and with other Academic institutions on the other. This has enabled KLEF to set high standards for teaching, Research & Consultancy.

11.8.b. Linkages with Industry:

The IRD caters the following activities to all the Departments of the University.

- Industry Participation in Curriculum Planning
- Continuing Education and Internship for Faculty
- Industrial Training for Students
- Industrial Visits and Tours for Students
- Projects Consultancy
- Collaborative Programmes with Industry
- Guest Lectures from Industry
- Extension Lectures
- Placement
- Student Counselling and Guidance
- Student Career Development
- Entrepreneurship Development Programme
- Coaching Programs
- Alumni Interaction

11.8.c. Linkages with the Community:

KLEF (Deemed to be University) believes in contributing to the society not only by developing proficient professionals but also contributing its best to under privileged, sections of the Society. To do this, KLEF (Deemed to be University) adopts different Localities around the institution for providing basic education and also provide a forum for school children to know about great personalities in the society by arranging symposium etc. on regular basis.

KLEF has a social Service wing which is used to channelizing the social service activities of the faculty, staff and the students. It has adopted 5 nearby villages and conducts activities like medical camps, literacy camps and educates the villagers regarding hygiene and health care, on a regular basis.

11.8.d. Linkages with other Technical Institutions in the region:

Few faculty of KLEF Deemed to be University is working in close association with premier institutions like, Acharya Nagarjuna University, Guntur, Hyderabad Central University, Jawaharlal Technological University Hyderabad as Guest faculty in different capacities which also help faculty members to keep themselves abreast with latest trends in research and allied areas and this crates long lasting effect on students learning experiences.

11.8.e. Linkages with institutions of excellence such as the IITs and IISc, Bangalore linkages abroad:

Faculty at KLEF Deemed to be University generally make it a point to attend Conferences conducted by premier colleges and professional bodies like IIMs, IITs, IISc, IIIT-Hyderabad almost on a regular basis.

Linkages Abroad:

University's collaborations with foreign universities to ensure following activities:

- Faculty exchange programme
- Student exchange programme
- Joint research
- Joint undergraduate & master's program

IUCEE (Indo-US Council for Engineering Education):

KLEF (Deemed to be University) has become a member of Indo-US Council for Engineering Education (IUCEE), a prestigious consortium approved by Government of India and Government of United States of America. As a part of consortium K L E F Deemed to be University will host one week/ two week long International workshops in the identified areas suggested by Deans or Heads of Departments concerned, for the benefit of faculty. IUCEE will depute various world renowned experts to teach few courses as per our requirements in our campus.

- K L E F Deemed to be University has organised 5 International Workshops for faculty development in association with IUCEE.
- 18 professors have taught 8 courses to students of K L E F Deemed to be University for two weeks.
- K L E F Deemed to be University has been taking the advantage of WEBINARs where in expert from abroad will deliver classes online.

Study Abroad Programs

- Two years in K L E F Deemed to be University & two years in foreign University
- 3 Years in K L E F Deemed to be University and 1 year in U-MASS
- One year in K L E F Deemed to be University & One year abroad for MBA students
- One & half year in K L E F Deemed to be University & One semester abroad for MBA
 - Internship abroad
 - Joint research
 - Co-Supervision for Ph. D Programs
 - Study tour abroad

11.8.f. Linkages with R & D Laboratories:

Some students of computer science will take up their projects at highly reputed research development organizations like IICT, NGRI, CCMB, DRDL, DRDO, which give them knowledge of various functional areas and emphasize need for applications of computer science in the field of various emerging frontiers Sciences.

11.9. Governance and Academic and Administrative Management

11.9.a. Philosophy of Governance

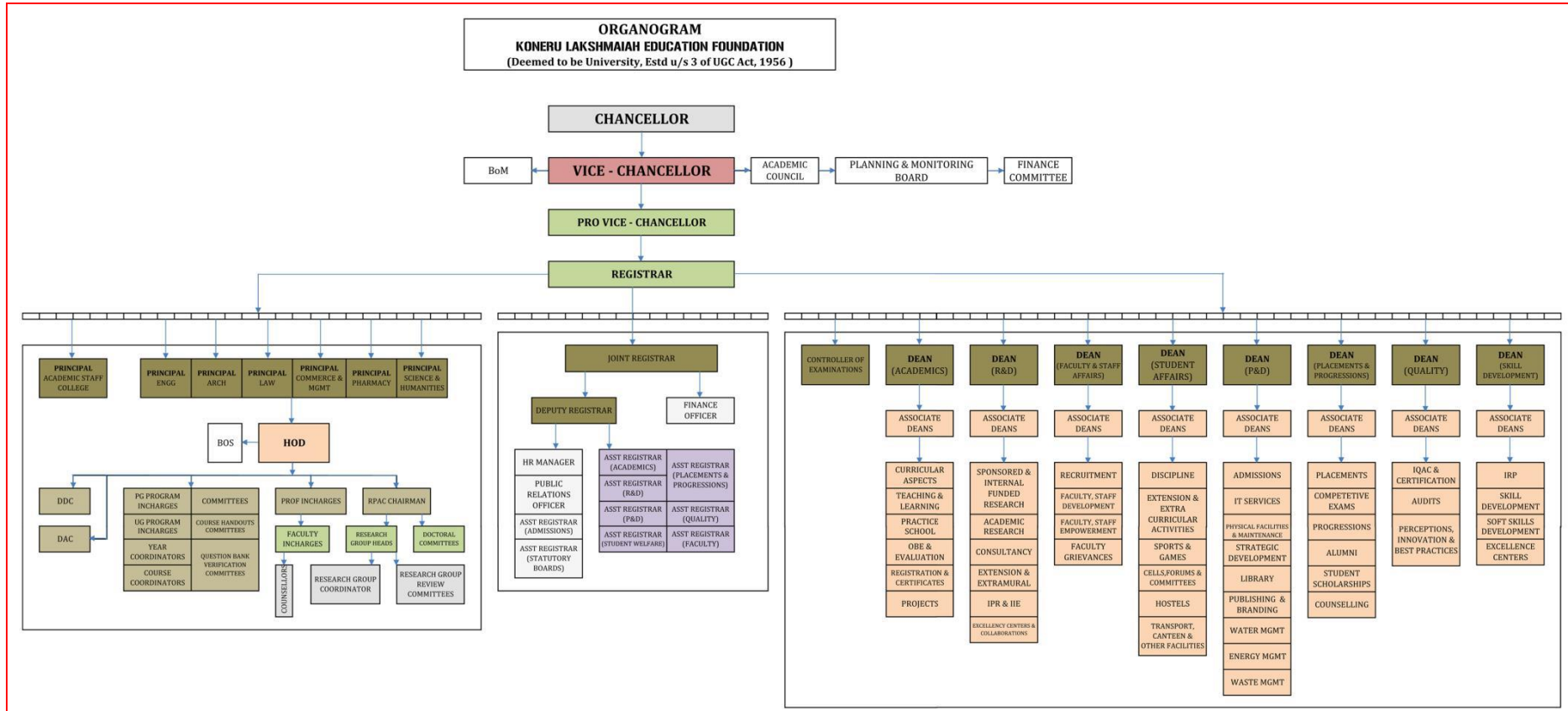
The philosophy of governance is to run the institution democratically at the best level of effectiveness using modern management techniques to achieve academic excellence.

11.9.b. Board of Governors

Board of Management (BOM) of K L University with the following members.

1	Chairperson (Vice-Chancellor)	Prof. L. S. S. Reddy
2	Member (Dean)	Dr A. Ananda Kumar, Dean (School of Engineering)
3	Member (Dean)	Dr. K. L. Narayana, Dean (R&D)
4	Member (Eminent Academician) (Chancellor's nominee)	Prof. P. Thrimurthy Retired Professor of Acharya Nagarjuna University, 20, Aamani, Kanchu Kota Street, Vijayawada, A. P. 520 008
5	Member (Eminent Academician) (Chancellor's nominee)	Dr. V. Balamohandas Former Vice-Chancellor of Acharya Nagarjuna University, Flat #608, M.V.V & M.K's Royal Gardens, D. No. 10-28-2/67, Facor Layout, Ramnagar, Visakhapatnam, A. P. 530 002
6	Member (Eminent Academician) (Chancellor's nominee)	Prof. V. Venkaiah Former Vice-Chancellor of Krishna University, Plat No.232, Kavuri Hills, Jubilee Hills Post, Hyderabad-500 033
7	Member (Central Government's nominee)	Dr. K. H. Kenchappa Former Member of Medical Council of India, #1903, 4 th , "A" Main, (2 nd Main, 21 st Cross) C-Block, Sahakara Nagar, BENGALURU-560 092
8	Member (Professor)	Dr. M. Sreedevi Professor, Dept of Computer Science & Engg
9	Member (Associate Professor)	Dr. M. Kishore Babu Associate Professor, Dept. of MBA
10	Member (Nominee of Sponsoring Society)	Sri Gorantla Punnaiah Chowdary, Chairman, Krishnaganga Spinning Mills Ltd., G.T. Road, Timmapuram-522233 Via Chilakaluripet, Guntur District, A.P.
11	Member (Nominee of Sponsoring Society)	Smt. K. Kanchana Latha D. No. 29-36-38, Museum Road, Governorpet, VIJAYAWADA. 520 002
12	Secretary (Registrar)	Prof. T. Umamaheswara Rao
13	Controller of Examinations	Permanent Invitee to BOM
14	Sri Koneru Raja Harin	Special Invitee

11.9.c. Organizational Structure and Chart for day-to-day Operations and Management



11.9.d. Role & Responsibility of Key Senior Position

- 1) Vice-Chancellor – will be the overall in-charge of all the academic and administration of the institute and plan for development and running of the institute.
- 2) Deans – They will hold independent charge of their departments concerned and plan the development of the department, procurement of equipment, furnishing of labs, designing and supervising session plans, overseeing student activities and general upkeep of the department.
- 3) HODs – will be engaged in guiding students and staff members in academic matters and would contribute a lot to research, development, publications, conducting and participating in seminars etc. They would also pro-actively advise on introduction of new courses and programs and engage in industrial consultancy.

11.9.e. Methods / Style of Administration / Management:

The governing body of the University will prepare the guide lines and methods to follow from time to time. The management will follow the time established method of rewards and punishments. Fairness will be observed in all administration and management. The style will be conducive to bring out the best in the students and faculty and to contribute to the overall healthy growth of all and to interact with the personnel at all levels for getting the feedback necessary for time-tuning the apparatus of management.

11.10. Conceptual Master Plan for Main Campus Development

11.10.a. The site:

K L E F (Deemed to be University) is situated in a spacious 21.25 acre campus on the banks of Buckingham Canal of river Krishna, eight kilometres from Vijayawada city. Built within a rural setting of lush green fields, the Institute is a virtual paradise of pristine nature and idyllic beauty. The campus has been aptly named “Green Fields” and the splendid avenue of trees and gardens bear testimony to importance of ecology and environment. The campus ambience is most befitting for scholastic pursuits. The Institute has a built up area of around 1,73,638 sq.m. (18,69,022 Sft) and has established over 94 laboratories.

11.10.b. Proposed land use pattern

In the last 37 years, depending on the academic, administrative and amenities requirements, the following buildings have been constructed and are being used:

- Civil Block (Civil & Mechanical)
- EEE Block (Architecture & Pharmacy)

- Computer Block (CSE, EEE)
- R&D Blocks (ECE, ECM)
- Library Block (Library & MBA)
- Administrative Block

11.10.c. Design concept

Modular building discipline-wise.

11.10.d. Infrastructural Facilities in the Campus

It includes Class Rooms, Tutorial Rooms, Laboratories, Drawing Hall, Principal Room, Staff Room, Work Shop, Library, Girls Room, Indoor Games, Canteen, and Toilets. A 250, 250, 125, 500 and 150 kVA Generators are available on the campus. Other facilities are that of drinking water.

11.10.e. External Services

The external services constitute Canteen, Transport facilities for Sports and appointment of a health consultant, etc.

11.10.f. Construction Systems and Materials

The building has been constructed with RCC roof using high-grade materials.

11.10.g. Landscape proposal

It is planned to have gardens, flowerbeds, flower yielding trees and water fountains to give scenic beauty to the campus.

11.11. Requirements of Staff, Space, Equipment and their Cost

11.11.a. Introduction

A consolidated report of estimate of phase-wise requirements pertaining to the staff, building, equipment and their costs along with strategies for the mobilization of funds required are presented.

11.11.b. Faculty Requirements

As KLEF (Deemed to be University) has been in existence since 1980 albeit under the name of Koneru Lakshmaiah College of Engineering during 1980-2009, all necessary faculty pertaining to all the academic departments in different cadres such as Professor, Associate Professor & Assistant Professor have been recruited depending on the requirement and are in service.

Presently there are 132 Professors, 182 Associate Professors and 629 Assistant Professors totalling to 943 permanent faculty, who are in service. Details are given under 11.6.b.iv.

11.11.c. Non-teaching Staff Requirements

The following Non-teaching staff (Technical as well as Administrative Staff) are already in service at KLEF.

Category	No. of Non-teaching staff already in service
Technical Staff	211
Administrative Staff	933
Total Non teaching staff	1144

11.11.d. Building requirements: Area and Cost:

As KLEF has been existence since 1980-81, all the necessary buildings which includes class rooms, tutorial rooms, laboratories, library, faculty cabins, etc. have already been established. KLEF presently has the following areas:

S. No.	Type of Area	Area (Sq.m.)
Program (s): Engineering & Technology, Management, Architecture, Pharmacy and Fine Arts		
1	Instructional Area	42045
2	Instructional Area - Common Facilities	8296
3	Administrative Area	9765
4	Amenities Area	43312
5	Circulation Area	70220
Total Area (Sq.m.):		1,73,638

11.11.e. Estimated cost of Equipment

As KLEF has established 94 laboratories for conducting various academic programmes, it has already invested around Rs. 19 Crores for procurement of various equipment. Besides the management always provides the necessary equipment on priority basis.

11.11.f. Phase-wise Financial Requirements

As KLEF has been in existence since 1980-81, it has already created the necessary built-up areas, equipment and so on. Depending on the requirement, necessary funds will be provided.

11.11.g Strategies for Financial Mobilization

KLEF has been a successful society with sound finances. There is no dearth of funds for providing any necessary facility/requirement for satisfactorily conducting the academic programs. Following table gives the important financial figures of the society in the last three assessment years.

S. No.	Assessment year	Total Income generated (Tuition fees, interest, research grants, room rents & others), Rs.	Total Expenditure (Rs.)	Surplus Funds (Rs.)
1	2014-15	1410022076	783817339	626204737
2	2015-16	1712786096	870468682	842317414
3	2016-17	2114684576	1023361350	1091323226

As could be seen from the above numbers the surplus funds are growing, which shows the sound financial health of the society. Any required funds could be mobilized without any difficulty.

11.12. Action Plan for Implementation

11.12.a. Activity Chart

As KLEF has been in existence since 1980-81, there is no specific intention to increase its capacity beyond existing one and hence no new activity. All the academic activities necessary for the smooth conduct of various academic programs are held as per the academic calendar which is normally released at the beginning of the academic year (1 July during every year).

11.12.b. Constraints

No Constraint is envisaged.

11.12.c. Financial Outlay

The management of Society will allocate the funds. The University board approves and the finance department allocate the necessary funds to meet the requirements.

11.12.d. Strategy for Implementation

Any finance required for courses will be raised from own sources.

11.13. Executive Summary of the Detailed Project Report

11.13.a. Details about the Promoting Body

The promoting body comprises the following Academicians, Industrialists and Businessmen.

S. No.	Name of Promoter	Designation
1	Er. Koneru Satyanarayana	President
2	Mr. Edupuganti Buchi Babu	Vice-President
3	Er. Koneru Lakshmana Havish	Secretary
4	Smt. Koneru Siva Kanchana Latha	Jt. Secretary
5	Sri Kalagara Naga Lingeswara Rao	Treasurer
6	Sri Yarlaagadda Lakshmana Rao	Member
7	Dr. Boddapati Chidambareswara Rao	Member
8	Er. Koneru Raja Harin	Member
9	Sri Kanuru Koteswara Rao	Member

11.13.b. Name and Address of the Promoting Body:

(Government / University / Trust / Society)

KONERU LAKSHMAIAH EDUCATION
FOUNDATION, GREEN FIELDS,
VADESWARAM, GUNTUR DISTRICT,
A. P. 522502

11.13.c. Date of Registration / Establishment of the Promoting Body:

19-07-1996

11.13.d. Nature of the Promoting

Body:

Religious

Charitable

Family

Society

11.13.e. Activities of the Promoting Body since inception:

(With special emphasis on Academic, Social & Industrial Activities and details on other institutions run by the Promoting Body)

The main activity of the promoting body is to run educational institutions only other than this promoting body is involving in religious activities and in social activities.

11.13.f. Constitution of the Promoting Body:

(Give details indicating the names)

S. No	Name	Academic Qualification		Nature of Association with the Promoting Body	Experience in Academic Institutions (in Years)			Overall Experience (in Years)
		Technical	Non Technical		Promotional	Management	Organizational	
1.	Er. Koneru Satyanarayana	√		President	√	√	√	37
2.	Mr. Edupuganti Buchi Babu		√	Vice-President	√	√	√	37
3.	Er. Koneru Lakshmana Havish	√		Secretary	√	√	√	9
4.	Smt. Koneru Siva Kanchana Latha		√	Jt. Secretary	√	√	√	37
5.	Sri Kalagara Naga Lingeswara Rao		√	Treasure	√	√	√	37
6.	Sri Yarlaagadda Lakshmana Rao		√	Member	√	√	√	37
7.	Dr. Boddapati Chidambareswara Rao		√	Member	√	√	√	37
8.	Er. Koneru Raja Harin	√		Member	√	√	√	7
9.	Sri Kanuru Koteswara Rao		√	Member	√	√	√	37

11.14 Faculty Data

Following table summarizes the presently working faculty pertaining to all the academic departments in different cadres such as Professor, Associate Professor & Assistant Professor.

S. No.	Department	No. of Faculty			
		Professor	Assoc. Professor	Asst Professor	Total
1	Freshman Engg Dept (English, Maths, Physics & Chemistry)	14	43	82	139
2	Bio-Technology	5	5	14	24

S. No.	Department	No. of Faculty			
		Professor	Assoc. Professor	Asst Professor	Total
3	Civil Engg.	6	9	37	52
4	Computer Science & Engineering	40	41	170	251
5	Electronics & Communication Engineering	26	32	140	198
6	Electronics & Computers Engineering	5	7	20	32
7	Electrical & Electronics Engg	7	8	31	46
8	Mechanical Engg.	21	17	93	131
9	B.Arch.	2	4	6	12
10	B. Pharmacy	1	4	9	14
11	BFA	0	1	9	10
12	MBA	5	11	16	32
13	Physical Education	0	0	2	2
	Total :	132	182	629	943

As could be seen from the above table, there are 132 Professors, 182 Associate Professors and 629 Assistant Professors totalling to 943 permanent faculty, who are already in service.

11.15 Proposed Institution

11.15. a Details about the Proposed Institution

KLEF is an existing institution which started as an Engineering College during 1980-81, became an autonomous institution during 2006 and became a Deemed to be University in the year 2009. It is rated as No.1 Institution in the combined states of Andhra Pradesh & Telangana. KLEF was awarded 68th rank at All India level during NIRF 2017 rankings.

11.15. b Development Plan for the Proposed Institution

As KLEF is an existing Deemed to be University, there is no requirement of development plan. Depending on the requirement, the management provides the necessary funds.

11.15.c. Vision of the Promoting Body

To be a globally renowned University.

11.15.d. Mission of the Promoting Body

To impart technical education in cutting edge Technology. Inculcating applied research, scholarly inquiry, creative endeavour through the knowledge and values based moulding of students and make an imprint in the economic and social development of the Nation.

11.16. Graphical Representation

11.16.a Give a bar chart indicating mobilization of funds for the proposed project at the time of establishment and for the next 10 years at intervals of five years.

Not applicable to KLEF (Deemed to be University). Details are provided under 11.11.g.

11.16.b Give a bar chart indicating the recruitment of faculty (separately for Lecturer, Assistant Professor, Associate Professor & Professor) for the proposed project at the time of establishment and for the next 10 years at intervals of five years.

Not applicable to KLEF (Deemed to be University). Details are provided under 11.11.b.

11.16.c Give a bar chart indicating creation of built-up area(separately for Instructional, Administrative & Amenities) for the proposed project at the time of establishment and for the next 10 years at intervals of five years.

Not applicable to KLEF (Deemed to be University). Details are provided under 11.11.d.

11.16.d Give a bar chart indicating investment on equipment and Machinery for the proposed project at the time of establishment and for the next 10 years at intervals of five years.

Not applicable to KLEF (Deemed to be University). Details are provided under 11.11.e.

11.17 Total Project cost (at the time of establishment and next five years)

Not applicable to KLEF (Deemed to be University).

11.18. Details for Mobilization / Source of Funds (Capital & Recurring) (At the time of establishment and next five years) (Rs. in Lakhs)

Not applicable to KLEF (Deemed to be University). Details are provided under 11.11.g.

11.19. Recruitment of Faculty (At the time of establishment and next five years)

Not applicable to KLEF (Deemed to be University).

Presently KLEF has 132 Professors, 182 Associate Professors & 629 Assistant Professors totalling to 943 permanent faculty, who are already in service. Details are provided under 11.11.b.

11.20. Recruitment of Non-Teaching Staff (At the time of establishment and next five years).

Not applicable to KLEF (Deemed to be University). It is stated that presently KLEF has 211 Technical Staff and 933 Administrative staff totalling 1144 non-teaching staff.

11.21. Proposed Structure of the Governing Body

The present structure of the Board of Governors is given under 11.9.b.

11.22. Industry Linkages

The criterion for usefulness of the students trained in any curriculum is patronization of the trained by the user establishments. This fact is more prominent in the field of technical education. Colleges imparting technical education are the primary sources of technical manpower and the resources that the industries look at for fulfilling their needs. The courses need to be adapted to the requirements of the industry. Similarly industries need to be familiarized with the developments in the educational institutions to ignite the process of research in the institutions. The continuous interaction between the industry and the institutions is an essential ingredient in the process of technology building. For the holistic academic of the institution it is essential to have progressive industry – institution interactions at various levels.

- Industry Participation in Curriculum Planning
- Continuing Education and Internship for Faculty
- Industrial Training for Students
- Industrial Visits and Tours for Students
- Projects Consultancy
- Collaborative Programmes with Industry
- Guest Lectures from Industry
- Extension Lectures
- Placement
- Student Counselling and Guidance
- Student Career Development
- Entrepreneurship Development Programme
- Coaching Programs
- Alumni Interaction

DECLARATION

I /~~We~~, on behalf of "KONERU LAKSHMAIAH EDUCATIONAL FOUNDATION (KLEF DEEMED TO BE UNIVERSITY) hereby confirm that this Detailed Project Report has been prepared for its approval for the existing programs and courses with the present intakes under the name and style of "KLEF - DEEMED TO BE UNIVERSITY". It is hereby confirmed that all the information furnished above is true to the best of my/our knowledge and belief and if any information is found to be false, the proposal may be rejected.

Place: Vaddeswaram

Name: Dr. T. Uma Maheswara Rao

Date: 15-02-2018

Designation: REGISTRAR