APPENDIX D

SET OF TOOLS

TECHNICAL TEACHER'S TRAINING INSTITUTE, CHANDIGARH

(Use as cover-page with all the questionnaires)

We at TTTI, Chandigarh are conducting a study to determine the "Organizational Effectiveness" of the polytechnics. The information gathered will help the polytechnic managers to evaluate their performance and plan strategies for carrying out actions to achieve the goals and objectives laid down by the funding agencies i.e. the Government and the society.

The indicators of organizational effectiveness are conceived to be Instructional process, Resource utilization, Staff development and deployment, Students personnel administration, Institutional administration and Institutional climate.

The attached questionnaire contains several statements under each of the above indicators. You are requested to read each statement carefully and mark a tick in the appropriate column against each statement for recording your state of agreement or disagreement. The explanation of abbreviations used is as follows:

SA : Strongly Agree

A : Agree

D : Don't know or no comments

DA: Disagree

SDA: Strongly Disagree

This is purely an academic activity and findings will be published in the form of a generalized report. You may feel free to express your point of view. Your identity will be kept confidential for all practical purposes.
PERSONAL BIO - DATA OF THE RESPONDENT
(Applicable to Principals and Teachers only)

Name of the Polytechnic

Branch of Engineering

Your name

Present post held

Date and Designation at entry level

Total Experience

Age in years

Academic Qualification: High school / Higher Sec. / B Sc. / M.Sc.


Industrial Experience (if any) ------------ yr. at ---------------------------------
as -----------------------------------------------

No. of short term courses attended so far:

<table>
<thead>
<tr>
<th>Name of the STC</th>
<th>Duration</th>
<th>Venue</th>
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Details of Industrial Training:

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<tr>
<th>Name of the organization</th>
<th>Duration</th>
<th>Remarks</th>
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Details of extra curricular activities:

1.
2.
3.
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5.

Details of awards / merit certificates earned:

1.
2.
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Present weekly engagement (40 hrs/wk)

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<th>No. of hrs/wk</th>
<th>As a coordinator/</th>
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<tr>
<td>Devoted</td>
<td>Assistance</td>
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</table>

- Academic
- Extra Curricular
- Administrative
- Any other *

Any other area to be highlighted
EXPLANATION OF TERMINOLOGY USED IN QUESTIONNAIRES FOR 
STUDY OF ORGANIZATIONAL EFFECTIVENESS OF POLYTECHNICS 
(to be attached with the questionnaires)

A. Instructional Process:
Teaching-learning process for development of desired capabilities in the students.

World of Work
All areas where a diploma holder may seek employment e.g. manufacturing, Sales and servicing, R&D, Teaching, contracting etc.

Curriculum Relevancy:
The curriculum is the main document which describes objectively the contents of the course and details out the implementation, evaluation and certification procedures. A curriculum should be relevant to the future needs of the diploma holders with respect to new procedures, materials and machines.

Curriculum Sufficiency:
 Sufficiency in respect of wide coverage of probable areas of employment.

Curriculum Clarity:
The boundary and depth of treatment of each topic should be spelled out clearly for the guidance of students and teachers.

Curriculum Feasibility:
Many a times a curriculum is so ambitious that it’s objectives can not be realised with the existing facilities at polytechnics.

Planning for teaching:
A teacher has to plan his lessons and arrange required facilities in advance.

Teaching Process (style / approach)
A teacher may organize his class with either teacher-centered activities or student centered activities.
Teaching Environment:
The classroom environment, instead of being tense should be amicable where students feel free to participate actively in teaching-learning process.

Classroom Evaluation:
A teacher evaluates whether all the objectives of teaching-learning have been achieved by the students and adopts corrections (if any) in his next class.

Teaching Methods:
A teacher has to use different teaching methods e.g. lecture, demonstration, project, group discussion etc. for teaching. The choice of the method will depend upon the topic itself.

Use of Multimedia:
Different audio-visual aids should be used judiciously to make teaching more effective.

Self Learning Skill:
One of the main objectives of teaching and training is to develop the skill of self learning amongst the students which is helpful to them in developing certain skills and attitudes through self study. Teacher first explains basic principles and concepts and then asks students to prepare the topics themselves. Students later make presentations through seminar or group discussion for collecting the feedback of their performance.

Formative Evaluation:
Feedback collected during the semester through class tests, assignments, projects etc. It is used to monitor learning progress during instruction.

Summative Evaluation:
Summative evaluation of student’s learning through end-term examination, helps in grading or certification of students’ achievement.

Laboratory Instruction:
Different objectives of conducting practicals can only be achieved if students perform practicals themselves.
B. Resource Utilization

Building Adequacy:
The size of the building should be adequate to hold academic and other activities comfortably.

Furniture Availability:
Right furniture in required quantity for classes, laboratories, library, office etc. is essential for carrying out different activities.

Equipment Availability:
Latest equipment in working condition is essential for conducting practicals.

Equipment Adequacy:
Many times several of the experiments can not be performed due to shortage of desired equipment.

Building Maintenance:
Appropriate Building maintenance keeps the building functionally fit.

Funds Availability:
Many planned activities are not taken-up due to shortage of funds.

Time Management:
The time-table and working days should be effectively managed in such a way so that students get enough time for learning various skills. This can be achieved if all classes are engaged as per time table and there are no mass cuts by students.

C. Staff Development and Deployment

Optimum Utilization of Staff:
Some times teachers are given more than desired teaching load and that becomes a cause of inefficiency in teaching. Many times, due to shortage of staff, teachers are given such subjects which are quite new for them and no guidance / training is provided to them for preparing that subject.
Extra Curricular Activities:
Extra curricular activities e.g. sports, cultural events and competitions, for overall personality development are very important, but there should be a proper blending of academic activities with such activities.

Administrative Activities:
Staff generally helps polytechnic principals in various administrative activities but it should not happen at the cost of their teaching work.

Staff Development Programme:
Polytechnic teachers are sponsored for attending various training programmes for exposure to new areas and learning teaching skill.

Action Research:
Teacher takes up a practical problem related to his area of interest of teaching, works out a solution, tries it and evaluate it for further modification.

Innovations in Teaching:
To tryout new methods and media in teaching in order to make it more effective. Teaching theory in the laboratory by integrating theory and practice, project method of teaching, computer aided instructions etc. are few of the innovative methods of teaching.

Instructional Material Development:
A teacher should develop appropriate type of instructional material for the benefit of his students. Instructional material could be both print and non-print.

Industrial Training:
Periodical Industrial training of teachers is a must for their exposure to industrial atmosphere and procedures and practices followed there.

D. Students Personal Administration:
The administrative activities which deal with sessional records, result tabulation and timely declaration, intimation of results to all concerned, arranging students training and placement, welfare etc.
E. Institutional Administration:

The polytechnic principal being administrative head of the Institution has to undertake all the managerial functions such as planning, organizing, staffing, leading and controlling. The effectiveness of these activities can be measured by knowing the perception of concerned people (constituents) in respect of adequacy of planning, staff participation in planning, delegation of power, freedom, flexibility, accountability, new projects, efforts made for internal resource generation, industry-institute interaction, continuing education programmes, enterprise development programmes, Community development programmes, and accountability.

F. Institutional Climate

The organizational effectiveness of a polytechnic is reflected by the institutional climate which should be growth oriented, satisfying and motivating for hard work. Every staff and student should feel himself a part of the polytechnic and make their best efforts to bring glory and name to the polytechnic.
QUESTIONNAIRE FOR PRINCIPALS

A: INSTRUCTIONAL PROCESS

Curriculum Relevancy
1. The contents of the present curriculum of Electrical, Mechanical and Civil Engineering courses are in accordance with the requirements of the world of work.

Curriculum Sufficiency
2. The topics in the curriculum of above branches are covering all the probable areas of employment of technicians.

Curriculum Clarity
3. The breadth and depth of treatment of each topic in the curriculum document is clearly defined.

Curriculum Feasibility
4. The course content in each subject is realistic and it is possible to teach these topics effectively in the given time.

Planning For Teaching .(Teacher preparation )
5. The teachers plan their lessons before hand and organize their classes in an effective manner.

Teaching Process
6. The teachers mostly undertake teacher centered activities (chalk and talk method) in the classes where students participation is minimal.

Teaching Environment
7. The students are encouraged for interacting with the teacher in the class for their effective learning.

Teaching Evaluation
8. Every lesson is evaluated by the teacher after the class by way of asking questions or through small tests and the feedback is used for further improvement.

Teaching Method
9. Most of the teachers select appropriate teaching method such as lectures, demonstrations, group discussion, project, assignment etc. while teaching a subject.

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<th>D</th>
<th>DA</th>
<th>SDA</th>
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</table>

1. For explanation of terminology used in the questionnaire, kindly see the annexure attached herewith.
2. Mark a tick in the appropriate column showing your level of agreement or disagreement with the statement
   SA: Strongly Agree,  A: Agree,  D: Don't Agree ,SDA: Strongly Disagree
Use of Multi-media
10 Use of multi-media e.g. OHP transparencies, video films, charts, models etc. is a common feature in class room teaching.

Self Learning Skill Development
11 Some topics out of the given syllabus are first introduced by the teacher and then assigned to students for preparing at home to encourage them for self learning.

Formative Evaluation
12 Three class tests are conducted every semester for evaluation of students' learning.

13 Objective type questions or quiz are used for evaluation of students' learning.

Summative Evaluation
14 Mostly the question papers set in theory examination are focused on testing of students' memory.

Laboratory Instructions
15 Every student is fully involved in planning and conducting of experiments and analysing the results while working in laboratories.

16 Most of the exercises in the workshop are generally demonstrated by the instructors to the students in their practical classes.

17 The teacher tries to correlate theoretical information with laboratory experiments in their practical classes.

18 No useful practical skills are developed in students through laboratory/workshop instructions.

B. RESOURCE UTILISATION

Adequacy Of Building
19 The building & open space at the polytechnic is enough to hold various activities comfortably.

Furniture Availability
20 The existing furniture in class rooms and laboratories is inadequate.
Equipment Availability
21 Most of the equipment in our laboratories are outdated/out of order and need immediate replacement.

Equipment Adequacy
22 Many of the experiments in the laboratories are not performed due to non-availability of desired equipment.

Building Maintenance
23 The building and other facilities at our polytechnic are very badly maintained.

Funds Availability
24. It is very difficult to get necessary funds for carrying out planned activities from the directorate in time.

Time Management
25. The classes are held regularly without any mass-cuts and complete syllabus is taught in each class.

C. STAFF DEVELOPMENT AND DEPLOYMENT

Optimum Staff Utilization
26. There is inefficiency in teaching-learning because teaching staff has generally to engage more than normal teaching hours per week.

27. Some of the teachers have been given such subjects for which no proper training has been provided to them.

Extra Curricular Activities
28. Mostly staff is engaged in extracurricular activities at the cost of their academic work.

Administrative Activities
29. The staff of this polytechnic helps the principal in several of administrative jobs.

Staff development Programmes
30. The teachers are given enough opportunities for attending staff development (training) programmes.

31. Some of our teachers are not competent to teach practical subjects such as estimating and costing, design and drawing, repair and maintenance etc. because of inadequacy in their basic training.

Action Research
32. Several of our teachers have undertaken action research on relevant topics.
Innovation in teaching
33. The atmosphere in the polytechnic is very conducive for undertaking innovations in teaching-learning process.

Instruction material development
34. Most of our teachers are actively involved in instructional material development.

Industrial Training
35. There are enough opportunities for our teachers to undergo industrial training.

D. STUDENTS PERSONNEL ADMINISTRATION

Seasonal Records
36. There is a very dependable record keeping and reporting system of students' sessionals.

37. The award of sessional in the class is based on actual performance of students in respect of class test, home assignment, attendance, etc.

Result Declaration
38. Progress of students is informed to them regularly and timely.

Training of students
39. The training and placement department is working very effectively in arranging training of students, staff and placement of final year students.

40. Guidance and counseling to students about employment is provided at Polytechnic.

E. INSTITUTIONAL ADMINISTRATION

Adequacy of planing
41. All the plans and policies for long term and short term projects and activities are formulated by the principal as per Government norms.

Staff Participation
42. The concerned staff members are associated in the planning of projects and other activities.

Delegation
43. Every staff member is explained his role in implementation of various projects and given well defined responsibilities.
Freedom
44. There is great degree of academic freedom to each staff member.

Flexibility
45. Planned activities (academic and extra-curricular) do not suffer due to rigid rules and regulations.

Accountability
46. Each staff member is held accountable for academic achievements of students in his subject.
47. Every teacher makes special efforts to develop desired technical skills amongst the students which will make him a successful technician engineer.

New Projects
48. There are number of new projects undertaken every year but only a few of them are completed.
49. Each staff member is actively involved in one or more developmental projects.

Internal Resource Generation
50. The polytechnic management gives lot of emphasis on internal resource generation.

Industry-Institute Interaction
51. Most of the teachers have very effective interaction with the industries.
52. There are many consultancy projects in hand where we are helping industries in solving their problems.

Continuing Education Programme
53. Polytechnic is conducting continuing education programmes for working professionals through part-time classes.

Development of Entrepreneurial Qualities
54. Entrepreneurship development programmes conducted for students of final year are very effective.

Community Development Programmes
55. The community development activities at our polytechnics are given due weightage and are effectively organized.
F. INSTITUTIONAL CLIMATE

Conducive Climate
56. Keeping in view the managerial skills and efforts I put into the job, the emoluments and facilities provided to me are not satisfactory.

57. I have very remote chances of getting next higher position while working at this polytechnic.

58. I feel highly satisfied with the recognition of my services rendered at this polytechnic.

59. My job as principal here has helped me a lot to learn more about administrative skills.

60. Mostly my immediate supervisors at the directorate level interact with me in appreciation and encouraging way.

61. In case of difficulty the immediate superiors at management level are always willing to help me even if they have to go out of the way.

62. Principal only should not be always held responsible for the normal working of the polytechnic.

63. I always have confidence and trust in the people with whom working.

Work Culture
64. Each work is very well planned before assigning it to the staff members for execution.

65. At times it becomes difficult to make decisions keeping in view the problems of the subordinates.

66. I have great degree of freedom in planning and executing my work.

67. Rigid rules and procedures are deterrent in taking initiative.

68. I like the most, the kind of responsibilities assigned to me at this polytechnic.

69. I feel that I am doing socially useful work at this polytechnic to a great extent.
A: INSTRUCTIONAL PROCESS

Curriculum Relevancy
1. The contents of the present curriculum of my branch of engineering is in accordance with the requirements of the world of work.

Curriculum Sufficiency
2. The topics in the curriculum of my branch of engineering cover all the probable areas of employment of technicians.

Curriculum Clarity
3. The breadth and depth of treatment of each topic in the curriculum document is clearly defined.

Curriculum Feasibility
4. The course content in each subject is realistic and it is possible to teach these topics effectively in the given time.

Planning For Teaching .(Teacher preparation)
5. The teachers always do planning and organising of lessons prior to their classes.

Teaching Process
6. The teaching-learning process in the class room is mostly teacher centred i.e chalk and talk.

Teaching Environment
7. Every student in the class is encouraged to participate actively in teaching-learning process.

Teaching Evaluation
8. Every lesson is evaluated by the teacher after the class by way of asking questions or through small tests and the feedback is used for further refinement.

Teaching Method
9. Mostly teachers apply a variety of teaching methods viz.: lectures, demonstrations, group discussion, project etc. in classrooms

Note :-1. For explanation of terminology used in the questionnaire, kindly see the annexure attached herewith.
   2. Mark a tick in the appropriate column showing your level of agreement or disagreement with the statement
   (SA:Strongly Agree, A:Agree, D:Don't Know, DA:Don't agree,SDA:Strongly Don't Agree)
Use of Multi-media
10. Use of multi-media e.g. OHP transparencies, video film, charts, models etc. is a common feature in class room teaching.

Self Learning Skill Development
11. Some topics out of the given syllabus are first introduced by the teacher and assigned then to students for preparing at home to encourage them for self learning.

Formative Evaluation
12. Three class tests are conducted in every semester for continuous evaluation of students’ learning.

13. Objective type questions or quiz are used for evaluation of students’ learning.

Summative Evaluation
14. Mostly the question papers set in final theory examination are focused on testing of retaining power of students’ memory.

Laboratory Instructions
15. Every student participates in conducting practicals individually in the laboratories.

16. Students do not perform exercises with their own hands in the workshop.

17. The teacher tries to correlate theory with practice in practical classes.

18. No useful practical skill is developed in students during practical classes.

B. RESOURCE UTILISATION

Adequacy Of Building
19. The size of the building and open space at the polytechnics is enough to hold various activities.

Furniture Availability
20. The furniture in class rooms and laboratories is either broken or inadequate in number.

Equipment Availability
21. The equipment in our departments’ laboratories are out dated/out of order and need immediate replacement.
Equipment Adequacy
22. Several of the experiments in the laboratories are not performed due to non-availability of desired equipment.

Building Maintenance
23. The building and other facilities at our polytechnic are very badly maintained.

Funds Availability
24. It is very difficult to get necessary funds for carrying out planned activities in time.

Time Management
25. The regular classes are not held due to mass cut and as a result, the syllabus is never completed in the class.

C. STAFF DEVELOPMENT AND DEPLOYMENT

Optimum Utilization Of Staff
26. Teaching load per week is on higher side and causes inefficiency in teaching.

27. I have been given a job for which no proper training has been provided.

Extra curricular Activities
28. The extracurricular activities assigned to me consumes so much of time that my academic work suffers.

Administrative Activities
29. I am not able to do justice with my teaching work due to additional administrative works assigned to me.

Staff development Programmes
30. The teachers are not given enough opportunities for attending staff development and training programmes.

31. Subjects like estimation and costing, design and drawing, repair and maintenance etc. are difficult to be taught effectively because we never studied these subjects.

Action Research
32. Several of our teachers have undertaken action research on relevant topics.

Innovation in teaching
33. The atmosphere in the polytechnic is very conducive for undertaking innovations in teaching-learning process e.g. C.A.I. packages, computer-video link up programmes etc.
Instruction material development
34. The teachers are actively involved in instructional material development e.g. text books, work books, manuals, models, charts etc.

Industrial Training
35. There are enough opportunities for teachers to undergo industrial training.

D. STUDENTS PERSONNEL ADMINISTRATION

Sessional Records
36. There is a very dependable record keeping and reporting system of students’ sessionals.

37. The award of sessionals in the class is based on actual performance of students with respect to class tests, home assignments, attendance etc.

Result Declaration
38. Progress of students is informed to them regularly and timely.

Training of students
39. The training and placement department is working very effectively in arranging training during the course and placement after the diploma.

40. Guidance and counselling to students about employment is provided at polytechnic.

E. INSTITUTIONAL ADMINISTRATION

Adequacy of planning
41. The principal prepares long-term and short-term plans (Annual calendar, annual budget, five year plan, developmental projects etc.)

Staff Participation
42. The concerned staff members are associated in the planning of projects.

Delegation
43. Every staff member is explained the role in implementation of various projects and given well defined responsibilities.

Freedom
44. There is academic freedom to each staff member.
**Flexibility**

45. There is flexibility in administrative rules and decisions are made without any bias.

**Accountability**

46. Each staff member is held accountable for academic achievements of students in his subject.

47. Every teacher makes special efforts to develop desired technical skills amongst the students which will make him a successful technician engineer.

**New Projects**

48. There are number of new projects undertaken every year but only a of them are completed.

49. Each staff member is actively involved in one or more developmental projects.

**Internal Resource Generation**

50. The polytechnic management gives lot of emphasis on internal resource generation.

**Industry-Institute Interaction**

51. Most of the teachers have very effective interaction with the industries.

52. There are many consultancy projects in hand by way which we help industries in solving their problems.

**Continuing Education Programme**

53. Polytechnic is conducting continuing education programmes for working professionals.

**Development of Entrepreneurial Qualities**

54. Entrepreneurship development programmes conducted for students of final year are very effective.

**Community Development Programmes**

55. The community development activities at our polytechnics are given due weightage and are effectively organized.

**F.INSTITUTIONAL CLIMATE**

**Conducive Climate**

56. Keeping in view the skills and efforts I put into the job, the salary paid to me is not satisfactory.
57. I have very remote chances of getting next higher promotion in this polytechnic.

58. I feel highly satisfied with the recognition of my work done at this polytechnic.

59. The work done by me here has helped me a lot to learn more about my profession.

60. Most often my immediate supervisors talk to me in appreciating and encouraging way.

61. In case of difficulty in my job, the immediate supervisors are always willing to go out of the way and help me.

62. I feel my self responsible for the works assigned to me to a great extent.

63. I always have confidence and trust in the people in my work group.

**Work Culture**

64. Each work is very well planned before assigning it to the staff members for execution.

65. The people who make decisions are always aware of the problems of their subordinates.

66. I have great degree of freedom in planning and executing my work.

67. Rigid rules, regulations and procedures are main deterrents in taking initiative.

68. I like the most ,the kind of work assigned to me at this polytechnic.

69. To a great extent I feel that I am doing useful work at this polytechnic.
QUESTIONNAIRE FOR STUDENTS

A: INSTRUCTIONAL PROCESS

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<tr>
<td><strong>Curriculum Relevancy</strong></td>
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<td>1. I visualize practical application of most of the topics taught to us in the class.</td>
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<td><strong>Curriculum Sufficiency</strong></td>
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<td>2. The total training imparted to us during the three years of our stay at this polytechnic has brought confidence in us to accept future challenges in our practical life.</td>
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<td><strong>Curriculum Clarity</strong></td>
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<td>3. All the topics in the curriculum document are clearly defined in respect of their depth of treatment.</td>
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<td><strong>Curriculum Feasibility</strong></td>
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<td>4. The treatment of the topics in the syllabus by the teachers were well within the comprehension level of an average student.</td>
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<td><strong>Planning For Teaching (Teacher preparation)</strong></td>
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<td>5. The teachers always come prepared in the class and organise their teaching in a very effective manner.</td>
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<td><strong>Teaching Process</strong></td>
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<td>6. While teaching, teacher is mostly speaking and students mainly listen and take notes.</td>
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<td><strong>Teaching Environment</strong></td>
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<td>7. We have no fear from our teachers and interact with them very freely in the classes.</td>
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<td><strong>Teaching Evaluation</strong></td>
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<td>8. Every lesson is evaluated by the teacher through oral questions or a small test and feedback is used for further refinement.</td>
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<td><strong>Teaching Method</strong></td>
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<td>9. Teachers mostly apply a variety of need-based teaching methods viz.: lectures, demonstrations, group discussion, project, assignment etc.</td>
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Note: 1. For explanation of terminology used in the questionnaire, kindly see the annexure attached herewith.
2. Mark a tick in the appropriate column showing your level of agreement or disagreement with the statement
   SA : Strongly agree; A : Agree; D: Don't Know; DA : Don't Agree; SDA : Strongly disagree.
Use of Multi-media
10. Use of multi-media e.g. OHP transparencies, video film, charts, models etc. is a common feature in every class.

Self Learning Skill Development
11. Some topics out of the given syllabus are first explained by the teacher to develop understanding and then assigned to students to encourage them for self learning.

Formative Evaluation
12. Three class tests are conducted in every term for evaluation of students' learning.
13. Mostly objective type questions or quiz is used for evaluation of students’ learning.

Summative Evaluation
14. Mostly the question papers set in final examination are focused on testing of knowledge component of students’ learning.

Laboratory Instructions
15. Every student goes prepared in the laboratories and conducts practicals himself.
16. Students do not perform exercises with their own hands in the workshops.
17. The teachers always try to correlate theory with practice in practical classes.
18. I have not learnt any useful practical skill in laboratory and workshop classes.

B. RESOURCE UTILISATION

Adequacy Of Building
19. The total building and open space available at the polytechnic is enough to hold various activities.

Furniture Availability
20. The furniture in class rooms and laboratories is either broken or inadequate in number.

Equipment Availability
21. The equipment in our departments’ laboratories are out dated / out of order and need immediate replacement.
Equipment Adequacy
22. Several of the experiments in the laboratories are not performed due to non-availability of desired equipment.

Building Maintenance
23. The building and other facilities at our polytechnic are badly maintained.

Funds Availability
24. Our teachers have many a times told us that the planned activities can not be taken up due to non availability of funds.

Time Management
25. The regular classes are not held due to mass cut sand as a result the syllabus is never completed in the class.

C. STAFF DEVELOPMENT AND DEPLOYMENT

Optimum Staff Utilization
26. The teachers are not able to pay full attention to each class because of their higher teaching load per week.
27. Several teachers are given such subjects for teaching for which they are not trained properly.

Extra curricular Activities
28. We are engaged in extracurricular activities at the cost of our academic work.

Administrative Activities
29. Some of our teachers are not able to pay the required attention towards their teaching work because of their involvement in administrative activities of the polytechnic.

Staff development Programmes
30. Our teachers go for out-station short term training programmes.
31. Our teachers are not able to do justice with practical subjects like estimating and costing, design and drawing etc.
32. We find considerable change in teaching of our teachers after their return from training programmes.
Innovation in teaching
33. Most of our teachers use innovative methods and media in teaching in the class rooms e.g. Computer Aided Instruction packages, integrating class room teaching with practicals, computer video linked-up programmes etc.

Instruction material development
34. Many of our teachers have published books, laboratory manuals, work books and developed models, charts etc. for class room teaching.

Industrial Training
35. Our teachers are given enough opportunities for undergoing industrial training.

D. STUDENTS PERSONNEL ADMINISTRATION

Sessional Records
36. There is a very dependable record keeping system of our sessionals.

37. The award of sessionals in the class is based on our actual performance in respect of class test, assignment, attendance etc.

Result Declaration
38. Our results are declared and communicated to us regularly and timely.

Students Training
39. Most of students get their training and employment fixed through our training and placement department.

40. The polytechnic encourages students in taking practical training in industry.

41. Guidance and counselling about employment is provided to students in the polytechnic.

E. INSTITUTIONAL ADMINISTRATION

Flexibility
42. Our academic activity do not suffer due to rigid rules and regulations.
### New Projects
43. There are number of new projects undertaken every year but only a few of them are completed.

### Industry-Institute Interaction
44. Industrial visits are arranged for us on regular intervals.
45. The polytechnic arranges campus interviews for final year students.
46. Expert lectures by field engineers and managers are arranged on regular basis.

### Continuing Education Programme
47. Polytechnic is conducting continuing education programmes for working professionals.

### Development of Entrepreneurial Qualities
48. We have been given enough training and exposure to entrepreneurship development.

### Community Development Programmes
49. The students are actively involved in community development activities of the polytechnic.

### Accountability
50. Every teacher makes his best efforts to teach students in an effective manner.
51. Every teacher makes special efforts to develop desired technical skills amongst the students which will make him a successful technician engineer.
52. Each staff member is actively involved in one or more developmental projects.

### F. INSTITUTIONAL CLIMATE

#### Conducive Climate
53. I am proud of being a student of this polytechnic.
54. I am fully satisfied with the training given to us at this polytechnic.
55. All the staff at this polytechnic are ever ready to help students in development of technical skills.
56. Our teachers always talk with us in appreciation and encourage for further overall development.

57. I feel myself a part of the polytechnic and want to do something for its glory and development.

58. I always have confidence and trust in the staff and students at this polytechnic.

**Work Culture**

59. Each work is very well planned and detailed out before assigning it to students for implementation.

60. The teachers are always aware of the problems of the students.

61. The students have no freedom to express their point of view.

62. The students are always willing to take up new responsibilities and accept the challenges thrown by teachers.
QUESTIONNAIRE FOR EMPLOYERS

A: INSTRUCTIONAL PROCESS

Curriculum Relevancy
1. The contents of the polytechnic curriculum of Engineering courses are in accordance with the requirements of the world of work.

Curriculum Sufficiency
2. The topics in the curriculum cover all the probable areas of employment of technicians.

Curriculum Clarity
3. The breadth and depth of treatment of each topic in the curriculum document is clearly defined.

Curriculum Feasibility
4. The course content in each subject is realistic and it is possible to teach these topics effectively in the given time.

Teaching Process
5. The teachers mostly undertake teacher centred activities (chalk and talk method) in the classes where students participation is minimal.

Teaching Environment
6. The students are encouraged for interacting with the teachers in the class for effective learning.

Teaching Method
7. Most of the teachers select appropriate teaching method, such as lectures, demonstrations, discussion, project, assignment etc. while teaching a subject.

Use of Multi-media
8. Use of multi-media e.g. OHP transparencies, video films, charts, models etc. is a common feature in class room teaching.

Self Learning Skill Development
9. The diploma engineers from polytechnics lack in self-learning skills.

10. The diploma engineers from polytechnics lack in communication skills.

Note: 1. For explanation of terminology used in questionaires, kindly see the annexure attached herewith
2. Mark a tick in the appropriate column showing your level of agreement of disagreement with the statement.
(SA : Strongly Agree; A : Agree D : Don’t Know; DA Don’t Agree; SAD Strongly Don’t Agree)
Formative Evaluation
11. The polytechnic examination system is mainly aimed at the evaluation of problem solving abilities in their students.

12. Objective type questions or quiz are used for evaluation of students' learning.

Summative Evaluation
13. Mostly the question papers in theory examination are focused on testing of students' memory.

Laboratory Instructions
14. Mostly the passed out students from this polytechnic have positive attitude towards safety.

15. Mostly the passed out students from this polytechnic have positive attitude towards accuracy in the work.

16. No exposure to the students was given at polytechnic to develop the skill of finding substitution / alternatives.

17. The passed out students have thorough knowledge of testing procedure for machines and materials.

B. RESOURCE UTILISATION

Adequacy Of Building
18. The building & open space at the polytechnic is enough to hold various activities comfortably.

Furniture Availability
19. The existing furniture in class rooms and laboratories is inadequate.

Equipment Availability
20. Most of the equipment in our laboratories are out dated/out of order and need immediate replacement.

Equipment Adequacy
21. Many of the experiments in the laboratories are not performed due to non-availability of desired equipment.
Building Maintenance
22. The building and other facilities at this polytechnic are very badly maintained.

Funds Availability
23. It is very difficult to get necessary funds for carrying out planned activities from the directorate in time.

Time Management
24. The classes are held regularly without any mass cuts and complete syllabus is taught in each class.

C. STAFF DEVELOPMENT AND DEPLOYMENT

Optimum Staff Utilization
25. There is inefficiency in teaching-learning because teaching staff has generally to engage more than normal teaching hours per week.

26. Some of the teachers have been given such subjects for which no proper training has been provided to them.

Extra Curricular Activities
27. Mostly staff is engaged in extracurricular activities at the cost of their academic work.

Administrative Activities
28. The staff of the polytechnic helps the principal in several of administrative jobs.

Staff development Programmes
29. The teachers are given enough opportunities for attending staff development (training) programmes.

30. Some of the teachers are not competent to teach practical subjects such as estimating and costing, design and drawing, repair and maintenance etc. because of inadequacy in their basic training.

Action Research
31. Several of the teachers have undertaken action research on relevant topics.

Innovation in teaching
32. The atmosphere in the polytechnic is very conducive for undertaking innovations in teaching-learning process.
Instruction material development

33. Most of the teachers undertake instructional material development.

Industrial Training

34. There are enough opportunities in the polytechnic for the teachers to undergo industrial training.

D. STUDENTS PERSONNEL ADMINISTRATION

Sessional Records

35. There is a very dependable record keeping and reporting system of students' sessionals.

36. The award of sessional in the class is based on actual performance of students in respect of class test, home assignment, attendance, etc.

Result Declaration

37. Progress of students is informed to them regularly and timely.

Training of students

38. The training and placement department is working very effectively in arranging training of students, staff and placement of final year students.

39. Guidance and counselling to students about employment is provided at Polytechnic.

E. INSTITUTIONAL ADMINISTRATION

Staff Participation

40. The concerned staff members are associated in the planning of projects and other activities.

Delegation

41. Every staff member is explained his role in implementation of various projects and given well defined responsibilities.

Freedom

42. There is great degree of academic freedom to each staff member.

Flexibility

43. Planned activities (academic and extra-curricular) do not suffer due to rigid rules and regulations.
Accountability
44. Each staff member is held accountable for academic achievements of students in his subject.

45. Every teacher makes special efforts to develop desired technical skills amongst the students which will make him a successful technician engineer.

New Projects
46. There are number of new projects undertaken every year but only a few of them are completed.

Internal Resource Generation
47. The polytechnic management gives lot of emphasis on internal resource generation.

Industry-Institute Interaction
48. Polytechnic administration takes keen interest in developing industry-institute linkages.

49. Polytechnic teachers have taken-up several consultancy projects where they are trying to help industry in solving their practical problems.

50. The polytechnic teachers have helped industries in solving their problems very effectively

51. Polytechnic teachers take keen interest in learning new procedures and practices when they come for industrial training.

52. The students are guided and supervised by their teachers during industrial training.

53. Engineers from this organisation visit polytechnics for delivering expert lectures.

Continuing Education Programme
54. Local polytechnic does not have any facility for education and training of our working professionals on part-time basis.

Development of Entrepreneurial Qualities
55. Diploma engineers demonstrate entrepreneurial qualities due to their training at polytechnic.
56. Our organisation is associated with the polytechnic in conduct of EDP programmes.

Community Development Programmes
57. The community development activities at this polytechnic are given due weightage and are effectively organised.

F. INSTITUTIONAL CLIMATE

Conducive Climate
58. The polytechnic education has helped in development of right attitudes and skills in the diploma students which are required in industries/field.

59. No emphasis is given on development of team spirit amongst the students in polytechnics.

60. The young diploma engineers are mostly high on perseverance.

61. Management has confidence and trust in the employees.

Work Culture
62. Each work is very well planned before assigning it to the staff members for execution.

63. Generally decisions are made keeping in view the problems of the subordinates.

64. Rigid rules and procedures are deterrent in taking initiative.