

## EXPERIMENTATION OF AUTONOMY AT GOVERNMENT POLYTECHNIC, AURANGABAD.

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### 1. INTRODUCTION

The rapid industrialisation of the country, globalization of markets, new economic policy, liberalization of trades and import export have brought about drastic changes in manpower requirements of industry. The needs of industry and society regarding trained and skilled manpower are becoming widely diversified and multidisciplinary.

The rigid and broad - based education system prevailing in most parts of the country does not promote satisfaction of these needs. This highlights the importance of according autonomy to polytechnics, so that programmes, courses, examination systems, institutional governance and administration reach up to the predetermined quality and lead to satisfaction of the needs of user system.

Against this backdrop, autonomy has been awarded to Government Polytechnic, Aurangabad vide G.R. No. WBP - 1093 (2640) (69) / TE-5, Dated 30.5.1994 of Higher & Technical Education & Em-

ployment Department of Govt. of Maharashtra, from the academic year 1994-95. The institute has now entered the third year of the project and the first batch of three-year diploma in engineering programmes under the autonomous pattern is to graduate in May 1997. During the past two years the institute implemented the project "Autonomy & Flexibility" in word and deed, bringing about a quantum jump in the quality of technician education passout of the institution. A review of manner in which autonomy is being implemented by this institute is presented in this paper.

### 2. STEERING COMMITTEE CONSTITUTION

Soon after the communication was received from the Government informing the Principal that Aurangabad Govt. Polytechnic was accorded autonomy, the Principal constituted a Steering Committee, consisting of the head of the institution as Chairman, and all heads of department as members. The purpose of

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Govt. Polytechnic Aurangabad (Maharashtra).

the Steering Committee was finalising, based on the G.O., the Governance Structure, including various committees required for the implementation of Autonomy in the institution and, consequently, the constitution of the committees / Board / infrastructures.

The Steering Committee met on 4th August 1994, and finalised the governance Structure and the committees with their constitutions. The Steering

Committee was disbanded as soon as the Governance structure became operational.

### 3. GOVERNANCE STRUCTURE

The Governance Structure that was found appropriate to the Aurangabad Govt. Polytechnic is shown in Figure 1. The brief role of this infrastructure is provided in annexure-A. This structure has been in operation since August 1994.

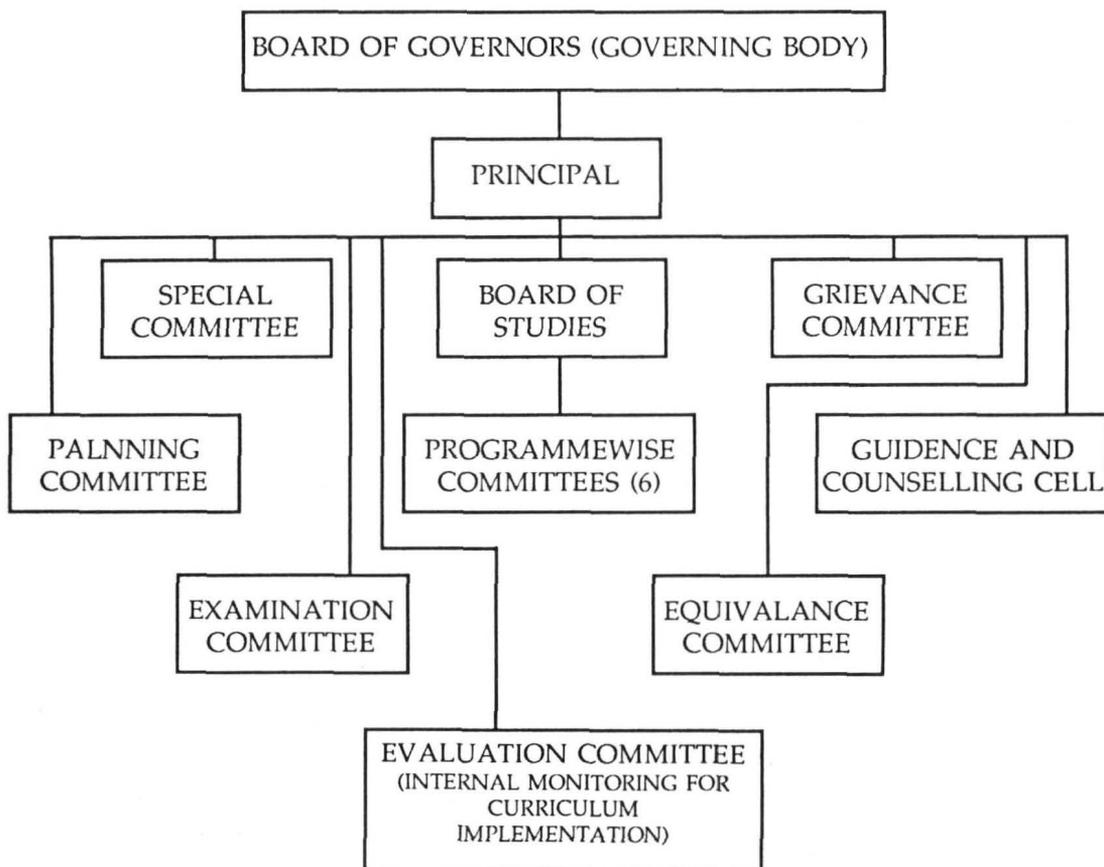


FIGURE - 01

All committees were functional by March, 1995.

#### 4. NATURE/DIMENSIONS OF AUTONOMY

The basic aim of autonomy was to make the system more effective and efficient. Though autonomy awarded to this institution was limited to the academic dimension only, it did not prevent the institution in 'becoming autonomous' in other dimensions, too, to ensure effective implementation of the project.

'Academic Autonomy' enables the institute to drop, add, alter courses offered in the institutions as per the needs of industry and society, thereby creating appropriate technical manpower required by the user systems. This improves the acceptability of the product to industry, society and enhances the self employment potential of the passouts.

Managerial autonomy enables the organisation to improve the effectiveness of the system and, thereby, to achieve institutional targets. Rather 'managerial autonomy' is a "Must" and is complementary to academic autonomy for qualitative improvement in system. In fact, it can be exercised by an institution to a significant extent without empowerment by superior infrastructure. The institution has used autonomy not only for curriculum design and implementation but also in various other sectors of its performance. The decisions made and strategies adopted in this regard over the past two years are detailed here. The main feature of autonomy at this institution are listed in Annexure - B.

#### (a) Staff Involvement :

Staff involvement was one of the important features of autonomy at this institute. It was essential to motivate the entire staff of the institution to accept the concept of autonomy and involve them in the thinking and planning process for utilising autonomy from the very beginning to ensure their participation at every stage.

The root cause for building up this major aspect was the LEADER (PRINCIPAL) of this institute and his qualities such as initiative, hardwork, self confidence, courage helpful for decision making and dedication to the cause. How did the staff get involved in this autonomy project ?

It was through :

- Creation of mutual faith in all functionaries;
- Involvement of all the functionaries.

The journey to these two points is diagrammatically represented in Fig. 2.

#### (b) Decentralisation :

Important functions of the departments are to evolve suitable programmes for major and related courses, establish linkages with industries, prepare course materials, develop and implement curriculum, ensure registration of courses, conduct examinations (progressive and continuous assessment) revise courses in tune with the changing technological needs of society and industry.

At Aurangabad, each department has been bestowed the freedom to make all decisions related to the above

- CREATION OF MUTUAL FAITH IN ALL FUNCTIONARIES
- INVOLVEMENT OF ALL FUNCTIONARIES

TRUST IS INTANGIBLE

INTANGIBLE CAN BE  
CREATED BY INTANGIBLE

- Supportive Top Leadership
- Understanding the capacities & capabilities of staff
- Recognising and utilising staff expertise for institutional development
- To reduce negative approaches, reinforce positive attitudes
- Respecting all persons
- Making individuals important
- Clarifying all doubts / queries
- To modify behavioural patterns to achieve objectives
- To practice what is preached and vice versa
- Initiative
- Building teams
- Hardworking
- Courage
- Participative decision making
- Dedication to the cause

Figure No. 2

mentioned functions without let or hindrance from the Principal. On the other hand, Principal's support has always been forthcoming. Thus, each department, has, in a way, worked as an 'institution' & the institution as a 'Federation of Departments'. This has enhanced the performance of the institution through :

- enhanced involvement of staff and faculty in institutional activities.
- participation in decision - making process of a large number of faculty and staff.
- acquisition of decision-making skills.
- optimal utilization of resources such as human resources, media equipment, infrastructural facilities.

- emergence of innovations such as open book examination, conducting expert lecturers, industrial visits, media preparation.

(c) Parents Involvement :

The involvement of parents is being promoted for getting desired outcome from the system. An annual meeting of parents is convened to discuss academic and students developmental activities. Regularly (quarterly, infact) parents are informed about the attendance and performance of their wards. Suggestion given by parents are considered and appropriate action taken, whenever feasible. Also parents are educated on the importance of autonomy and their co-operation in this venture.

No. of parents / teacher meeting	= 02 (Yearly)
No. of parents attending meeting (1995-96)	= 60
No. of letters written in 1995-96	= 2200 (Quarterly to all parents about attendance /performance)
No. of suggestion received	= 10
No. of suggestion considered	= 03
(* Telephone facility in students hostel, * Increased cleanliness in hostel, and * Mess facility for student).	
No. of appropriate action (the first two suggestions)	= 02
* Cleanliness in hostel is now critically monitored by the Warden	
* Providing telephone facility is in progress.	

**(d) Student Involvement :**

Students are deeply involved in the learning designs and their active participation is ensured in various institutional activities.

Some examples are :

- Meeting of new entrants with Principal and Faculty, in groups (every year).
- Guidance & counselling at the time of registration and at least once during term (one teacher for 15 students).
- Selection of optional courses by students.
- Providing feedback on curriculum implementation.
- Open access to Principal, H.O.D. and faculty.
- Open access to main library and departmental libraries.

This has resulted in student performance, attendance and sincerity in the institution being significantly higher

than the state average level.

Number of contact days/year : 200

Number of students having attendance above 80% : 95%

**(e) Innovation in Teaching - Learning Process :**

Innovations in classroom and laboratory instruction are made to reduce the gaps between theoretical knowledge and professional skills needs :

- (i) The inclusion of case studies is done in some courses. And one chapter from each course is designed for self study by students.
- (ii) Laboratory in Industry - this might be the first of its kind implemented in the whole country by any institute. It is difficult to set up all the laboratories in the institute due to diversification of courses / contents and number of courses offered and, hence the resources of industry are drawn upon.

Therefore, the institute has taken

A few examples of the above concept are given below :

S. No.	PRACTICALS	VENUE (WHERE)	SPECIAL FEATURES
1.	WORKSHOP PRACTICE GAS-WELDING	WELDING WORKSHOP (PRIVATE IND.)	- Gas welding practicals in batch of 15 - on its application & procedures. - Rates on contact.
2.	Body & beauty care	Beauty Parlour (Private ind.)	* Practical of all terms, examinations are conducted. * Rated on hourly basis
3.	Civil workshop	Institution Buildings	- Painting class-rooms - Plumbing maintenance

special permission from Directorate of Technical Education (M.S.) Mumbai for conducting / hiring facilities available in industry / organisation in the environment. In fact, the initiative taken by the polytechnic has resulted in a state policy formulation.

This unique concept has helped students to acquire curriculum skills under field condition.

**(f) Continuous Assessment :**

A Continuous Assessment scheme has been developed to promote the acquisition of the stipulated abilities by a student. The key feature of this scheme is the continuous feedback to facilitate his learning. The main objectives of the scheme are :

- To ensure validity, reliability and comparability in the assessment.
- To improve learning by students, through feedback.
- To improve teaching processes by the use of appropriate methods.

The scheme is designed for courses having laboratory experiences where

there is a provision for term work marks. These marks are awarded by teacher on the basis of work done by the students with respect to stipulated ability acquisition during the laboratory experiences.

**(g) Non-Exam Credit Courses :**

Earlier there was little scope to develop the personality of a student, because of low priority assigned to allied education. Unduly high emphasis was placed on transferring technical knowledge to the students. As a consequence the 'technical personality' of the student was dominating the 'total personality' and the development of passouts was lacking in, among other things, confidence, thinking capacity and communication skills.

Now, a wide range of courses are available to the students to develop in dimensions of 'total personality' like Yoga Skill, Music, Photography, Video Shooting, Dramatics, Gardening, Painting, Sports, Spoken-English, Swimming, Indian Classical dance, Two-Wheeler

maintenance, T.V. Servicing, Radio Servicing. The number of students who opted for different courses in 1995-96 was more than that in 1994-95 as shown

in Figure 3. Also the range of such courses broadened.

(h) Interaction with Industry :

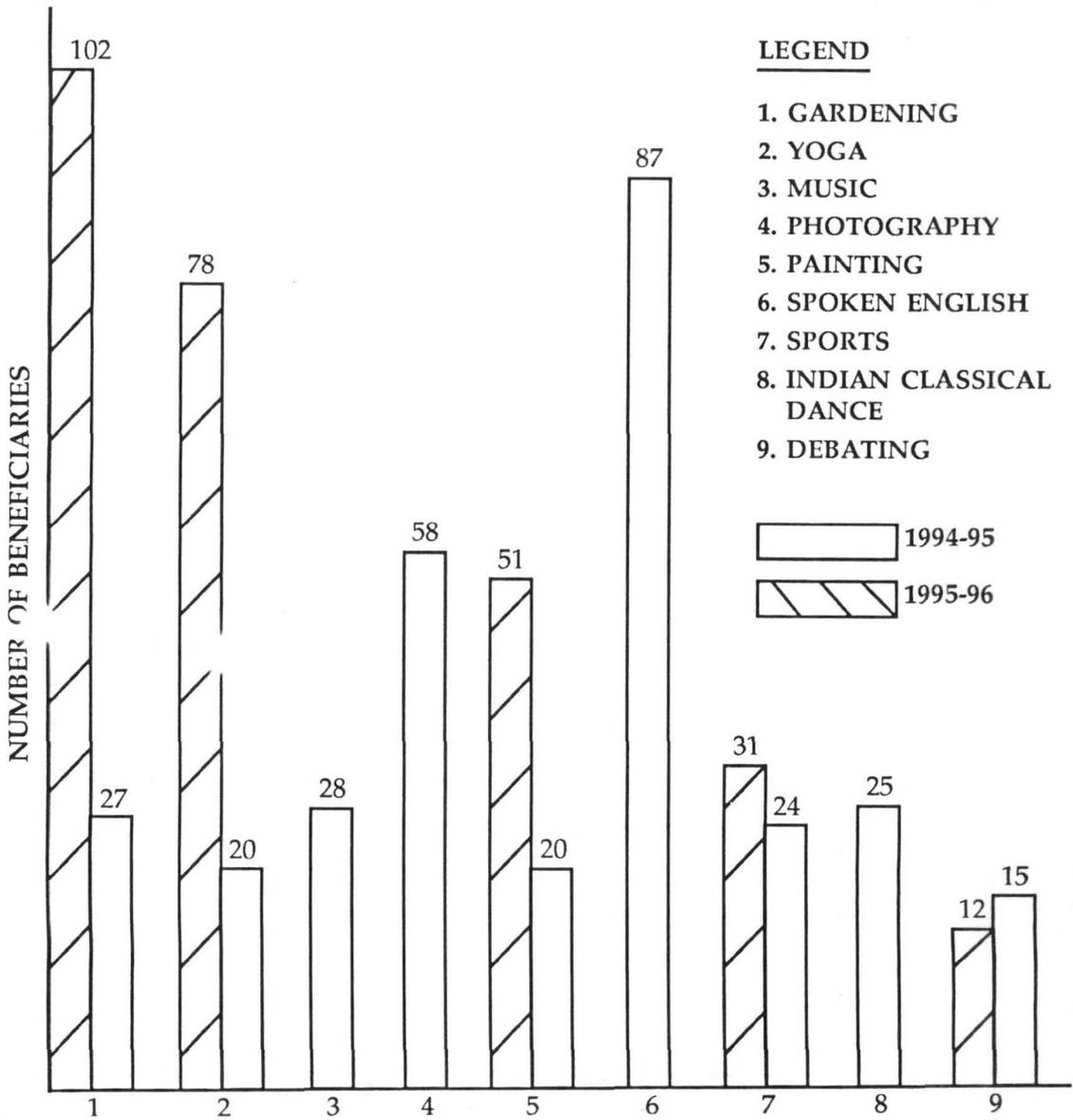


FIGURE - 03

Interaction with industry is now occurring in the following major areas :

- (i) Industrial visits (a regular feature of curriculum design & implementation).
- (ii) Industrial training to students during vacations (2nd term onwards for 15 days).
- (iii) Expert lectures from Industry personnel.
- (iv) Services to industry like material testing, calibration of gauges.
- (v) Campus interviews.

- (vi) Industry involvement in curriculum development (25 experts from industry establishment). The list of industry involved in polytechnic performance enclosed in Annexure - C.

The exposure of students to industry practice and methods has helped them in improving their confidence and orienting themselves to industrial culture and environment.

The number of beneficiaries from various areas of industry interaction is shown in Figure 4.

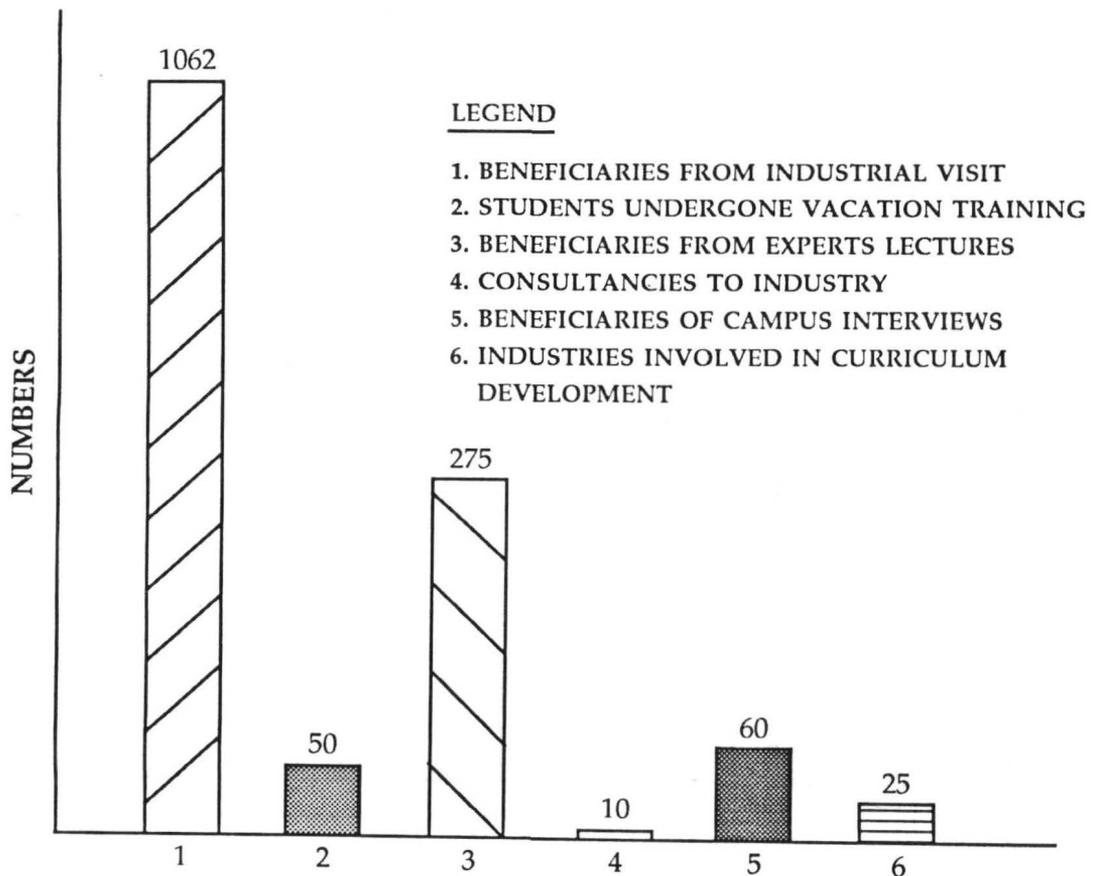


FIGURE - 04

In addition to this, about 200 industries have been identified in Maharashtra (out of which 50 are located in Aurangabad) for enhanced interaction. They are being educated on the new autonomous status of the institute. They are being invited for conducting campus interviews and for participating in curriculum implementations.

**(i) Departmental Library :**

The decentralisation in certain areas is continuing, especially at the departmental level. One such area is library. For effective implementation of curriculum and to provide quick and ready access of instructional resources to teachers and students, departmental libraries have been established. Handbooks, Reference books, IS Codes and Magazines related to each discipline have been transferred to concerned department. A faculty is in-charge of each departmental library and the day-to-day work is looked after by a laboratory technician.

**(j) Training programmes for Students :**

For facilitating the overall development of personality of the student, various training programmes are arranged. These are :

- Entrepreneurship Awareness camp (3 days) (75 beneficiaries in the past two years).
- Personality Development Programme (one week) (Part-time).
- Interview technique (one day)
- Communication (one week - part-time).
- Mock interviews (now for 5th & 6th semester students, in the evenings).

**(k) Examination Cell :**

An examination cell was established in the institute with the following salient features :

- Computerised students' record.
- Schedule for examination and date of results declared at the beginning of term.
- Results declared within 15 days from the last date of examination.
- Guidelines to question-paper-setters.
- Masking of examination numbers on answer books before assessment.
- 10% of answer books are reassessed by external experts for ensuring reliability.
- Question-paper envelopes are opened on the day of examination, typed and after printing, these are handed over to the officer - in-charge.
- During examination, the cell starts working from 6.00 a.m. onwards.
- Result analysis.

**(l) 'Encashing' Practical Outputs :**

Some laboratory experiences are designed with dual purpose. One is to enable students to understand practical application of equipments and procedures. The other is to generate resources through sale of products prepared by students during practicals.

The institute has manufactured / prepared the following goods / products during the practicals which were sold later on.

- Wooden tables.

- Steel tables.
- Wooden chairs.
- Truss
- Flower pots stand (Steel)
- Steel grills
- Dresses

Also some practical experiences such as painting, plumbing are utilised for maintenance & developmental work of the Institute.

**(m) Organisation of Staff Training :**

The institute has conducted wide range of programmes for industry personnel, polytechnic staff and I.T.I. staff during the past two years. The list of programmes with number of beneficiaries is given below :

- |  |      |
|--|------|
| i) Induction Phase-<br>I (long term) - 3 batches               | - 90 |
| ii) Industrial training<br>(Long term) - 2 batches             | - 50 |
| iii) Curriculum Development<br>(Short term) - 3 batches        | - 75 |
| iv) Learning Resources Development<br>(Short term) - 2 batches | - 30 |
| v) A-V aids preparation for<br>I.T.I. Staff - 2 batches        | - 60 |
| vi) Industrial Hydraulics for<br>Industry personnel            | - 12 |
| vii) Computer Operation for<br>Ministerial staff               | - 17 |
| viii) Computer Modules<br>I to IV (4 batches)                  | - 40 |
| ix) C. N. C. Machine Operation<br>1 batch                      | - 20 |

Such programmes not only utilised the human resources of the institute but also helped in confidence building of

teachers and implementation of developmental activities of the institute.

The faculty of this institute has also contributed as guest faculty, during I.S.T.E. programmes, Induction Phase - I and programmes of other institutes.

**(n) Deputation of Staff for Seminars and Conferences :**

Staff of the institute is deputed for seminars and conferences organised by different organisations. This has provided impetus to many institutional development activities. In the past two years, staff was deputed for :

- International Conference for Technical Education held at Mumbai (Dec. 1995).
- National Conference on 'Vocation Training' held at Delhi (Oct. 1996).
- Seminar on Import - Export Management (3 days)
- Seminar on Environmental Issues (one day)
- Seminar on Entrepreneurship Development Programme (one week).
- Leadership Development (3 days)

**(o) Internal Monitoring of Curriculum Implementation :**

A mechanism is established in the institute. Written feedback is collected from students and staff on the curriculum implemented in class-room and laboratories and conduct of examinations. On the basis of analysis carried out by a Monitoring Committee comprising of Heads of Department and faculty-in-charge of CDC, necessary measures are taken.

**(p) Semester Pattern (Term Pattern) :**

The term pattern (semester) is adopted by the institute. It has resulted in students becoming more learning - oriented. Students have become more sincere and hardworking and their attendance and participation in curricular activities has gone up significantly.

**(q) Innovative Bullock-Cart for Product Transport :**

The institute has designed a new bullock-cart for DILASA a Non Government Organisation (NGO) with the primary aim of assisting farmers to transport agricultural produce to markets. This was designed by faculty of the institution and fabricated in the institutional workshop. This new bullock-cart effects about 35% reduction in the weight of the cart without any reduction

in capacity. This project was undertaken on a no profit basis and has been a tremendous success. DILASA has requested the polytechnic to fabricate special purpose water tanks for use in rural locations. This is a direct result of the acceptance of the community as a real stakeholder of the institution.

**5. DEVELOPING EXTERNAL LINKAGES**

The number of stakeholders have increased since autonomy was granted to this institute. The linkages of institute with stakeholders is illustrated in Figure 5.

The area of interaction with different stakeholders are, curriculum development, student development, staff training, campus interviews, industrial visits, resources procurement, expert lectures, learning resources development,

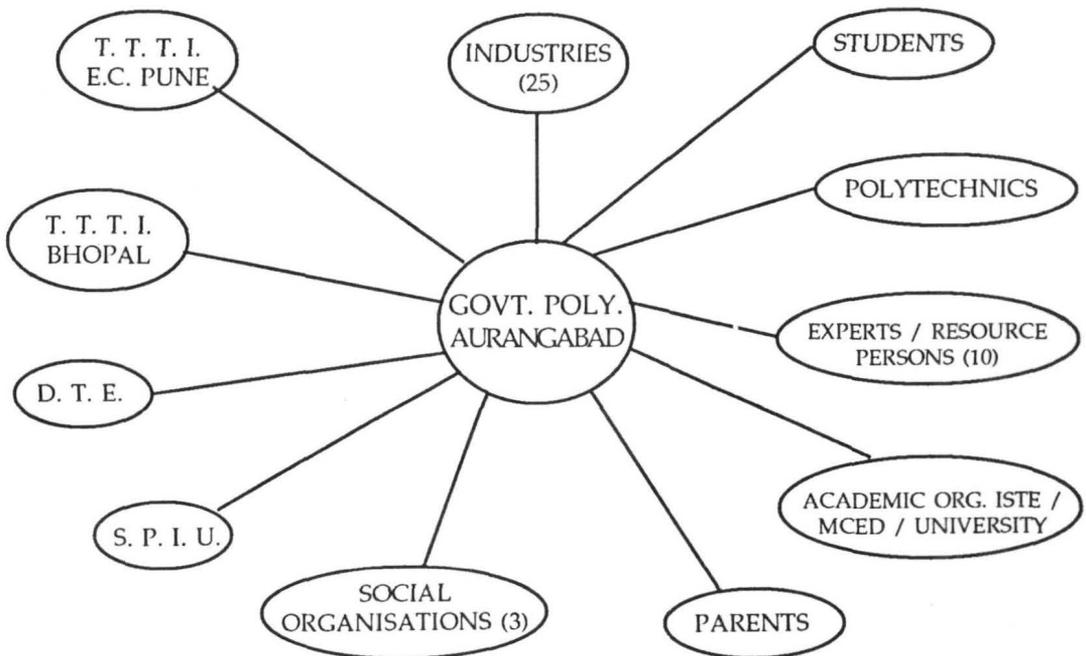


FIGURE - 05

curriculum implementation, examination etc. Over the past two years, the linkages with stakeholders are both broadening and strengthening.

## 6. CURRICULUM DESIGN & IMPLEMENTATION

The basis for curriculum design at this institute are major skills and functions that a diploma engineer is supposed to perform in his/her professional life.

The model of curriculum design is as shown in annexure - D. The following are the three major aims of curriculum design :

- To minimise the gap between institutional life and industrial life (in respect of practical & theoretical knowledge)
- To design laboratory experiences in tune with professional needs.
- To develop the overall personality of the student to suit individual, industrial and social needs.

The main features of the curriculum are :

- Curriculum designed at five levels viz. Foundation, Basic, Allied, Applied and Diversified courses.
- Practical Orientation to courses.
- Practical (professional) orientation to laboratory experiences.
- Compulsory industrial visits (IIInd and IVth terms weekly).
- Non-examination credit courses.
- Credit system.
- Guidance for curriculum implementation.
- Flexibility (more optional courses).

The active participation of 42 experts (25 from industry) has helped the CDC of the institution in developing the curricula for various programmes.

Programme flexibility helps the institute to design and offer courses as per the needs of industry and society. Further, students have the freedom to select / opt for courses of their interest. Also, diversified courses are offered in a particular programme and specialisation is possible. Since special needs of industry are catered to, the passout of the polytechnic is generally well qualified to enter the World of work.

The level-wise and programme-wise credits are as shown in Figure 6 (a) to 6 (f). The extent of flexibility to the students is as mentioned in Figure 7.

## 7. CERTIFICATION OF STUDENTS

The project is implemented along-with programme flexibility through multipoint entry and credit system. A student has to acquire 180 credits (120 for DERE) for becoming eligible for the award of a diploma.

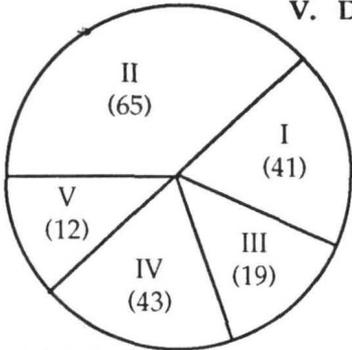
For awarding class (at present for DERE only) the marks obtained by the student in courses at applied & diversified levels are considered. After successful completion of diploma programme (i.e. earning 180 credits), diploma is awarded by the institute.

## 8. INTERNAL RESOURCE GENERATION

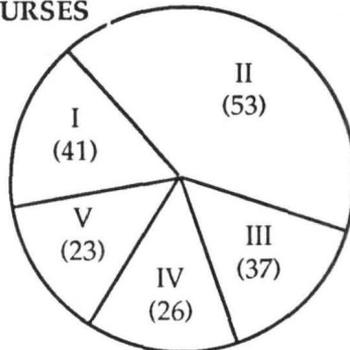
Internal Resource Generation (IRG) is an area in which institute is striving very hard to show progress. Resources are being generated through :

- Continuing Education Programme for industry

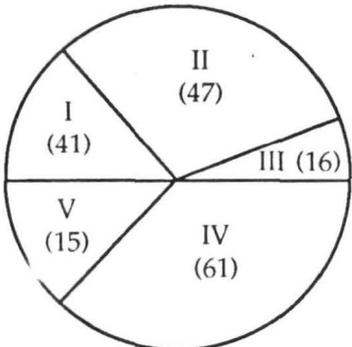
- I. FOUNDATION COURSES
- II. BASIC COURSES
- III. ALLIED COURSES
- IV. APPLIED COURSES
- V. DIVERSIFIED COURSES



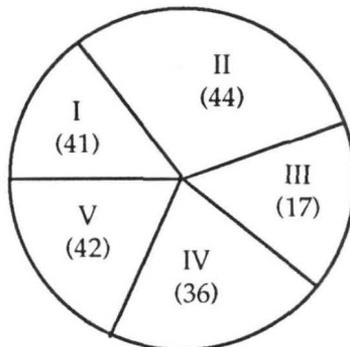
6 (a) CIVIL ENGINEERING  
TOTAL CREDITS : 180



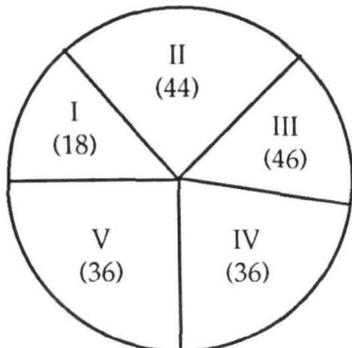
6 (b) MECH. ENGINEERING  
TOTAL CREDITS : 180



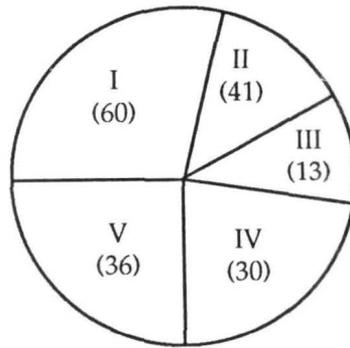
6 (c) ELECTRICAL ENGINEERING  
TOTAL CREDITS : 180



6 (d) IND. ELECTRONICS  
TOTAL CREDITS : 180



6 (e) DRESS DESIGNING & GARMENT  
MFG. TOTAL CREDITS : 180



6 (f) ELECTRONICS & RADIO  
ENGINEERING TOTAL CREDITS : 180

FIGURE - 06

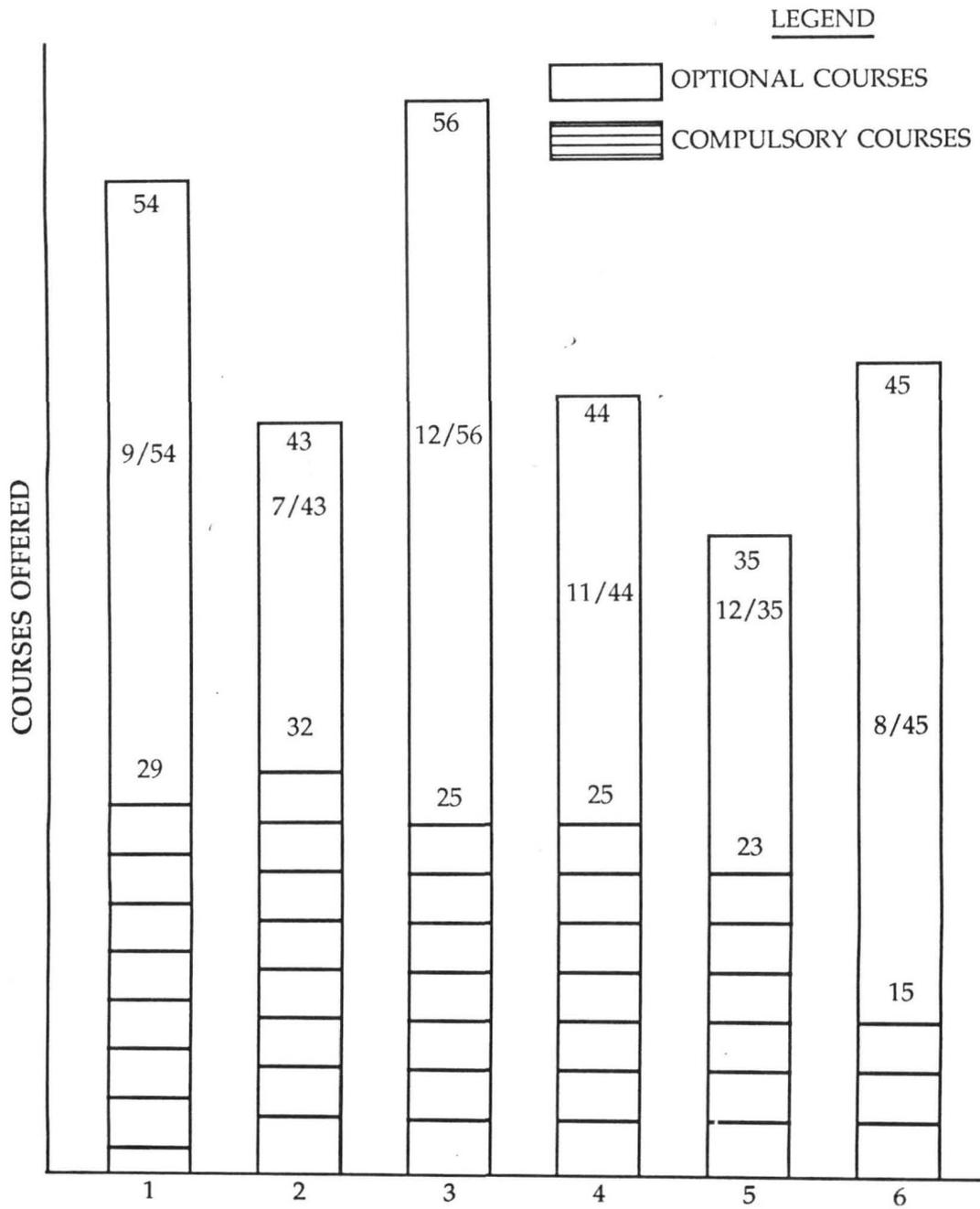


FIGURE - 07 : COURSES IN DIFFERENT PROGRAMMES

- Short-term Computer Programmes for General Public
- Staff Development Programmes
- Material Testing & Repairs
- Sale of Publications
- Consultancy Services to Industry / Society
- Sale of Products (Prepared during practicals)
- Students Project.

The institute has also made 100 industries aware of the potential available in the institute for mutually - beneficial activities - it has also planned to establish a "TEST HOUSE" in the institute. The ITI cell is busy in identifying the continuing education requirements and consultancy services required by industry surrounding the institute.

## 9. MAJOR ACHIEVEMENTS SINCE BECOMING AUTONOMOUS

### (a) Internal Autonomy :

Since 1994 when the polytechnic was accorded autonomy, there has been a continuously growing trend towards internal autonomy, exercised not only by the institution but also by functionaries at different levels. The major outcomes of actions that have resulted in this shift in institution governance and management are :

- inclusion of faculty in different committees set up in the institution as part of its governance structure (Publication Cells, Equivalence Cell, Continuing Education Cell, III Cell).
- all academic decisions have been delegated to Heads of Departments. In making such decisions, a heavy involvement of departmental faculty is ensured.
- by and large, decision related to participation in seminars, conferences and to serve as resource person to other organisation, are made by the faculty itself.
- faculty has been empowered to visit industries using the institute vehicle, collect learning resources or information for preparing Learning Resources (LRs) and distribute LR's to students.
- faculty and in many instances the technical laboratory staff have been provided the freedom to purchase item required in laboratories, upto Rs. 500, at a time.
- Departmental libraries have been established and the departments are empowered to procure appropriate books and journals.

### (b) Promotion of Passout Employment :

The institution has accepted students as a most significant stakeholder and has assigned a very high priority to their need for obtaining employment, soon after completing the diploma programme. The actions that have been taken in this regard are :

- significant enhancement in the number of campus interviews. During 1995-96, five major and medium - scale industries selected 50 students through campus interviews (the target for 1996-97 has been set for campus interviews by 20 industries and for selection of 100 students).

- a full-time T.P.O. is in position with a well-equipped section to improve institutional performance in this vital sector.
- training of students, beyond curriculum, in appearing for interviews, including acquiring communication skills. In 1995-96, every student in the institution had an opportunity to be a 'mock' interviewee. This activity will be continued and infact intensified since practice-feedback cycle is the only way to acquire interview skills.
- conduct of Entrepreneurship Development Programmes by HRD consultants to promote self employment ventures by passouts. Seventy-five students took advantage of such programmes in 1995-96. Efforts to improve the effectiveness of such programmes have been initiated this year.
- learning laboratories have been shifted from institution premises to industry and other field locations and are now being utilised in a unique way, where the 'trainers' are mostly field professionals and the students demonstrate skills they are expected to acquire. A by-product of this approach is the performance of institutional tasks that are normally performed on payment basis by external agencies.

**(c) Industry-Institute-Interaction :**

The establishment of intimate and effective linkages with industry has been supported by the accord of autonomy. The variety of linkages is indicated by the diverse ways in which industry is

participating in the governance of the institution and in the various facets of curriculum design and implementation. These are :

- Membership in the Board of Governors (5 out of 10).
- Membership in the Board of Studies (Chairman is from industry as also four members).
- Contributions to the deliberations of programme-wise committees (15 industry experts).
- Expert lecturers (About 7 extension lecturers by industry experts and around 300 subject lecturers by industry professionals).
- Guidance to student trainees in industry (all students avail of this provision, two weeks between terms i.e. four time during their diploma studies).
- Campus interviews.
- Guidance in industry - based practical - currently 30 industries are participating in this academic activity related to 3 diploma programmes. About 20% of laboratory work in these 3 programmes are industry - located and efforts are on to increase this proportion to 30% and to extend the activity to the other 3 programmes.
- Currently 10 industries are taking advantage of the consultancy services offered by the institution. The target for the next three years is an increase of 50% annually. In this regard, 200 industries have been educated on the institutional potential and the autonomy the institution enjoys. Further, dialogue has

been initiated.

**(d) Promotion of Media Usage :**

The significance of media usage in learning is no longer in doubt. The institute has achieved significant progress in this area :

- a) A media room fully equipped and operational is now available. Infact, the utilisation factor of this room today is over 90%.
- b) Each of the six departments has an OHP and this is being used most of the time.
- c) Learning Resources are being produced by the LRUC and transferred to departments to enhance accessibility. In 1995-96, over Rs. 35000 worth of Learning Resources were produced.
- d) LRUC has a computerised inventory of LRs.
- e) A beginning has been made in the preparation of LRs in 1995-96, 2 video programmes and about 10 transparency sets were prepared. Work in this area will be intensified.
- f) Over 30 faculty of the institution have been trained in the preparation and use of LRs.

**(e) Linkage with External Resource Persons :**

Effective linkages have been maintained with external resource persons in the substantive environment of the polytechnic. These linkages include activities like :

- Conduct of personality development programmes from experts in

society.

- Services to DILASA - an NGO.
- Education of user systems through an institution - developed video programme.
- Blood donation by students, staff and faculty.
- Professional services offered to external organisations.
- Joint projects and ventures.

**(f) Documentation of Innovation :**

The polytechnic has realised the importance of documenting its experiences with the introduction and utilisation of autonomy and the interest that would be shown by other educational institutions in this experiment. So, it has started preparing and publishing all documents within the institutional itself and to facilitate this, a publication cell too has been established. It is gratifying to note that the institutional publications have made the experiment 'open' and available to all interested organisations. Even persons in their individual capacities have purchased institutional documents.

The documents published are :

1. Implementation of autonomy at Govt. Polytechnic, Aurangabad.
2. Curriculum (for all programmes)
3. Progress Reports.
4. Prospectus.
5. Learning Materials (handout) for computer science course).
6. Certificates (for training programmes).
7. Application forms for admission to Part-time Diploma Programmes.

The document have purchased by :

1. Autonomous Polytechnics of Maharashtra.
2. Government, Aided and Private Polytechnic.
3. Engineering Colleges, Universities and other Educational Institution.
4. Polytechnic teachers.
5. Persons interested in technician education.
6. Students.

**(g) Internal Resources Generation (IRG) :**

The institution has been keeping in mind the need to generate resources for growth and development of the institution. The sources of IRG are :

- Need - based continuing education programme especially for acquisition of skills, for industry personnel.
- Short term programmes in areas like use of computer software, repair of electrical fixtures and gadgets to general public.
- Conduct of induction and other staff development programmes for faculty / staff of M.S. polytechnics.
- Testing and repairs for 10 industries.
- Sale of Documents / Publications.
- Consultancy services to industry / society, including design and fabrication of special purpose equipment.
- Value of products from practicals.

The IRG for 1995-96 was Rs. 2 Lacs. This shall definitely show increasing trend in the years to come.

**(h) Changing Role of the Institution :**

The accord of autonomy to the institution has served as a 'tonic' to the functionaries, methods of thinking and actions. No longer do they consider themselves only individuals but as part of teams, all utilising the scope and privilege to contribute to the success of the experiment, to the signal achievements of the past two years and to lead the institution in to becoming a Centre of Excellence. In fact, the institution has derived, through faculty and staff a Mission Statement.

**MISSION STATEMENT**

*TO CREATE MULTIDISCIPLINARY BASED CITIZENS TO SUIT THE LOCAL, STATE, NATIONAL AND INTERNATIONAL NEEDS HAVING SCIENTIFIC TEMPERAMENT, MORAL, ETHICAL VALUES AND MULTIFACETED, PROACTIVE PERSONALITY BY PROVIDING EXCELLENT EDUCATIONAL SYSTEM.*

The additional role dimensions that have now become part of the institutional role are :

- to communicate with other teams and individuals, to prevent gaps and overlaps.
- to enhance 'practicals' orientation of all diploma programmes.
- to evolve and install passouts employment system in the institutions.
- to sustain and strengthen mutually - beneficial linkages with industry including sharing of resources.
- to develop a Mission Statement and appropriate objectives for the institution for the twenty first century

and to strive for the achievement of objectives.

- to promote decentralisation of decision-making and, consequently, to enable functionaries to assume greater responsibilities.
- to document implementation of experiment both to make the experiment 'visible' to all and to disseminate achievements to society at large
- to generate resources for institutional growth and development.
- to reformulate role of the institution on an annual basis to cope with the changing internal and environmental scenarios.
- to promote team building.

#### ANNEXURE - A

#### MAJOR ROLES OF VARIOUS BODIES / COMMITTEES

1. **Governing Body** : This body is responsible for all academic and other administrative affairs of the institution such as framing of academic policies, approving curricula, regulations etc.
2. **Board of Studies** : Board of Studies is responsible for prescribing and recommending the curricula for various courses / programmes.
3. **Programmes Committees** : They are to design curricula for various courses, reviewing & updating curricula as per requirements from time to time and introducing new courses.
4. **Examination Committee** : This will recommend panels for appointment

of examiners for the end - of - term examination, ensure conduct of examinations, announce results and carry out certification of passouts.

5. **Special Committee** : This will decide action to be taken in cases of misbehaviour of students in examination work.
6. **Planning Committee** : This committee is to prepare the five - year and annual academic & developmental plans of the institute.
7. **Evaluation Committee** : The role is to monitor curriculum implementation and to suggest remedial measures.
8. **Equivalence Committee** : This committee will grant exemption to courses and decide equivalence of courses.
9. **Grievance Committee** : This will handle all grievances and recommend solutions / actions.
10. **Guidance & Counselling Committee** : This committee is to lay down policies for the guidance and counselling of students related to selection of courses / career options and other situations.

#### ANNEXURE - B

#### MAIN FEATURES OF AUTONOMY AT GOVERNMENT POLYTECHNIC, AURANGABAD

- Multipoint entry, flexibility and credit system
- Staff involvement
- Supporting top leadership
- Departmental decentralisation
- Parents involvement

- Students involvement
- Innovation in teaching learning process
- Continuous assessment
- Non - exam credit courses.
- High interaction with industry and society
- Departmental library
- Wide range of training programmes for student's overall developments
- Efficient examination system
- Results declared within 15 days after examination.
- Development of inter-disciplinary and inter-level teams.
- 'Enhancing' the outputs of laboratory and workshop assignments
- Design and implementation of wide range of training programmes for industry and staff.
- Active involvement of industry personnel in curriculum development
- Deputation of staff for seminars and conferences
- Intimate linkages with various stakeholders
- Practical orientation to courses
- Compulsory industrial visits
- Practical orientation to laboratory experiences.

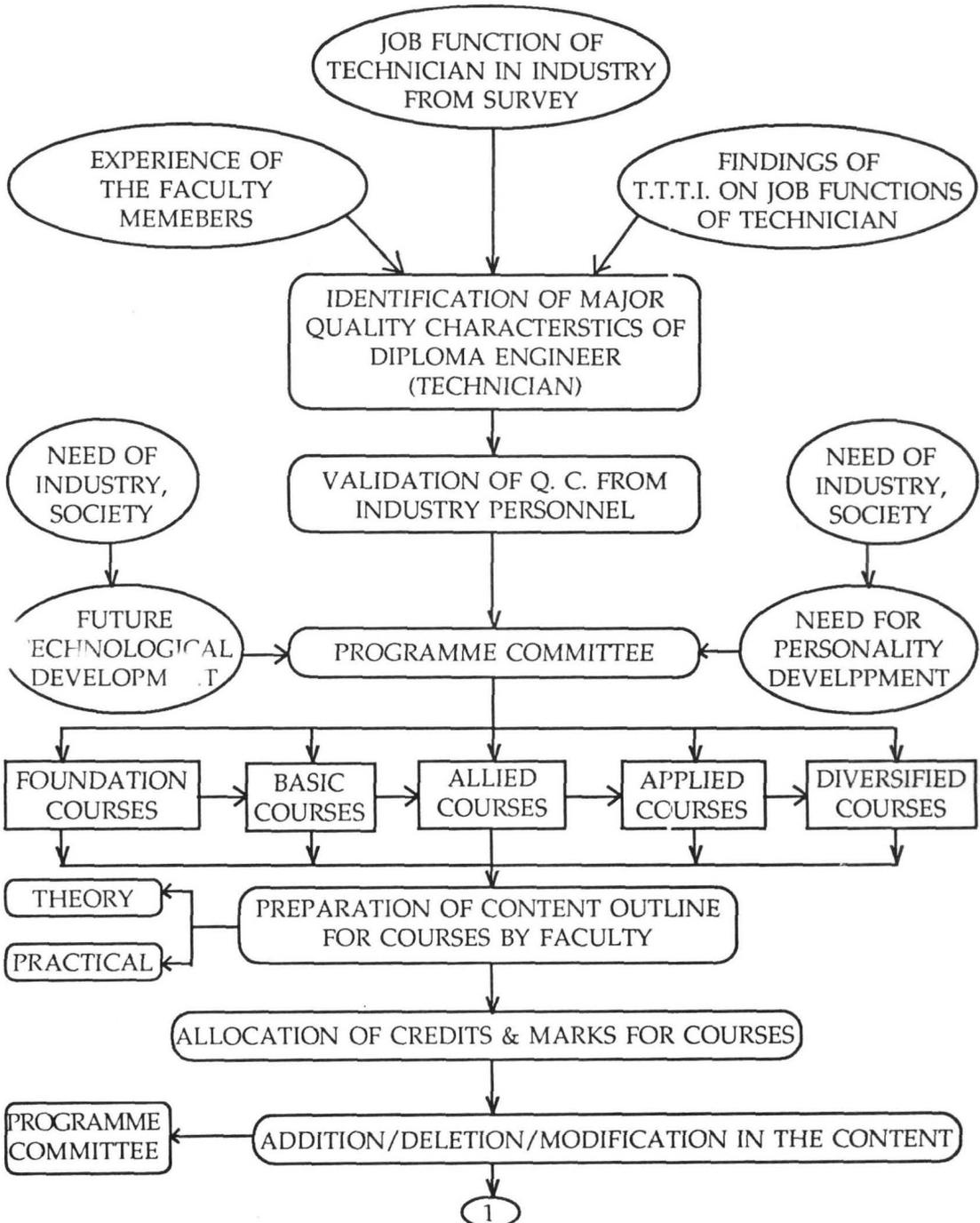
- Diversified courses
- Choice of courses open to students
- Internal monitoring of curriculum implementation.

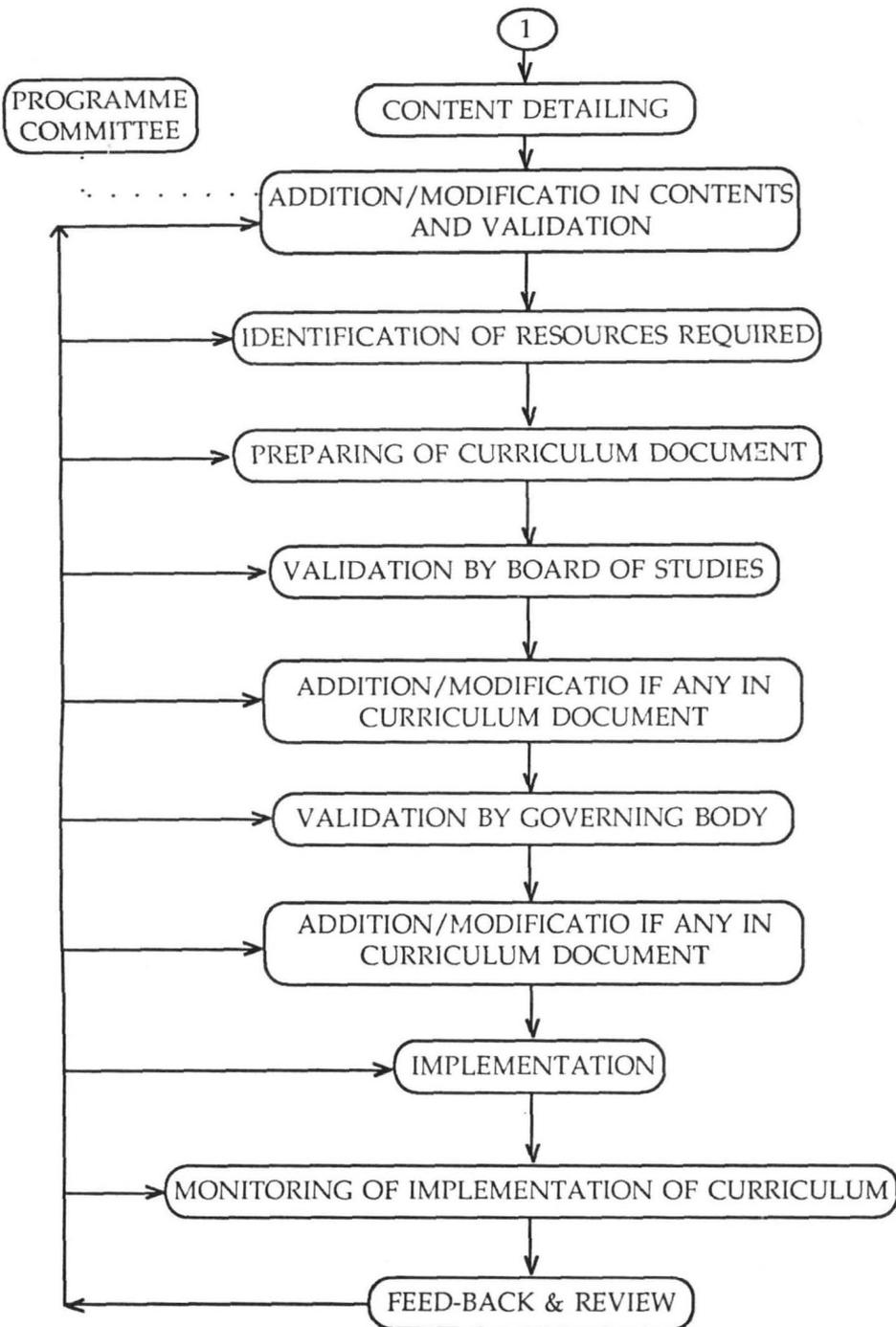
#### ANNEXURE - C

#### LIST OF INDUSTRIES AND NUMBER OF PERSONS INVOLVED IN CURRICULUM DEVELOPMENT

1. Bemco Slippers, Aurangabad	01
2. Garware Polyester, Aurangabad	01
3. Nirlep Industries, Aurangabad	01
4. District Industry Centre, A'bad	01
5. Varma Associates, Aurangabad	01
6. Gleitagor (India) Ltd, Aurangabad	01
7. Luans Industries, Aurangabad	01
8. Meltron, Aurangabad	01
9. Godavari Garments, Aurangabad	01
10. WALMI, Aurangabad	02
11. M.S.E.B., Aurangabad	02
12. Deepa Chemicals, Aurangabad	01
13. Videocon International, A'bad	03
14. Forbes India Ltd., Aurangabad	02
15. Architech & Consultant, A'bad	03
16. Bajaj Auto Ltd., Aurangabad	02
17. Thakare Tailoring, Nagpur	01

ANNEXURE - D  
CURRICULUM DEVELOPMENT





MODEL ADOPTED BY GOVERNMENT POLYTECHNIC, AURANGABAD.

