# A I C T E IT'S ROLE IN THE NEW CENTURY

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### ABSTRACT

The objective of this paper is to make aware of some aspects of AICTE, like, provisions in the AICTE Act, 1987, its functioning and importance in the qualitative and quantitative growth of technical and management education in India, etc. The NBA process of accreditation has been presented to a certain details. A few passing comments are made so as to enable this country to face the challenges of the new century. The paper, it is believed, can be of interest to all those concerned with technical education in India.

#### INTRODUCTION

As reported by the Bell, the trend is from pre-industrial societies to industrial societies to post-industrial societies. Post-industrial society is based on service, and hence is a contest between persons. What counts today is not raw muscle power and energy, but information and knowledge. Today's society is knowledge based, thereby essentially calling for knowledge worker, knowledge organisation and knowledge management. Such a society has got the following five dimensions [1]:

 Economic sector : switching to service economy from goodsproducing economy.

- 2. Occupational distribution : emergence of professional and technical class.
- Axial principle : innovation is knowledge based.
- Future orientation: the control of technology and technological assessment.
- 5. Decision making: the creation of a new "intellectual technology" (of which computer and IT are the prime tools).

Succinctly, the next century is an era of knowledge management. However, to achieve this, developing countries will have to go for sustainable

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and equitable development. According to the recent "Human Development Report 1998" based on such criteria as overall health, general education, and the degree to which an average person enjoys a decent standard of living, India is ranked 139th among 174 countries. It has already been visualized by our political leaders that spread of quality technical and management education in masses can give us a helping hand. In fact, after independence, there appears to be a surge in the education sector because of such several reasons as explosive nature of population, guiding principles laid down in the Constitution, awakening in the downtrodden classes of society, etc. This naturally has led to a phenomenal growth in education sector in India. However, it is a matter of deep concern with such related issues as inability of the Central/State Governments for providing enough funding for education, alarmingly suicidal illiteracy rate, a very limited success achieved in primary education sector, hardly 5% of potential students population anyhow reaching to the higher education level etc. In India, population-wise, there are on an average 0.1% engineers, whereas, in advanced countries like, USA, UK, Germany, Japan etc., this figure is reported to be more than fifteen times that of in India. These and issues of similar nature, in view of the challenges of the new century, are further aggravated to a very high degree of complexity in the technical and management education sector in India due to such factors as [2):

1. Changing nature, importance and

- role of technical and management education in the era of globalisation.
- 2. The quality assurance issue related to ever-growing number of institutions, universities, faculty, students, etc., in India.
- The number of regulatory bodies, like, AICTE, State/Central Governments, university, etc.
- 4. Socio-economical-political environment (having two extreme poles in terms of, say, culture, caste system, language, religion, etc.) prevailing in a region and countrywide.
- 5. Tangible constraints like quality of students admitted/staff appointed in institutions, funds, infrastructure availability, etc.
- 6. Intangible constraints as waves in society, conflicting goals of individual and nation as a whole, culture, opportunities and threats at international level, etc.

It has been widely accepted and seen that competitive technical and management education can alone lead a country towards her sustainable and equitable development. The next section deals with how this herculean task is excellently being performed by the All India Council for Technical Education (AICTE) in india

# AICTE: SOME ASPECTS

The Indian Society for Technical Education (ISTE), formerly known as the Association of Principals of Technical

Institutions (APTI year establishment 1941), came into existence in 1967 with a view to enlarge its activities to advance the cause of technical education. The ISTE naturally has been playing a vital role in furthering the cause of the AICTE. The New Education Policy of 1986 of the Government of India gave impetus for technical and management education in India, through Bill No. XXXVI-F of 1987 the All India Council for Technical Education Bill, 1987 (as passed by the Houses of Parliament - Rajya Sabha on 26th November, 1987; Lok Sabha on 15th December, 1987) assented to on 23 December 1987 Act No. 52 of 1987 [3].

#### A Bill

"To provide for the establishment of an All India Council for Technical Education with a view to the proper planning and coordinated development of the technical education system throughout the country, the promotion of qualitative improvement of such education in relation to planned quantitative growth and the regulation and proper maintenance of norms and standards in technical education system and for matters connected therewith".

Table I presents summary of the chapters of the Bill. As per the Act, "Technical education" means programmes of education, research and training in engineering technology, architecture, town planning, management, pharmacy and applied arts and crafts and such other programmes of areas as the Central Govenment may, in consultation with the Council, by notification in the

Official Gazette, declare. The Act has specified 22 such functions for the Council as (technical) manpower planning and forecast, equitable and sustainable development of technical education in the country, allocation of grants. schemes for women. handicapped and weaker sections of the society, inter linking education with industry, R & D, etc., devising performance appraisal accountability mechanism, inservice training for teachers, norms and standards for infrastructure, staff, fees, etc., approval for starting new institutions, new courses, etc.; granting autonomy to institutions, prevent commercialization of institutions, withhold or discontinue grants, set up the National Board of Accreditation (NBA), etc. Under the Bodies of the Council, Chapter IV, the following Board of Studies are established:

- 1. The All India Board of Vocational Education
- 2. The All India Board of technical Education.
- 3. The All India Board of Under graduate studies in Engineering and Technology.
- 4. The All India Board of Post graduate Education and Research in Engineering and Technology.
- The All India Board of Managment Studies.

The Council has also established the following Regional Committees:

Table 1.: Summary of the Chapters of the AICTE Bill 1987 [3].

Chapter	Title	Clauses
I	Preliminary	1. Short title and commencement.
		2. Definitions.
II	Establishment of the	3. Establisment of the Council.
	Council	4. Terms of office of members.
		5. Meetings of the Council.
	9	6. Vacancies, etc., not to invalidate proceedings of the Council.
,		7. Temporary association of persons with the Council for particular purposes.
		8. Appointment to officers and other employees of the Council.
		9. Authentication of orders and other instruments of the Council.
III	Powers and functions	10. Functions of the Council
	of the Council	11. Inspection
IV	Bodies of the	12. Executive Committees of the Council.
	Council	13. Boards of Studies
		14. Regional Committees.
V	Finance, Accounts	15. Payment to the Council.
	and Audit	16. Fund of the Council
		17. Budget
		18. Annual report
		19. Accounts and audit.
VI	Miscellaneous	20. Directions by the Central Govenment
		21. Power to supersede the Council.
		22. Power to make rules.
		23. Power to make regwations.
		24. Rules and regulations to be laid before Parliament.
		25. Power to remove difficulfies.

- 1. The Northern Regional Committee : office at Kanpur.
- 2. The Southern Regional Committee: office at Madras (Chennai).
- 3. The Western Regional Committee: office at Mumbai.
- 4. The Eastern Regional Committee office at Calcutta.

Thus, the AICTE is the Apex Body dedicated to the noble cause of promoting technical and management education in India. The AICTE has scrupulously worked out the norms and standards in respect of, infrastructure, staff recruitment rules, etc. For instance, the AICTE has published "Norms and Standards for Engineering Colleges programmes)" in August 1990, and in December 1995 for all institutions under its coverage [4-5]. This is really the Bible for institutions aspiring for world-class competitiveness through quality education. Through this, the AICTE, in the national interest, has done an excellent job for improving both quality of teaching-learning process through setting norms and standards, and welfare of staff, through, say, revision of pay scales in 1986 and 1996. The earlier effective and efficient implementation of these standards in letter and spirit by institutions/ govenments, better for the nation to meet the challenges of the next century. In fact, even if only, say, the recruitment rules had been followed strictly over the last 10-12 years, India would have been very rich in (technical)

human capital. Many of the Colleges, universities and public service commissions, however, have not observed these in both letter and spirit. Some States have not been prompt enough to maintain certain directives of AICTE like, admission strictly on the basis of common entrance test within approved intake, revision of fee structures periodically, etc. These are some of the factors which have imposed server constraints on attaining the goals set by the AICTE, and this mindset has naturally yielded limited success in meeting the expectations of stakeholders of technical education To achieve this, accreditation is a way out. The NBA can play a vital role in this respect. In fact, a very few institutions have opted for the NBA accreditation for one or the other reason. Some of the institutions, like, IIT, Chennai, Engineering College, Vellore and Indian Railway institute, Pune, have opted for ISO 9001 or ISO 9002. Some features of NBA are, therefore, presented in the next section.

## **NBA: SOME FEATURES**

In September 1994, the AICTE published the NBA document on objectives, structure & policies and also a manual of evaluation procedure for accreditation [6-7]. According to this document "accreditation' means the accreditation of an institution or programme accorded by the Board for purposes of quality assurance on the basis of evaluation procedure prescribed. Later in January 1998, the AICTE published four volumes on NBA. These are summarized in Table 2.

The fifteen steps involved in the accreditation process are summarised as given below

- 1. Institution submits information to the NBA in the prescribed pro foma.
- 2. The NBA appoints Chairman and visiting team members.
- 3. The NBA provides information received to the visiting team.
- 4. The visiting team undertakes critical study of the information.
- 5. Institution furnishes additional information to the visiting team if

- sought for.
- 6. The visiting team visits institution for infrastructure inspection as per schedule.
- 7. The visiting team holds discussion with the management, principal, deans, etc., regarding strengths and weakneesses of programmes. At this stage institution may withdraw from accreditation.
- 8. The Chairman finalizes the report based on team members deliberations.
- 9. The Chairman submits the report

	Table 2. Summary of	the four Volumes of the NBA [8].
Volume No.	Title	Some Features
I	The Primer on Accreditation	Concepts involved and their importance to stakeholders.
II.	The Manual of Accreditation	Evaluation policy and methodology explained.
III	The Accreditation Proforma	In two parts. Information sought for accreditation.
IV	The Accreditaor's Manual	Guidelines for accreditation teams.

to the Sectorial Conunittee.

- The Sectorial Committee forwards the report with its observations to the NBA.
- 11. The NBA considers the Visiting Team report and Sectorial Comittee's observations.
- 12. The NBA takes decision on the assignment of grade.
- 13. The NBA reports its decision to the AICTE.
- 14. The AICTE issues seperate certificates for each programme with grade, to institution.
- 15. The AICTE publishes in the Directory the relevant grade, the date of issue of ceitificate, etc.

The normal period of accreditation is of five years. An institution can appeal within 30 days of

the date of notification of the Board action with a prescribed fee for review of the action of Accreditation taken by the Board. The NBA has prescribed fees for evaluation of programmes subject to change from time to time as the AICTE thinks it fit. For instance, earlier it was Rs 25,000 per programme and now it is Rs 50,000 per programme. programme is accredited using eight parmeters spread over 1000 point scale. Table 3, for instance, presents one of these. Table 3 has presented the maximum points for each parameters. On evaluation by a visiting team, actual points obtained programme-wise are worked out, and these programmes are awarded grades as presented in Table 4. It is note worthy that a similar gradation system has been developed and implemented by the Government of Maharashtra for institutions (as a whole) in the State (see Appendix A).

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Table 3. Details of Accreditation Parameters and proposed weightages.

Sr. No. Parameter	Points (UG) P	Points (PG)
A) Infrastructural Performance Indices		
I Mission, Goals and Organization	100	70
1. Management		
Mission & Goals, Commitment, Attitude	. 50	30
Planning and monitoring, Incentives, Effectiveness		
2. Organization and governance	50	40
Leadership, Motivation, Transparency		
Decentralization and delegation.  Involvement of faculty. Efficiency		
AND THE REPORT OF THE PARTY OF	n 100	80
<ul> <li>II. Financial &amp; Physical Resources and their Utilizatio</li> <li>1. Capital resources, Operational budget,</li> </ul>	40	40
Maintenance Budget, Development reso and budget		10
2. Land, Building, Hostels, Support service	es 40	30
(Water, Electricity, Communication etc.)		
3. Office equipment, Canteen, Transport,	20	10
Medical facilities	20	10
Subtotal (A)	200	150
B) Academic Performance Indices:		
III. Human Resources	200	200
1. Faculty	100	100
Numbers, Qualifications, Recruitment		
Procedures. Workload (Teaching, researc	rh,	
consultancy, admn.) Attitude and commitment.		
2. Faculty development	50	50
(QIP, Conferences, Continuing Edu.	30	30
Professional Societies, Indl. Exposure,		
Sabbatical leave, etc.)		
Performance appraisal.		
3. Supporting Staff (Tech. / Admin.)	50	50
Numbers, Qualifications/Skills, Recruitm		
procedure. Attitude and involvement, Sk	aill	
upgradation. Performance appraisal.		

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IV.	Students	100	100
	1. Admissions	20	20
	Central or institutional Criteria (minimum		
	criteria for different categories). Admission		
	Policy for lateral entry.		
	2. Academic results	30	30
	Performance in competitive examinations*.		
	Admission to postgraduate courses*.		
	3. Employment of	50	50
	Graduating students during the past year.		
	Feedback from employers, Intake, number of		
	GATE qualified candidates, drop outs during		
	the past three years.**		
V.	Teaching-learning Process	350	250
	1. Syllabus	100	80
	2. Academic calendar, number of instructional	50	40
	days, contact hours per week. Evaluation		
	procedure and feedback. Laboratories,		
	workshops and equipment (facilities,		
	maintenance and utilization).		
	3. Computing facilities,	100	80
	Maintenance and utilization, Library,		
	ET Facilities, Instructional materials.		
	4. Budget for consumables	100	50
	Implementation of the instructional	. i	
	programmes. (Lectures, tutorials,		4
	maintenance of course files, workshops,		
	lab classes, colloquia, projects, teaching aids).		
	Removal of obsolete experiments and		
	introduction of contemporary lab.		
	Experiments.		
VI.	11	50	50
	Extra & co-curricular activities. Student		E N G≥ KA . ■ L
	counseling and guidance. Professional	<i>*</i>	
	Society activities. Enterpreneur ship	y	
	development. Alumni Association.	1:	
	Subtotal (B)	700	600

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C) Societal contribution indices	70	100
<ul> <li>VII. Industry - Institution interaction</li> <li>1. Industry participation in curriculum planning continuing education and industrial internship for Faculty, Consultancy.</li> </ul>	30	50
2. Industry visits and training. Project work, Extension lectures, Placement	40	50
VIII. Research and Development	30	150
<ol> <li>Institutional budget for R &amp; D         Academic/sponsored/industrial research development. Publication and patents.     </li> </ol>	30	NIL
2. Recognition as center of excellence/special assistance/Department support programmes. Fellowship/Assistantship. Joint guidance with industry/R&D labs/other institutions for Ph D thesis/M Tech projects. Criteria for evaluation of Ph D thesis/M tech projects.	NIL	150
Subtotal (C)	100	250
Grand Total (A+B+C)	1000	1000

Table 4. Summary of accreditation grades.

<u>Grade</u>	<u>Points</u>		<u>Description</u>
A B C NA	750 Points above 650-749 points 550-649 points Below 550 points	~	Very good/e xcellent Good Satisfactory Not accredited.
	1		

The AICTE has done a commendable work within a short span of 13 years, and published a large number of manuals and monograms encompassing such areas, both technical and non-technical, as TQM, Quality Circles, PADS, etc. In fact the AICTE's norms and standards, its routine

inspections, PADS, publication, etc., go hand in hand, and they are complimentary and supplementary to each other. Their implementation, therefore, in letter and spirit by institutions can be a boon fetching them excellent grades. As per the AICTE directives, the Government of

Maharashtra has brought into force a PADS document entitled as implementation of Performance Appraisal and Development System for Teachers and Administrative posts vide Higher & Technical Education & Employment Department G R No. CRF 1096/(20/96)TE-4, Mumbai, dated 25th March, 1997. For instance, teacher's performance can be assessed using the following point system:

- Performance of engaging lectures/ practicals : 5 points
- 2. Performance of attendance of students : 5 points
- 3. Performance of results (Theory subjects) : 5 points
- 4. Other performance: 80 points
  It includes 8 main
  factors each of which
  has 5 sub-factors.
  Each Sub-factor can
  fetch maximum
  2 points which can be
  worked out by
  qualitative assessment
  of each sub-factor
  as excellent, good,
  average or poor.
- 5. Special weight by reporting officer : 5 points.

# Total : 100 points

Based on the points obtained by a teacher, a teacher is awarded one of the grades as excellent, very good, positively good, good, average, or poor. In view of earlier presentation, the next section presents some comments on the AICTE functioning.

# SOME COMMENTS

In this section, a few comments have been made on the functioning of the AICTE:

- 1. Because of globalization, mass technical education is a call of the day. AICTE has done justice to assure quality of technical education in India through standardization and setting norms.
- 2. The AICTE has done commendable work over a short span of 13 years, and has contributed immensely in such areas as accreditation, setting healthy norms for effective and efficient functioning institutions, performance appraisal, publication, laying down service conditions, etc.
- 3. If followed all AICTE norms strictly at all levels, India can turn very competitive and quality technical manpower, and India can hopefully meet the challenges of the new century.
- 4. However, State Governments, universities and institutions are in need of better AICTE directives in such matters as:
  - i. To adopt one window method for approval/continuation of approval of an institution in the

sense that State Government, university and AICTE can carry out inspection as one

- ii. The AICTE needs to exercise its strict control over such matters as faculty recruitment rules, tution fee structure and periodical revision. admission norms and procedure, etc. It need not be only an approval body.
- iii. PADS and Accreditation system need review. instance, teaching-learning process, and conduct of need practicals through supported documentation on continuous basis. subjectivity accreditation parameters be reduced, etc. Is it necessary to for award grades the accreditation? accreditation grades really serve any purpose? Like ISO 9000, what will happen if the NBA only certifies whether an institution is accredited or not? Why are grade points in arithmetic mean, why not in geometrical mean?
- iv. The NBA offers gradation program-wise, whereas, as per the scheme being practiced by Government the Maharashtra, institution is graded as a whole (see Appendix A).

Nevertheless, it is quite interesting to note the weight-ages given to assessment-criteria by these two methods (see Table 5).

Table 5. : A Comparative statement for criteria weight-ages in % (UG progmmes),

Sr.	Criterion (parameter)	NBA Wt.%	Govt of Mah. Wt.%
1.	Infrastructure (performance/ development)	20%	50%
2.	Academic performance	70%	40%
3.	Societal contribution	10%	10%
	Total	100%	100%

The above Table indicates that the NBA emphasizes more for academic performance than that of infrastructure for grading a programme, whereas, the Government of Maharashtra gives almost equal weight-ages to both infrastructure development; and academic performance and teaching faculty put together for grading an institution as a whole. Further, the NBA awards, three grades progrmme-wise as "A" to "C", and one more as "Not accredited!' (see Table 4), whereas, the Government of Maharashtra offers five grades "A" to "E' instituye-wise as a whole (see Appendix A). The pros and cons of such grade-awarding methods need to be reviewed.

- v. Autonomy is the very key to quality education What will happen if the AICTE grants autonomy and approval together as a package? Certainly the fittest shall survive. Quality of education depends on competitive teachers. Obviously, all teaching jobs need to be made internationally competitive. To competitive, make it recruitment be done on a tenure basis of 3-5 years. At the end of tenure, a teacher be re-employed based on his/her rigorous assessment of the past tenure. Once this type of work culture and mindset inculcated in the education system in India, future generations also shall readily adopt it as their work culture.
- vi. According to a recent report of Higher the Education Department, MHRD, New Delhi it is estimated that in the year 1998, over 34,000 from Higher students Education, and approximately 30,000 experienced engineers migrated to USA Out of these, 75% personnel left India never to come back Moreover, over 500 million American dollars per year in the form of tuition fee are taken out by foreign universities from the pocket of middle/upper middle class section in India, who is crazy

- after foreign degrees [8]. To control this, the AICTE needs to promote sandwich type programmes, and to make a provision that no degree would be awarded unless students successfully complete, in service, manufacturing or social (community) sector, two years/one year internship after spending four years in institution under normal/sandwich stream undergraduate programmes.
- vii. Today, in the Indian academic world, the buzz words are IT. cyber space, virtual class, virtual university, etc. In fact, in India Internet penetration is about half a percent of the population, and nearly 90 % of the people have never even seen a computer [9]. The AICTE will have, therefore, to shoulder a great responsibility and a challenging task of equitable and sustainable development of the masses. This can be achieved, of through course, (technical and management) education in India. AICTE is, naturally, called upon to play a vital role in such and similar related issues of the new century.

### **CONCLUSIONS**

The major objective of this paper is to make aware of the AICTE

functioning, the apex body in technical and management education in India, solely responsible for monitoring its growth both qualitative and quantitative. The paper highlights some provisions of the AICTE Act, and some features of the AICTE functioning. Some details of the NBA are presented as well. A few comments on the achievements and expectations from the AICTE are also made.

#### REFRENCES

- [1] WAGHODEKAR P. H., 1999, On Some Aspects of Cost Reduction in Engineering Education in India, proceedings of the XXIX ISTE Annual Convention, Kongu Engineering College, Erode, 10-12 December.
- [2] WAGHODEKAR P. H., 2000, TQM in the Technical Education Sector in India:Some Myths, Some Proposals, invited paper, one day Conference on "Quality Education (@, 2000 E.E., Engineering Education Foundation, Pune, 16th April 2000.
- [3] ANON, 1988, The All India Council for Technical Education Bill, 1987, reproduced by ISTE, New Delhi.

- [4] ANON, 1990, Norms and Standards for Engineering Colleges (Degree Programmes),. AlCTE, New Delhi, August.
- [5] ANON, 1995, Norms and Standards, AICTE, New Delhi, December.
- [6] ANON, 1994, National Board of Accreditation (NBA-India)
  Document on Objectives,
  Structure & Policies and Manual
  Evaluation Procedure for Accreditation, AICTE, New Delhi,
  September.
- [7] ANON, 1994, National Board of Accreditation (NBA-India) Manual Evaluation Procedure for Accreditation, AICTE, New Delhi, September.
- [8] PATWARDHAN BHUSHAN, 2000, Even today the anti-national work of imparting non-useful education has been continuing (in Marathi), Marathi daily Loksatta, Pune Vritant May 3, P. 1.
- [9] GUPTA SHEKHAR 2000, How bricks-and-morter can click: Cyber Souffle's, the daily Indian Express, Pune, April 29, p. 8.

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# APPENDIX - A Graduation Evaluation Sheet

College Code:

University Area:

# ABSTRACT ENGINEERING (DEGREE)

Name of the Institute:

Year of establishment:

Address:

DEGREE 7 PROGRAMMES: Total Degree Intake: 360

Equivalent Annual Degree Intake: 360

Sanctioned Courses	Mechanical	Mech. Sandwich	Prod. Sandwich	Electrical	Electronics	Chemical
Sanctioned Intake	60	60	60	60	60	60

Sr. No.	Particulars of Parameter for w	veightage	Requir. as per Norms Intake : 360	Actual	Marks obta- ined	Max. Marks
1 a) b) c)	LAND AND BUILDING AREAS Land acquired for institue Built up area for instructional Built up area for Administrative	(Degree) (in Hectors) (in sqm) (in sqm)	2.32 hect. 15730 sqm 1057 sqm	Total Max	mum Marks	15 3 9 3
2	LABORATORY & EQUIPMENT COS	T (Degree)		Total Max	mum Marks	15
a) b) c) d)	Workshop Costs Laboratory Costs of Group A (Mechanical, Mech SAV, Prod SAV) Laboratory Costs of Group B (Electrical, Electronics) Laboratory Costs of Group C Laboratory Costs of Group D (Chemica Laboratory Costs of Group E General facilities Costs, off. Equip. Costs. Comp. Centre, Phy, Chem, etc.	(in Lakhs)	80.00 193.00 74.00 - 68.00 - 10.00 23.00			15
3 a) b)	Total Cost of Equipment in Lakhs  LIBRARY  Costs of Books  Carpet Area in use of Library	(Degree) (in Lakhs) (in sqm)	448.00 8.00 508.5 sqm	Total Max	mum Marks	10 2 2

Sr. No.	Particulars of Parameter for weightage	Requir. as per Norms Intake : 360	Actual Marks obta- ined	Max. Marks
c) d) e)	Number of Books (After 4 years) Number of Periodicals (for 6 Courses) Multimedia Learning Packages (Yes+1, No≈0) Qualification of Librarian (M.Lib/B.Lib) (Yes=1, No=0)	8000 84 Yes Yes		2 2 1 1
4 a) b)	TEACHING FACULTY Appointment of Principal (Deg. Ph.D) Faculty appointment made against actual requirement as per AICTE Regular staff to student ratio maximum 1:13 Total Salary:	Regular 111 Rs.88.8 Lakhs	Total Max mum Marks	25 5 5
c) d)	Ratio Appointment of senior level staff as per AICTE Norms (Degree (P+AP) AICTE Pay scales to faculty alongwith allowances Rs. in Lakhs	1:13 P:16 AP:32 Rs.1 Lakh		2.5 2.5 3
e)	No. of Staff deputed for higher studies (M.E./M.Tech.) Training Programmes organised (Summer/Winter/Anyother)	Yes		1
5 a) b) c)	COMPUTER FACILITIES (Degree) Total Cost of Computers & Peri. (in Lakhs) Number of Computers and Terminals Number of B.E. Computer qualified staff to run Computer Centre and Computer Courses	44 Lakhs 60 4	Total Max.mum Marks	10 4 4 2
	Sub Total Marks	Obtained		75
6.	ACADEMIC PERFORMANCE  First Year average for last three years Final year average for last three years	% Results	Total Max mum Marks	15
7.	OTHERS Students Amenities, Hostel Facilities, Corporate life of the Institution Record keeping, Functioning of Students Placement Cell, Up keep of Campus etc.	Grade of Inspection Team	Total Max mum Marks	10
	Total Marks Ob	tained		100

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<b>GRADE</b>	<b>TOTAL MARKS</b>	
A	70 and above	
В	60 to 69	
C	50 to 59	
D	40 to 49	
E	40 or less	

Ref. No.: PEC 2096/(7359)/TE-1, dated 09.01.1997 received from the Secretary, Government of Maharashtra, Higher and Technical Education Department, Mantralaya Annexe, Mumbai - 400 032.