Annexure 1

BHEL, Trichy - Product Profile

Conventional Boilers

Steam Generators for utilities 30 MW to 500 MW for coal, oil, gas firing or in combination. Steam Generators for industrial applications 6 T/hr to over 350 T/hr firing a wide range of fuels including coal, oil, gas, etc., or in combination.

Fluidised bed combustion boilers

For process steam and power generation upto 150 T/hr steaming capacity with coal, washery middlings and pulveriser rejects.

Recovery Boilers

Boilers for chemical recovery in paper industries from 200 T/hr to over 1000 T/hr of dry solid capacity.

Waste Heat Boilers

Waste heat boilers to suit a wide range of waste gases from process industries - tailor made to suit the specific requirements, waste heat recovery systems for gas turbine exhaust, unfired, supplementary fired or fired applications to suit varying duty conditions.
Boiler House Auxiliaries

Fans

Fans for steam generators and various industrial applications. Axial Reaction Fans of single stage and double stage type of clean air application, the fan capacity ranging from 50 cu.m/sec to 800 cu.m/sec with pressures ranging from 200 to 1500 mm of water column and medium temperatures upto 200°.

Axial impulses fans for clean air and flue gas applications

The fan capacity varying from 40 cm.m/sec to 800 cu.m/sec with pressure ranging from 300 to 700 mm of water column and with medium temperatures upto 250°C. The maximum acceptable dust concentration is 500 mg/m³.

Single and double suction type radial type fans for clean air and dust laden hot gas applications upto 400°C. Fan capacity varying from 6 cu.m/sec to 800 cu.m/sec with pressure varying from 300 to 1500 mm of water column.

Air preheaters

Air preheaters for steam generators and various industrial applications. Ljungstrom Regenerative Air
Preheaters in a broad range of sizes and capacities. The capacity ranging from $2.5 \times 10^6$ to $200 \times 10^6$ K cal/h of heat absorption, gas temperatures upto 450°C (600°C max), gas flows upto 4000000 kg/hr. The diameter varying from 1.2 M to 16 M from the package to the conventional large type.

Tabular Air heaters for steam generators and Process Industries, for various duty conditions.

Electrostatic Precipitators
Dust collectors for steam generators and various industrial applications.

Electrostatic Precipitators in a broad range of sizes and capacities. Maximum gas flow per precipitator upto 250 cu.m/sec and collection efficiency to 99.9% and above.

Electrostatic Precipitators for recovery boilers to recover black liquor particulate for recycling.

Cyclone type Mechanical Precipitators for steam generators and industrial applications.

Soot Blowers
For cleaning the steam generators and heat
transfer equipment in process application, using steam or air as the cleaning medium.

For retractable soot blower (travel upto 13 M), wall blowers, rotary blowers and temperature probes and related control panels, choice of operations with pneumatic, electric or manual.

For swivel arm and retract type soot blowers for regenerative Air Preheaters.

Valves

High pressure and low pressure steam bypass system valves for utilities, with connected hydraulic electronic control equipment. High and Medium pressure valves of cast and forged steel material - slide, globe, non-return (swing-check and piston left check) type valves for steam, water, oil, gas and other applications, valves upto 1200 mm diameter, 400 kg/sq.cm pressure and 540°C temperature.

High pressure, high capacity safety valves, automatic electrically operated pressure relief valves for set pressures upto 210 kg/sq.cm and temperatures upto 565°C/
Full bore valves, X'mas tree valves, mud manifold valves and well heads equipment for oil wells.

Piping and Pressure vessels

Piping for power plants and process industries to handle steam, water and any other media upto a temperature of 540°C and a pressure upto 320 kg/sq.cm.

Pressure vessels for various applications in utilities and process industries.

Nuclear Steam Generator Components

Steam Generators, heat exchangers and headers for nuclear power stations.

Seamless Steel Tubes

Carbon steel and low alloy steel tubes conforming to ASTM equivalent specifications of SA 210 Gr Al, SA 209 T1, SA 213 T11 and SA 213 T22 for sizes from 21.3 mm to 127 mm OD and 2 mm to 12.5 mm wall thickness.
Annexure 2

The Activities currently undertaken by Management Services Department organised under different sections are shown below:

<table>
<thead>
<tr>
<th>Section</th>
<th>Appx. no. of Professional</th>
<th>Major functions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manpower Planning Cell</td>
<td>3</td>
<td>Manpower planning</td>
</tr>
<tr>
<td>Resource Planning</td>
<td>2</td>
<td>Layout and equipment Planning</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Assistance in preparation of feasibility report and Project reports</td>
</tr>
<tr>
<td>Systems and Procedures</td>
<td>3</td>
<td>Total systems implementation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Review and maintenance of Standard Procedure</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Forms designing and Control</td>
</tr>
<tr>
<td>Data Collection and Special Assignment</td>
<td>2</td>
<td>Work study in office</td>
</tr>
<tr>
<td>Work study</td>
<td>4</td>
<td>Formulation of time standards</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rate fixing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Productivity Improvement studies</td>
</tr>
<tr>
<td>Productivity and Suggestions</td>
<td>2</td>
<td>Identify Projects with concerned departments</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PIP Project documentation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Suggestion evaluation</td>
</tr>
</tbody>
</table>
Annexure 3

Production trend for the past five years from 1984-85 to 1988-89 in BHEL, Trichy is as follows. The concept of deflation was applied to the production value to know its real value.

(Rs. in lakhs)
(Base year 1984-85)

<table>
<thead>
<tr>
<th>Year</th>
<th>Index No.</th>
<th>Value of Production</th>
<th>Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>1984-85</td>
<td>100.00</td>
<td>43604</td>
<td>43604</td>
</tr>
<tr>
<td>1985-86</td>
<td>104.16</td>
<td>53916</td>
<td>51762</td>
</tr>
<tr>
<td>1986-87</td>
<td>110.63</td>
<td>64259</td>
<td>58084</td>
</tr>
<tr>
<td>1987-88</td>
<td>114.80</td>
<td>69991</td>
<td>60967</td>
</tr>
<tr>
<td>1988-89</td>
<td>123.75</td>
<td>70995</td>
<td>57369</td>
</tr>
</tbody>
</table>
### Annexure 4

Consolidated Table of Productivity for the past five years in BHEL, Trichy

(Rs. in lakhs)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Labour productivity ratio using cost of wages and salary</td>
<td>3.16</td>
<td>2.84</td>
<td>2.87</td>
<td>2.99</td>
<td>2.49</td>
</tr>
<tr>
<td>Capital productivity</td>
<td>3.46</td>
<td>3.38</td>
<td>3.64</td>
<td>3.63</td>
<td>3.25</td>
</tr>
<tr>
<td>Material productivity</td>
<td>0.428</td>
<td>0.345</td>
<td>0.320</td>
<td>0.328</td>
<td>0.328</td>
</tr>
<tr>
<td>Energy productivity</td>
<td>-</td>
<td>-</td>
<td>22.00</td>
<td>28.60</td>
<td>27.40</td>
</tr>
<tr>
<td>Total factor productivity</td>
<td>0.325</td>
<td>0.269</td>
<td>0.253</td>
<td>0.261</td>
<td>0.249</td>
</tr>
</tbody>
</table>
Annexure 5

Consolidated Table of Productivity (in %) for the past five years in BHEL/Trichy

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Labour productivity $LP_2$</td>
<td>100</td>
<td>90</td>
<td>91</td>
<td>95</td>
<td>79</td>
</tr>
<tr>
<td>Capital productivity</td>
<td>100</td>
<td>98</td>
<td>105</td>
<td>105</td>
<td>94</td>
</tr>
<tr>
<td>Material productivity</td>
<td>100</td>
<td>81</td>
<td>75</td>
<td>77</td>
<td>77</td>
</tr>
<tr>
<td>Energy productivity (not converted due to non-availability of data for 1984-85, 1985-86)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total factor productivity</td>
<td>100</td>
<td>83</td>
<td>78</td>
<td>80</td>
<td>77</td>
</tr>
</tbody>
</table>
Annexure 6

Executives will be exposed to various modular training programme according to their level/designation as shown below.

<table>
<thead>
<tr>
<th>Module</th>
<th>Details of Module</th>
<th>Level</th>
</tr>
</thead>
</table>

1. a) Workshop on classification of individual expectations vis-a-vis organisational expectations, identification of gaps and strategies to bridge them \( E_1 \)
   b) Workshop on 'Becoming effective'
      - What is effectiveness
      - What are parameters of effectiveness
      - What are barriers to becoming effective

2. a) Personal growth Lab including Transactional Analysis \( E_2 \)
   b) Team building exercises

3. a) Productivity concepts
    - Cost consciousness
    - questioning technique \( E_2 \)
    - productivity measurement in individual situation
    - Productivity enhancement strategies
   b) Problem solving-kepner-Tregoe Approach
4. Communication skills
   - effective speaking
   - presentation skills

5. a) Creativity workshop

b) Computer-appreciation and use
   of personal computer including
   hands on training

6. a) Appraising skills / Appraisal
       Dialogue
   b) Managing discipline

7. a) HRD and OD concepts

b) Counselling skills

c) Grievance handling

8. a) Motivation

b) Managing conflict

   c) Technique of one minute manager'

9. a) Management of change

b) Coping with frustration

c) Participative style of management

d) Delegation and subordinate
   development

   e) Concept of strategic planning
Annexure 7

The modular training programme for different levels of Supervisors will be as follows:

<table>
<thead>
<tr>
<th>Module</th>
<th>Content</th>
<th>Duration in days</th>
<th>Level of Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Role of Supervisor, planning directing, controlling and co-ordinating, BHEL Code of conduct</td>
<td>2</td>
<td>Chargeman and Asst. Foreman</td>
</tr>
<tr>
<td>2.</td>
<td>Transactional analysis</td>
<td>3</td>
<td>- do -</td>
</tr>
<tr>
<td>3.</td>
<td>Communication, motivation Leadership, Team building and decision making</td>
<td>5</td>
<td>- do -</td>
</tr>
<tr>
<td>4.</td>
<td>Personnel Management</td>
<td>2</td>
<td>Foreman, General Foreman &amp; Executive Foreman</td>
</tr>
<tr>
<td>5.</td>
<td>Industrial relations</td>
<td>2</td>
<td>- do -</td>
</tr>
<tr>
<td>6.</td>
<td>Counselling</td>
<td>2</td>
<td>- do -</td>
</tr>
<tr>
<td>7.</td>
<td>Productivity, work study Quality, Safety, Materials Management, Inventory control, Finance &amp; Costing and Material handling</td>
<td>4</td>
<td>- do -</td>
</tr>
<tr>
<td>8.</td>
<td>Computer Awareness</td>
<td>3</td>
<td>- do -</td>
</tr>
</tbody>
</table>
Annexure 8

Total Training Costs i.e., HRDC Costs (before deflating)

Human Resources Development Centre - Expenditure

in BHEL, Trichy

<table>
<thead>
<tr>
<th></th>
<th>84-85</th>
<th>85-86</th>
<th>86-87</th>
<th>87-88</th>
<th>88-89</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Fabrication shop</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Executives Pay &amp;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>allowances</td>
<td>-</td>
<td>22898</td>
<td>31380</td>
<td>32839</td>
<td>84896</td>
</tr>
<tr>
<td>Supervisors Pay &amp;</td>
<td>444408</td>
<td>540506</td>
<td>537165</td>
<td>764976</td>
<td>642504</td>
</tr>
<tr>
<td>allowances</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industrial workers Pay</td>
<td>1155255</td>
<td>1251173</td>
<td>1299540</td>
<td>1512214</td>
<td>347691</td>
</tr>
<tr>
<td>&amp; allowances</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other trainees</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>*Miscellaneous</td>
<td>1615930</td>
<td>2999306</td>
<td>2413568</td>
<td>2233291</td>
<td>8940089</td>
</tr>
<tr>
<td>expenditure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>3215593</td>
<td>4862250</td>
<td>4494327</td>
<td>3217097</td>
<td>10015180</td>
</tr>
</tbody>
</table>


2. Machine shop

<table>
<thead>
<tr>
<th></th>
<th>Supervisors Pay &amp; allowances</th>
<th>Industrial workers</th>
<th>Others</th>
<th>Miscellaneous expenditure</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1645532</td>
<td>166522</td>
<td>160674</td>
<td>245286</td>
<td>260264</td>
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<tr>
<td></td>
<td>409420</td>
<td>382947</td>
<td>368269</td>
<td>387953</td>
<td>364973</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>-</td>
<td>38408</td>
<td>217178</td>
<td>81739</td>
</tr>
<tr>
<td>*Miscellaneous</td>
<td>847824</td>
<td>1222600</td>
<td>1025620</td>
<td>907068</td>
<td>1478481</td>
</tr>
<tr>
<td>expenditure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2902746</td>
<td>1772069</td>
<td>1592971</td>
<td>1757485</td>
<td>2185457</td>
</tr>
</tbody>
</table>

3. Training Centre, Office & Hostel

<table>
<thead>
<tr>
<th></th>
<th>Executives</th>
<th>Supervisors</th>
<th>Industrial workers</th>
<th>Others</th>
<th>Miscellaneous expenditure</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1210197</td>
<td>1038525</td>
<td>838106</td>
<td>701334</td>
<td>1332002</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1262297</td>
<td>1292079</td>
<td>1412991</td>
<td>2122115</td>
<td>1951276</td>
<td></td>
</tr>
<tr>
<td></td>
<td>670334</td>
<td>667278</td>
<td>699015</td>
<td>897291</td>
<td>924828</td>
<td></td>
</tr>
<tr>
<td></td>
<td>570387</td>
<td>573121</td>
<td>604388</td>
<td>786763</td>
<td>701930</td>
<td></td>
</tr>
<tr>
<td>*Miscellaneous</td>
<td>7463786</td>
<td>10664714</td>
<td>114707080</td>
<td>13906339</td>
<td>8077354</td>
<td></td>
</tr>
<tr>
<td>expenditure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>11177001</td>
<td>14235717</td>
<td>150252800</td>
<td>18613842</td>
<td>12990990</td>
<td></td>
</tr>
</tbody>
</table>

*Maintenance and services of machinery and equipment consumables such as welding electrodes, gas, electricity etc.
Annexure 9
BHARAT HEAVY ELECTRICALS LIMITED
TIRUCHIRAPALLI 620 014
TRAINING NEEDS
ASSESSMENT FOR THE PERIOD ENDING .................

NAME: STAFF NO.
DESIGNATION: DEPT.

FURTHER TRAINING IS REQUIRED/NOT REQUIRED
Kindly indicate two most important areas in which the individual requires training. (For instructions see note on reverse side) If training not required as per assessment on the year reporting, columns (1) and (2) may be marked as 'NIL'.

1) 

2) 

CONTROLLING OFFICER:
REVIEWING OFFICER
APPROVING AUTHORITY:

p.T.o.
NOTE:

In respect of non-supervisory staff the training needs indicated should relate to the present work area or the area they are likely to be engaged in the near future. Training needs identified should be mainly related to the skills/knowledge of operation.

In regard to the supervisors, training needs identified should be in the area of work he is doing, likely to do in the near future or on subjects relating to the supervisory skills.

In regard to the executives, the training identified should be in technical area, functional management or behavioural science.

It will be sufficient if description of the input required to be given is indicated.
Annexure 10

Executive Stress Management Programme Pre/Post

Programme Knowledge Evaluation Form

Please round the correct answer as you think, in the answer sheet given separately.

01. The following are risk factors for causing heart attack:
    a) High Cholesterol  
    b) High BP
    c) Smoking  
    d) Obesity
    e) Lack of Exercise  
    f) All of the above
    g) None of the above

02. For high BP the following restrictions are necessary:
    a) Weight reduction  
    b) Salt reduction
    c) Both the above  
    d) None of the above

03. For reducing cholesterol one must avoid
    a) Eggs  
    b) Coconut
    c) Oil  
    d) Ghee
    e) Mutton  
    f) All the above
    g) None of the above

04. Heart attack happens due to
    a) Stoppage of blood supply to the heart muscle
    b) Action on the nerves supplying heart?
05. Fitness is necessary to keep
   a) the heart fit   b) the lungs fit
   c) both the above d) None of the above

06. Exercise can benefit by
   a) Reducing stress b) Reducing chances for
       heart attack
   c) Both the above d) None of the above

07. The stress caused by pleasant happening in life is know as:
   a) P Stress       b) Enstress       c) Distress

08. Impact of distressful situations may affect an individual:
   a) Physiologically b) Emotionally
   c) Intellectually d) Behaviourally
   e) All the above  f) None of the above

09. Good Health means:
   a) Physical well-being  b) Mental well-being
   c) Social well-being   d) All the above
   e) None of the above

10. Best way to deal with anger is to suppress it:
    a) True    b) False
11. Best way to deal with anger is to express it immediately by shouting, condemning, rebuking:
   a) True  
   b) False  

12. The appropriate way to express anger in most of the situations is known as
   a) Reactive anger  
   b) Proactive anger  
   c) Adoptive anger  

13. The process which is essential in developing better interpersonal understanding is
   a) Sympathy  
   b) Empathy  
   c) Telepathy  

14. The three best antidotes for dealing with depression are
   a) to remain silent  
   b) to do vigorous physical activity  
   c) to listen sad songs  
   d) to talk out to some  
   e) to do deep breathing exercise
**Annexure 11**

**EVALUATION SHEET**

1. Topic Title

2. Content Coverage
   - more than adequate
   - adequate
   - inadequate

3. Presentation
   - excellent
   - good
   - average

4. Relevance of Cases/examples discussed
   - Highly relevant
   - relevant
   - not relevant

5. Involvement of Participants by Faculty
   - high
   - moderate
   - low

6. Aids used
   - more than adequate
   - adequate
   - inadequate

7. Overall rating
   - excellent
   - good
   - average
8. Please indicate the new points of learning that had impact on you.

9. Write briefly the aspects of learning in this lecture that you wish to translate into application in your functional area.

10. Any other remarks.
Annexure 12

The various participative foras that have been established in the Unit are described below. These foras are functioning effectively and the Unit is well equipped to prevent/deal with any kind of industrial unrest.

Various participative foras in BHEL, Trichy

<table>
<thead>
<tr>
<th>Foras</th>
<th>Members of participation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Corporate Level:</strong></td>
<td></td>
</tr>
<tr>
<td>Joint Committee</td>
<td>Nomination from four elected Trade Union of each manufacturing Unit and nomination from national central Trade Unions; the Board of Directors and Executive Directors of all the manufacturing Units represent the management.</td>
</tr>
<tr>
<td><strong>Unit Level:</strong></td>
<td></td>
</tr>
<tr>
<td>a) Statutory</td>
<td></td>
</tr>
<tr>
<td>Works Committee</td>
<td>Ten representatives elected from among workmen. Equal number of management representatives are nominated.</td>
</tr>
<tr>
<td>Board of Trustees of Provident Fund</td>
<td>Four elected representatives from among eligible members; equal number representing the management through nomination.</td>
</tr>
<tr>
<td>Committee</td>
<td>Representation Details</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Canteen Managing Committee</td>
<td>Six representatives are elected from the employees. Equal number of management representatives are nominated by management.</td>
</tr>
<tr>
<td>b) Non-statutory</td>
<td></td>
</tr>
<tr>
<td>Plant-Bi-partite Forum</td>
<td>Elected representatives of the four Trade Unions and management representatives.</td>
</tr>
<tr>
<td>Plant council</td>
<td>Nomination from four elected Trade Unions and equal number represented by management through Nomination.</td>
</tr>
<tr>
<td>Shop Councils - 21 numbers</td>
<td>Nominations from four elected Trade Unions and equal number represented by management through nomination.</td>
</tr>
<tr>
<td>Function related Safety Committee</td>
<td>Workers nominated among the elected works committee members and Management representatives nominated by the management.</td>
</tr>
<tr>
<td>Township Committee</td>
<td>Workers nominated from among the elected works committee members and management representatives nominated by the Management.</td>
</tr>
<tr>
<td>Hospital Apex Committee</td>
<td>General Secretaries of the four elected Trade Unions and Management representatives nominated by Management.</td>
</tr>
</tbody>
</table>
Transport Committee: One nomination each from the four elected Trade Unions. Management representatives nominated by Management.

Staff benefit fund and Death Relief fund Committee: Workers nominated from among elected works committee members and management representatives nominated by Management.

Community Centre Managing Committee: Elected representatives of the employees and Management representatives nominated by Management.

Source: Industrial Engineering Department.
Annexure No. 13

SCHEDULE FOR MANAGERIAL PERSONS

1. Aspiration and Satisfaction from the job

Put a Tick in the appropriate column

1.1. How far are you satisfied with your present salary?
   a) High
   b) Moderate
   c) Low

1.2. How much do you think your salary should be? (Rs)
   a) 3500 - 4000
   b) 4000 - 4500
   c) 4500 - 5000
   d) 5000 & above

1.3. How does your salary compare with your counterpart's salary in other public sector plants in India?
   a) Higher
   b) Equal
   c) Lower
   d) Don't know
1.4. How does your salary compare with those in similar private sector plants?
   a) Higher (  )
   b) Equal (  )
   c) Lower (  )
   d) Don't know (  )

1.5. How does your salary compare with other industries in this State?
   a) Higher (  )
   b) Equal (  )
   c) Lower (  )
   d) Don't know (  )

1.6. For what job do you consider yourself to be fit?
   a) At present - Technical (  )
   b) At the time of retirement - Managerial (  )

1.7. How interesting do you find your work?
   a) Interesting (  )
   b) Interesting but sometimes boring (  )
   c) Neither boring nor interesting (  )
   d) Boring but sometimes interesting (  )
   e) Boring (  )
1.8. How tired does your job leave you at the end of the Day?

a) Very tired ( )
b) Tired ( )
c) Slightly tired ( )
d) Not tired at all ( )

1.9. If the condition of service were to remain the same, would you like to change your present service or would you like to continue in this plant?

a) Willing to continue ( )
b) Want a change of organisation ( )

1.10. If change preferred, why?

a) For earning more ( )
b) Better scope ( )
c) To know wide area ( )
d) No personal growth in the existing job ( )
e) Just for a mental change ( )
f) Don't want a change ( )

1.11. In your work, do you act wholly according to the instructions of your boss, or are you allowed to do certain things of your own also.

a) Many times ( )
b) Sometimes ( )
c) Never ( )
1.12. How close your boss interacts in your work?
   a) High (  )
   b) Moderate (  )
   c) Low (  )

1.13. Some people say that in public sector managers do not work hard. What happens in your plant?
   a) Do not work hard (  )
   b) Work hard (  )
   c) Work moderately (  )
   d) Don't know (  )

1.14. What changes in the job situation will help you to contribute more towards raising production? (Please rank it as 1, 2, 3, 4 ... according to your preference)
   a) More pay (  )
   b) Higher incentive pay (  )
   c) More information relating to your work (  )
   d) More recreation (  )
   e) Fair treatment by the Management (  )
   f) Improved equipment (  )
   g) Quicker promotion (  )
   h) Shorter hours (  )
   i) More co-operation of fellow workers (  )
   j) More security of service (  )
1. Would you advise your friends/relatives to join the company?
   a) Yes
   b) No
   c) No opinion

2. Worker's Participation in Decision Making

2.1. Do you favour worker's participation in decision making?
   a) Favour
   b) Don't favour

2.2. If so, at what level
   a) Plant council
   b) Shop council
   c) Department level
   d) Management level
   e) Group level
   f) Union level
   g) Not represented

2.3. Have you been a member of any committee in your plant?
   a) Yes
   b) No
2.4. If (yes) which committees or committee?
   a) Shop council committee   (   )
   b) Selection committee       (   )
   c) Standardisation committee (   )
   d) Canteen committee         (   )
   e) Safety committee          (   )
   f) Not represented            (   )

2.5. What are the usual decisions taking in the Meeting? Subjects of decision taken
   a) Productivity Discipline   (   )
   b) Better facilities         (   )
   c) Action oriented with time frame (   )
   d) Work related problems     (   )
   e) Improving the neatness    (   )
   f) Not represented            (   )

2.6. How many of these decisions were implemented?
   a) Majority                   (   )
   b) Half of them               (   )
   c) A few                      (   )
   d) All                        (   )
   e) Not implemented            (   )

2.7. Do you think what is talked about in the committees is generally relevant?
   a) Generally relevant         (   )
   b) Generally not relevant     (   )
2.8. Would you like that the functions of bipartite committees should be enlarged or it is not so?
   a) Enlarged ( )
   b) Should remain the same ( )

2.9. If it is to be enlarged, how?
   a) More matters to be brought under its purview ( )
   b) To be vested with more power and authority ( )
   c) Participation through Officers and Supervisors ( )
   d) Not to be enlarged ( )

2.10. Would you like that there should be Joint Management council in the plant or not?
   a) Necessary ( )
   b) Not necessary ( )

2.11. What are the hindrances in the way of its formation?
   a) Meaningless ambitions ( )
   b) No co-operation between workers and leaders ( )
   c) Management reluctance ( )
   d) Union rivalry, external politics ( )
   e) Policy by management ( )
   f) No hindrance ( )
2.12. What is your opinion, would encourage worker to participate in decision making?
   a) No partiality
   b) Proper reward for the work done
   c) Good discipline and offering of incentive
   d) Regular interaction with the workers about the implementation of their ideas/counselling

2.13. Would you like that workers should be allowed to become members of the Board of Directors, or are you not in favour of this proposal?
   a) Favoured
   b) Not favoured

2.14. Do you think that by and large, workers have a desire to participate in decision making?
   a) Yes
   b) No

2.15. How far are workers fit to participate in decision making?
   a) Quite fit
   b) Fit
   c) Not fit
3. Trade Unions and Participative Management

3.1. To what extent do the Trade Unions co-operate with the Management in your plant?
   a) High ( )
   b) Moderate ( )
   c) Low ( )

3.2. In your opinion facilities provided to the recognised Union by the Management
   a) Adequate ( )
   b) Less than adequate ( )
   c) No facility are provided ( )

3.3. In some plants, there is just one union but in your plant there are 20 unions. What in your opinion are the causes of Multiplicity of unions in your plant?
   a) Selfishness of a few self imposed leaders ( )
   b) External politics ( )
   c) Personal growth of the persons ( )
   d) Need to form one union ( )
   e) Indisciplined without a common goal ( )
   f) Don't know ( )

3.4. In your opinion, what are the results of Multiplicity of unions in your plant?
   a) Confusion everywhere ( )
   b) Personal growth of the employees ( )
c) More delays in decision making

d) Lack of positive approach

e) Easier for Management to handle problems

3.5. There are differences of opinion about the role of political leaders in Trade Unions. Is the role in Trade Unions by political leaders useful.

a) Useful
b) Slightly useful
c) Harmful

3.6. In your plant, workers participation in the Trade Union activity is effective or not?

a) Effective
b) Not effective

c) Policies and procedures to handle problems

d) No disagreement
e) Jobs for employee dependents

3.7. What are the major issues of disagreement between Management and Union?

a) Maintaining discipline
b) Welfare facilities
c) Policies and procedures to handle problems
d) No disagreement
e) Jobs for employee dependents
4. Industrial unrest

4.1. In your view, what are the common reasons for dispute in your plant?

a) Evasive attitude of workers towards work

b) Mismatch between talent and work

c) Multiplicity of unions

d) Incorrect communication

e) No dispute

4.2. Which method of dispute settlement has been most useful in your plant?

a) Direct negotiation between the executives and workers

b) Give and take policy

c) Counselling

d) Interaction with the union

e) Not applicable

Collective bargaining

4.3. To what extent, in your opinion, is the bargaining power of Management strong?

a) High

b) Moderate

c) Low

4.4. To what extent in your opinion grievance procedure is working satisfactorily?

a) High

b) Moderate

c) Low