

## 6.1 GENERIC SKILLS AND ENTREPRENEURSHIP DEVELOPMENT

**L T P**  
**3 - -**

### RATIONALE

Generic Skills and Entrepreneurship Development is one of the courses from “Human Science” subject area. Generic skills have emerged as an important component of employability skills, which enable an individual to become and remain employable over lifetime and to lead happy and prosperous life. Entrepreneurship development aim at developing conceptual understanding for setting-up one’s own business venture/enterprise. This aspect of Human Resource Development has become equally important in the era, when wage employment prospects have become meager.

Both the subject areas are supplementary to each other and soft skills are required to be developed in diploma passouts for enhancing their employability and self confidence.

### DETAILED CONTENTS

1. Introduction to Generic Skills (4 hrs)
  - 1.1 Importance of Generic Skill Development (GSD)
  - 1.2 Global and Local Scenario of GSD
  - 1.3 Life Long Learning (LLL) and associated importance of GSD.
  
2. Managing Self (8 hrs)
  - 2.1 Knowing Self for Self Development
    - Self-concept, personality, traits, multiple intelligence such as language intelligence, numerical intelligence, psychological intelligence etc.
  
  - 2.2 Managing Self - Physical
    - Personal grooming, Health, Hygiene, Time Management
  
  - 2.3 Managing Self – Intellectual development
    - Information Search: Sources of information
    - Listening: Effective Listening
    - Speaking: Effective Oral Communication
    - Reading: Purpose of reading, different styles of reading, techniques of systematic reading; Note Taking: Importance and techniques of note taking
    - Writing: Correspondence - personal and business

Note: Practical sessions should be coupled with teaching of effective listening, speaking, reading and writing.

#### 2.4 Managing Self – Psychological

- Stress, Emotions, Anxiety-concepts and significance (Exercises related to stress management)
- Techniques to manage the above

#### 3. Managing in Team (6 hrs)

- 3.1 Team - definition, hierarchy, team dynamics
- 3.2 Team related skills- sympathy, empathy, co-operation, concern, lead and negotiate, work well with people from culturally diverse background
- 3.3 Communication in group - conversation and listening skills

#### 4. Task Management (3 hrs)

- 4.1 Task Initiation, Task Planning, Task execution, Task close out
- 4.2 Exercises/case studies on task planning towards development of skills for task management

#### 5. Problem Solving (5 hrs)

- 5.1 Prerequisites of problem solving- meaningful learning, ability to apply knowledge in problem solving
- 5.2 Different approaches for problem solving.
- 5.3 Steps followed in problem solving.
- 5.4 Exercises/case studies on problem solving.

#### 6. Entrepreneurship

##### 6.1 Introduction (22 hrs)

- Concept/Meaning and its need
- Competencies/qualities of an entrepreneur
- Entrepreneurial Support System e.g., District Industry Centres (DICs), Commercial Banks, State Financial Corporations, Small Industries Service Institute (SISIs), Small Industries Development Bank of India (SIDBI), National Bank of Agriculture and Rural Development (NABARD), National Small Industries Corporation (NSIC) and other relevant institutions/organizations at State/National level.

##### 6.2 Market Survey and Opportunity Identification (Business Planning)

- How to start a small scale industry

- Procedures for registration of small-scale industry
- List of items reserved for exclusive manufacture in small-scale industry
- Assessment of demand and supply in potential areas of growth.
- Understanding business opportunity
- Considerations in product selection
- Data collection for setting up small ventures.

### 6.3 Project Report Preparation

- Preliminary Project Report
- Techno-Economic Feasibility Report
- Exercises on Preparation of Project Report in a group of 3-4 students

## **INSTRUCTIONAL STRATEGY**

This subject will require a blend of different teaching and learning methods beginning with lecture method. Some of the topics may be taught using question answer, assignment, case studies or seminar. In addition, expert lectures may be arranged from within the institution or from management organizations. Conceptual understanding of Entrepreneurship, inputs by teachers and outside experts will expose the students so as to facilitate in starting ones own business venture/enterprise. The teacher will discuss success stories and case studies with students, which in turn, will develop managerial qualities in the students. There may be guest lectures by successful diploma holding entrepreneurs and field visits also. The students may also be provided relevant text material and handouts.

## **RECOMMENDED BOOKS**

1. Soft Skills for Interpersonal Communication by S. Balasubramanian Published by Orient BlackSwan, New Delhi.
2. Generic skill Development Manual, MSBTE, Mumbai.
3. Lifelong learning, Policy Brief ([www.oecd.org](http://www.oecd.org))
4. Lifelong learning in Global Knowledge Economy, Challenge for Developing Countries – World Bank Publication
5. Towards Knowledge Society, UNESCO Paris Publication
6. Your Personal Pinnacle of Success by DD Sharma, Sultan Chand and Sons, New Delhi
7. Human Learning, Ormrod
8. A Handbook of Entrepreneurship, Edited by BS Rathore and Dr JS Saini; Aapga Publications, Panchkula (Haryana)
9. Entrepreneurship Development by CB Gupta and P Srinivasan, Sultan Chand and Sons, New Delhi
10. Handbook of Small Scale Industry by PM Bhandari

### SUGGESTED DISTRIBUTION OF MARKS

<b>Topic No.</b>	<b>Time Allotted (hrs)</b>	<b>Marks Allotted (%)</b>
1.	4	5
2.	8	15
3.	6	10
4.	3	10
5.	5	10
6.	22	50
<b>Total</b>	<b>48</b>	<b>100</b>

## Elective

### 6.2.1. ADVANCED YARN MANUFACTURING

L	T	P
4	-	-

#### RATIONALE

A student of diploma in textile technology must be familiar with the new systems of yarn manufacturing coming in modern industry. Hence the subject has been included in the curriculum.

#### DETAILED CONTENTS

1. Fibre properties, requirements for different spinning processes (3 hrs)
2. Limitations of ring spinning. Principle of open end spinning (3 hrs)
3. Basic elements and principles of Rotor Spinning Machine. Passage through the Rotor Spinning Frame (7 hrs)
4. Functions of transport channel (3 hrs)
5. Introduction to Air-jet Spinning. Principle of yarn formation and its comparison with Ring Yarn and Rotor Yarn (5 hrs)
6. Introduction to Friction Spinning. Principle of yarn formation. Yarn structure. (4 hrs)
7. Comparison between the structure and properties of Ring spinning yarn, Rotor yarn, Air-jet yarn and friction spinning yarn. (5 hrs)
8. Introduction to core and compact yarn and its advantages (2 hrs)
9. Introduction to texturing process. Different texturing processes, their overview. Application and advantages of Textured Yarn (9 hrs)
10. Fibre characteristics required for blending. Modification of blow room machinery, speeds and setting for and man-made fibre processing and their blends (9 hrs)
11. Recommended speeds and settings of different parts in card for man-made fibres and blend processing (4 hrs)
12. Recommended changes in speeds and drafting zones of Draw Frames, Simplex and Ring Frame for man-made fibre processing and blends processing. Twist and twist multipliers for different man-made fibres and their blends. (5 Hrs)

**INSTRUCTIONAL STRATEGY**

Teachers should lay emphasis on clarifying the concept and principles. Teachers should use various teaching aids to clarify concepts and principles. The teachers should plan assignments so as to promote problem solving abilities and develop continued learning skills.

**RECOMMENDED BOOKS**

1. Manual of Textile Technology (Vol.5) by W Klein
2. Manual of Textile Technology (Vol.6) by W Klein
3. Spinning of man-made Fibres and their Blends in Cotton Spinning by KR Salhotra
4. Open End Spinning by V.Rohlena
5. Spun Yarn Technology by Venktasubramanian

**SUGGESTED DISTRIBUTION OF MARKS**

<b>Topic No.</b>	<b>Time Allotted (hrs)</b>	<b>Marks Allotted (%)</b>
1.	03	05
2.	03	05
3.	07	10
4.	03	05
5.	05	08
6.	04	06
7	05	08
8	02	03
9	09	14
10	09	14
11	04	06
12	05	08
13	05	08
<b>Total</b>	<b>64</b>	<b>100</b>

## Elective

### 6.2.2 ADVANCED FABRIC STRUCTURE AND APPLIED DESIGN

L T P  
4 - -

#### RATIONALE

A student of Textile Technology is supposed to have knowledge regarding Gauge and Leno Fabrics, Brocade and damask fabrics and Double Cloth. In this subject, the student will learn advanced Fabric Structure and Applied Design for various applications.

#### DETAILED CONTENTS.

1. Gauge and Leno Fabrics (15 hrs)  
Structure of gauge and leno fabrics, bottom and top douping principle. Different type of sheds formed in gauge, leno fabrics. Comparison of gauge and leno structures. Russian cord
2. Jacquard harness and design calculations. (09 hrs)
3. Double Cloth (15 hrs)  
Construction of double cloth and multiple cloths viz three ply, four ply, five ply, tubular cloth, double face fabric, fabric opening to double width. Beaming and drafting arrangement of double cloth.
4. Brocade and damask fabrics. Reversible and non-reversible damask principle. (15 hrs)
5. Analysis of fabric-To analyse the given sample of fabric using its yarn parameters, fabric parameters and weaves. Reproduction of sample (10 hrs)

#### INSTRUCTIONAL STRATEGY

Student should be able to understand different weaves from fabric samples or by weaving and should be taken for a visit to Museum for Oriental Tapetry/Carpets.

#### RECOMMENDED BOOKS

1. Elementary Textile Design and Colour by William Watson
2. Advanced Textile Design and Colour by William Watson
3. Grammar of Textile Design by H.Nisbat.

### SUGGESTED DISTRIBUTION OF MARKS

Topic No.	Time Allotted (Hrs)	Marks Allotted (%)
1	15	24
2	09	13
3	15	24
4	15	24
5	10	15
Total	64	100



Elective  
**6.2.3 ADVANCED TEXTILE PROCESSING**

L T P  
4 - -

**RATIONALE**

A diploma holder in Textile Technology must have the requisite knowledge and skill about various processing of textile i.e. bleaching, printing and finishing etc. Hence this subject.

**DETAILED CONTENTS.**

1. Study of combined desizing, scouring and bleaching method and various machines used for the same (08 hrs)
2. Characteristics of effluent (02 hrs)
3. Various methods of effluent treatment (04 hrs)
4. Design, layout and working of an effluent treatment plant (04 hrs)
5. Norms for textile processing: scouring, bleaching, dyeing, printing (12 hrs)
6. Fundamentals of colour theory and colour mixing laws. (06 hrs)
7. Concept of metamerism and process of matching of shade on colour matching cabinet (04 hrs)
8. Principle and working of colour matching instrument, spectrophotometer and colorimeters used in textile industry. (10 hrs)
9. Brief study of various application of computer colour matching system. (04 hrs)
10. Red listed dyes and chemicals used in textile industry. (04 hrs)
11. Brief study of various textile auxiliaries used in (06 hrs)
  - a) Spinning
  - b) Pretreatment
  - c) Dyeing
  - d) Printing

## **INSTRUCTIONAL STRATEGY**

Use of audiovisual aids should be made to show specialized operations. Expose the students to real life problems. Stress should be given to acquaint the students with relevant industrial practices.

## **RECOMMENDED BOOKS**

1. Textile Auxiliaries and Chemicals by AA Vaidya
2. Process and Quality Control in Textile Processing by AA Vaidya ATIRA
3. Computer Colour Matching by HS Shah
4. Environment and Pollution Awareness by BR Sharma
5. Textile Auxiliaries by VA. Shehnai

## **SUGGESTED DISTRIBUTION OF MARKS**

Topic No.	Time Allotted (Hrs)	Marks Allotted (%)
1	08	12
2	02	03
3	04	06
4	04	06
5	12	20
6	06	10
7	04	06
8	10	15
9	04	06
10	04	06
11	06	10
Total	64	100

### 6.3 TEXTILE TESTING AND QUALITY CONTROL – II

L T P  
4 - 4

#### RATIONALE

The diploma holders in textile technology have to ensure quality at all levels. The skills in testing of materials and textiles of various stages of production and finishing are essential to be developed in the students. To train the students in assessment of performance characteristics of various textile materials i.e. fibre, yarns and fabrics the subject of Textile Testing and Quality Control has been included in the curriculum.

#### DETAILED CONTENTS

Sr. No.	Theory	Practical
1.	<b>Tensile Testing of Textiles</b> (18 hrs)	
1.1	Fabric strength testing by Tensile Strength Tester (6 hrs)	Tensile Strength Testing of Fabrics
1.2.	Tearing Strength Tester for Umbrella and Parachute failure (6 hrs)	
1.3	Bursting strength testing of fabric by Hydraulic Bursting Strength Tester (6 hrs)	Find out bursting strength of fabric by Hydraulic Strength Tester
2.	<b>Fabric Dimension</b> (36 hrs)	
2.1	Fabric thickness testing by thickness tester (2 hrs)	Find out fabric thickness by thickness tester.
2.2	Definition of air permeability, air resistance. Porosity Measurement of permeability by Shirley Air Permeability Tester (3 hrs)	Find out air permeability of fabric by Air Permeability Tester
2.3	Crease recovery of fabric. Measurement of crease recovery by Shirley Crease Recovery Tester (2 hrs)	Find out Crease Recovery of fabric by Crease Recovery Tester
2.4	Abrasion resistance and serviceability, wear and abrasion test on fabrics. Measurement of serviceability by Abrasion Tester Stiffness, Handle & drape of fabric (4 hrs)	<ul style="list-style-type: none"> <li>- Find out serviceability of fabric by abrasion tester</li> <li>- Use of Drapemeter.</li> <li>- Stiffness Tester</li> <li>- Drapemeter</li> </ul>

2.5	Definition of crimp, measurement of warp and weft crimp in fabric by crimpmeter (2 hrs)	Find out crimp in warp and weft of fabric
2.6	Fabric shrinkage relaxation and felting. Measurement of fabric shrinkage (2 hrs)	Shrinkage test by Launderometer and Template.
2.7	Flammability test for fabrics (2 hrs)	Flammability test by Flammability Testers.
2.8	Fabric cover and its relation with fabric properties (2 hrs)	
2.9	Methods of determination of colour fastness to Washing, perspiration (acidic and alkaline), rubbing (dry and wet), light and sublimation. (10hrs)	Colour fastness of fabric: Washing- Launderometer Perspiration – by Persperometer Rubbing (dry & wet) – Crock meter Light – Light fastness tester Sublimation – Sublimation Tester
2.10	Blend tests by solubility methods (2 hrs)	Blend testing by chemical (Solubility) methods
2.11	Wettability test for fabric water proofing and shower proofing. Drop penetration test. Spray test. (3 hrs)	
2.12	Test for Pilling of Fabric by using Pilling Tester (2 hrs)	Findout pilling by ICI pill box (Pilling Tester)
3.	<b>Evenness Testing (10 hrs)</b>	
3.1	Importance of evenness in yarn. Short term, medium term and long term variations in yarns). Periodic and non-periodic irregularities. Causes and remedies for yarn uneven-ness (10 hrs)	Uster classmate testing.

### INSTRUCTIONAL STRATEGY

The teacher should lay emphasis on understanding of basic concepts and various terms used in the subject. Practical exercises will reinforce various concepts. Industrial exposure must be given by organizing visits.

### RECOMMENDED BOOKS

1. Principles of Textile Testing by JE Booth
2. Textile Testing by P Angappan, R Gopalakrishnan
3. Handbook of Textile Testing and Quality Control by Grover and Hamby
4. Stains Remover from Textiles and Garments by S.S. Satsangi, Usha Publications, 53B/AC-IV Shalimar Bagh, Delhi -80

### SUGGESTED DISTRIBUTION OF MARKS

<b>Topic No.</b>	<b>Time Allotted (hrs)</b>	<b>Marks Allotted (%)</b>
1.	18	30
2.	36	55
3.	10	15
<b>Total</b>	<b>64</b>	<b>100</b>

## 6.4 TEXTILE MERCHANDISING

L T P  
3 - -

### RATIONALE

Merchandising - Ensures proper production and sales to meet the ISO, companies go to great lengths to make sure that their products meet the quality and are cost effective. This is called merchandising, which for a textile technologist includes manufacturing of various products to different manufacturers for quality, packaging, promotions and pricing to appeal to the target market.

### DETAILED CONTENTS

Unit I	Merchandising – Functions of Merchandiser- Programming Accessories	(9 hrs)
Unit II	Estimating, aims of estimating – costing, aims of costing- difference between estimating and costing –types of estimates, Elements of cost- material cost - Labour cost different types of expenses – cost of product-advertisement cost.	(10 hrs)
Unit III.	Material cost – cost of yarn, cost of fabric production, cost of processing width of fabric, and design affecting cost – lot size, and cost of components – cutting cost – making and trim cost (CMT cost). Simple problems.	(10 hrs)
Unit IV	Programming – fabric consumption calculation – Scheduling- Concepts of scheduling-Types of scheduling	(09 hrs)
Unit V	Export Procedures – Import/Export Documentation – Certificate Of Origin – Letter of Credit-Bill of Lading – Export License- Packing list – Commercial Invoice	(10 hrs)

Note :

Merchandising, as commonly used in Marketing also means the promotion of merchandise sales, as by coordinating production and marketing and sales strategies to increase sales. This includes disciplines in production outsourcing, pricing and discounting, physical presentation of products and displays, and the decisions about which products should be presented to which customers at what time.

### INSTRUCTIONAL STRATEGY

Use of audiovisual aids should be made to show specialized operations. Expose the students to real life problems. Stress should be given to acquaint the students with relevant industrial practices.

## RECOMMENDED BOOKS

1. Garment finishing and Care Labelling by S.S. Satsangi M/s Usha Publishers  
53B/AC-IV Shalimar Bagh Delhi-110088
2. The World of Fashion Merchandising – May Gorgen Walfe Amazon
3. Understanding Aesthetics for the Merchandising and Design Professional, Ann Marie Fiore Amazon

## SUGGESTED DISTRIBUTION OF MARKS

<b>Topic No.</b>	<b>Time Allotted (hrs)</b>	<b>Marks Allotted (%)</b>
1.	09	20
2.	10	20
3.	10	20
4.	09	20
5.	10	20
	<b>48</b>	<b>100</b>

## 6.5 COMPUTER APPLICATIONS IN TEXTILE TECHNOLOGY- II

L T P  
- - 4

### RATIONALE

Today no work can be completed without the good working knowledge of IT, with the Textile Technology taking a big leap towards automation working knowledge of computers have become mandatory, success would only be possible by assigning small projects and completing them in a particular time frame, for which curiosity is the key word, using of internet for trouble shooting and problem solving.

### DETAILED CONTENT

- Unit-I Arranging Objects (a) Make design and change the order of the motifs, (b) Draw 5 shapes like rectangle and star on drawing page and then align these, (c) Draw multiple motifs or shapes and then try horizontal alignment, (d) Try rotation and skewing of objects, (e) Using graph tool, draw the squares for the background (use texture fill) and then make a design for the quilt.
- Unit-II Working with shapes, curves and colour (a) Make 5 designs with various shapes (b) Make 5 designs with Free Hand Tool, (c) Fill these designs with various colours & effects, (d) Try to fill these designs with different fills (Texture, embroidery stiches using the built in design library etc.) (e) Use texture fill in the background and do placement with any one buti.
- Unit –III Symbols & Design Library (a) Make 5 traditional motifs (b) Change these motifs into symbol (c) Make a Corel Library and save these symbols in this library (d) Revert these symbols into object make changes in it or edit symbol (e) Design a bed sheet with these (any one) symbol.
- Unit IV -Embroidery/Printing/Woven Techniques (a) Make a Logo (b) create a print file and then print it (c) colour separations and font and print (d) Trapping & nesting (e) Printing of text or work, tile printing etc.
- Unit –V Adding effects to objects.



- Note:-** (i) The laboratory to be equipped with the latest versions of designing software like Corel Draw/Illustrator/Photoshop/Wilcome DECO STUDIO el.5/Ned graphic/Toxtronics for woven/printed/embroidery fabrics.
- (ii) Linkage with industry to supply designs will speak volumes and success.
- (iii) To perform basic operation on image using any image editing software

### **INSRUNCTIONAL STRATEGY**

The teacher is expected to tell the students the applications of this subject area in various fields. Emphasis should be laid on practical examples.

### **RECOMMENDED BOOKS**

1. Built in PDF's of Corel Draw, Illustrator, Photoshop, Wilcome
2. [www. Wikipedia. Org](http://www.Wikipedia.Org)
3. Help files of Corel, Illustrator, Photoshop & Wilcome Deco Studio el.5

## 6.6 MAJOR PROJECT WORK

L T P  
- - 12

Project work aims at developing skills in the students whereby they apply the totality of knowledge and skills gained through the course in the solution of particular problem or undertaking a project. The students have various aptitudes and strengths. Project work, therefore, should match the strengths of students. For this purpose, students should be asked to identify the type of project work, they would like to execute. It is also essential that the faculty of the respective department may have a brainstorming session to identify suitable project assignments. The project assignment can be individual assignment or a group assignment. There should not be more than 3 students if the project work is given for a group. The students should identify or given project assignment at least two to three months in advance. The project work identified in collaboration with industry may be preferred. The Industrial/practice based major project is intended to place students for project oriented practical training in actual work situations for the stipulated period with a view to:

- i) Develop understanding regarding the size and scale of operations and nature of field work in which students are going to play their role after completing the courses of study.
- ii) Develop understanding of subject based knowledge given in the class room in the context of its applications at work places
- iii) Develop first hand experience and confidence amongst the students to enable them to use and apply polytechnic/institute based knowledge and skills to solve practical problems in the world of work.
- iv) Develop special skills and abilities like interpersonal skills, communication skills, attitudes and values

The major project should not be considered as merely conventional Industrial training in which students are sent at work places with minimal supervision. This experience is required to be planned and supervised on regular basis by the polytechnic faculty. For the fulfillment of above objectives, polytechnics may establish close linkage with 8-10 relevant organisations for providing such and experience. It is necessary that each organisation is visited well in advance and activities to be performed by the students are well defined. The chosen activities should be such which are of curricular interest to students and of professional value to Industrial/field organisations. Each teacher is expected to supervise and guide 5-6 students.

Efforts should be made to identify actual field problems in the textile industries to be given as project work to the students. Project selected should not be too complex which is beyond the level of the students. The placement of the students for such a practical cum project work should match with the competency profile of students and the project work assigned to them. Students may be assessed both by industry and polytechnic faculty.

**Some of the suggested project activities are given below:**

**For Spinning group**

1. Assessment of yarn realization, expected waste percentage at different stages from a specific trash percentage raw material
2. To prepare a spin plan for a particular count balancing the machines, material and labour
3. Modifications/changes required in the various machines for processing of stapled man made fibres on cotton spinning system
4. Comparison of semi high production and high production card silver on yarn quality and economics of the both
5. Effect of draft distribution and total draft and change in twist on ring spun yarn with respect to productivity and quality
6. Reasons of end breakages, their remedies and analysis in a ring frame machine

**For Weaving Group**

1. Graph to fabric (may be in the mill or institute)
2. Mill plan (for certain number of looms)
3. Sample testing
4. Loom efficiency
5. Project fire fighting
6. Reproduction from fabric samples
7. Fabric faults and remedial steps
8. Study of any latest technology/machine related to weaving

**For Processing Group**

- 1 Study of effect of change of process parameters (temperature, time, concentration) in various processes used in pretreatments, dyeing, printing and finishing.
2. Relative study of various classes of dyes on same or different substrate
- 3 To analyse efficiency of various net processing treatments
- 4 Relative study of various fastness properties of different classes of dyes
- 5 Any project related to textile processing industry

A suggestive criteria for assessing student performance by the external (personnel from industry) and internal (teacher) examiner is given in table below:

Sr. No.	Performance criteria	Max.** marks	Rating Scale				
			Excellent	Very good	Good	Fair	Poor
1.	Selection of project assignment	10	10	8	6	4	2
2.	Planning and execution of considerations	10	10	8	6	4	2
3.	Quality of performance	20	20	16	12	8	4
4.	Providing solution of the problems or production of final product	20	20	16	12	8	4
5.	Sense of responsibility	10	10	8	6	4	2
6.	Self expression/ communication skills	5	5	4	3	2	1
7.	Interpersonal skills/human relations	5	5	4	3	2	1
8.	Report writing skills	10	10	8	6	4	2
9.	Viva voce	10	10	8	6	4	2
<b>Total marks</b>		<b>100</b>	<b>100</b>	<b>80</b>	<b>60</b>	<b>40</b>	<b>20</b>

The overall grading of the practical training shall be made as per following table

	Range of maximum marks	Overall grade
i)	More than 80	Excellent
ii)	79 <> 65	Very good
iii)	64 <> 50	Good
iv)	49 <> 40	Fair
v)	Less than 40	Poor

In order to qualify for the diploma, students must get “Overall Good grade” failing which the students may be given one more chance of undergoing 8 -10 weeks of project oriented professional training in the same industry and re-evaluated before being disqualified and declared “not eligible to receive diploma ”. It is also important to note that the students must get more than six “goods” or above “good” grade in different performance criteria items in order to get “Overall Good” grade.

### Important Notes

1. This criteria must be followed by the internal and external examiner and they should see the daily, weekly and monthly reports while awarding marks as per the above criteria.
2. The criteria for evaluation of the students have been worked out for 100 maximum marks. The internal and external examiners will evaluate students separately and give marks as per the study and evaluation scheme of examination.

3. The external examiner, preferably, a person from industry/organization, who has been associated with the project-oriented professional training of the students, should evaluate the students performance as per the above criteria.
4. It is also proposed that two students or two projects which are rated best be given merit certificate at the time of annual day of the institute. It would be better if specific nearby industries are approached for instituting such awards.

The teachers are free to evolve another criteria of assessment, depending upon the type of project work.

It is proposed that the institute may organize an annual exhibition of the project work done by the students and invite leading Industrial organisations in such an exhibition. It is also proposed that two students or two projects which are rated best be given merit certificate at the time of annual day of the institute. It would be better if specific industries are approached for instituting such awards.