

DEPARTMENT OF TECHNICAL EDUCATION

From The Principal Secretary / Commissioner of Technical Education, Directorate of Technical Education, Chennai 600 025	To To the Principals of Government, Government Aided and Self Financing Polytechnic Colleges.
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Letter No. 22639/Y3/CDC/2015 dated: 6.05.2015

Sir,

Sub:	Technical Education – Amendment in M-Scheme Regulations– Regarding.
Ref:	Letter No. 114537/M1/2011 dated: 10/04/2015

The regulations for M-Scheme is attached in the enclosure. It is requested that the regulations be followed meticulously for the students admitted from 2015-16 onwards.

Encl: M-Scheme
Regulations


for Principal Secretary /
Commissioner of Technical Education


6/5/15

**DIPLOMA COURSES IN ENGINEERING/TECHNOLOGY
(SEMESTER SYSTEM)**

(Implemented from 2015- 2016)

M – SCHEME

REGULATIONS*

* *Applicable to the Diploma Courses other than Diploma in Hotel Management & Catering Technology and the Diploma Courses offered through MGR Film Institute, Chennai.*

1. Description of the Course:

a. Full Time (3 years)

The Course for the Full Time Diploma in Engineering shall extend over a period of three academic years, consisting of 6 semesters[♦] and the First Year is common to all Engineering Branches.

b. Sandwich (3½ years)

The Course for the Sandwich Diploma in Engineering shall extend over a period of three and half academic years, consisting of 7 semesters[♦] and the First Year is common to all Engineering Branches. The subjects of three years full time diploma course being regrouped for academic convenience.

During 4th and/or during 7th semester the students undergo industrial training for six months/ one year. Industrial training examination will be conducted after completion of every 6 months of industrial training

c. Part Time (4 years)

The course for the Part Time Diploma in Engineering shall extend over a period of 4 academic years containing of 8 semesters[♦], the subjects of 3 year full time diploma courses being regrouped for academic convenience.

♦ Each Semester will have 15 weeks duration of study with 35 hrs. /Week for Regular Diploma Course and 21 hrs. / Week for Part-Time Diploma Course.

The Curriculum for all the 6 Semesters of Diploma courses (Engineering & Special Diploma Courses viz. Textile Technology, Leather Technology, Printing Technology, Chemical Technology etc.) have been revised and revised curriculum is applicable for the candidates admitted from 2015 – 2016 academic year onwards.

2. Condition for Admission:

Condition for admission to the Diploma courses shall be required to have passed in The S.S.L.C Examination of the Board of Secondary Education, Tamilnadu.

(Or)

The Anglo Indian High School Examination with eligibility for Higher Secondary Course in Tamilnadu

(Or)

The Matriculation Examination of Tamil Nadu.

(Or)

Any other Examinations recognized as equivalent to the above by the Board of Secondary Education, Tamilnadu.

Note: In addition, at the time of admission the candidate will have to satisfy certain minimum requirements, which may be prescribed from time to time.

3. Admission to Second year (Lateral Entry):

A pass in HSC (Academic) or (Vocational) courses mentioned in the Higher Secondary Schools in Tamilnadu affiliated to the Tamilnadu Higher Secondary Board with eligibility for university Courses of study or equivalent examination, & Should have studied the following subjects

Sl. No	Courses	H.Sc Academic	H.Sc Vocational	
		Subjects Studied	Subjects Studied	
			Related subjects	Vocational subjects
1.	All the Regular and Sandwich Diploma Courses	Maths, Physics & Chemistry	Maths / Physics / Chemistry	Related Vocational Subjects Theory & Practical
2.	Diploma Course in Modern Office Practice	English & Accountancy English & Elements of Economics English & Elements of Commerce	English & Accountancy, English & Elements of Economics, English & Management Principles & Techniques, English & Typewriting	Accountancy & Auditing, Banking, Business Management, Co-operative Management, International Trade, Marketing & Salesmanship, Insurance & Material Management, Office Secretary ship.

- For the Diploma Courses related with Engineering/Technology, the related / equivalent subjects prescribed along with Practicals may also be taken for arriving the eligibility.
- Branch will be allotted according to merit through counseling by the respective Principal as per communal reservation.
- For admission to the Textile Technology, Leather Technology, Printing Technology, Chemical Technology and Modern Office Practice Diploma courses the candidates studied the related subjects will be given first preference.
- *Candidates who have studied Commerce Subjects are not eligible for Engineering Diploma Courses.*

4. Age Limit: No Age limit.

5. Eligibility for the Award of Diploma:

No candidate shall be eligible for the Diploma unless he/she has undergone the prescribed course of study for a period of not less than 3 academic years in any institution affiliated to the State Board of Technical Education and Training, Tamilnadu, when joined in First Year and two years if joined under Lateral Entry scheme in the second year and passed the prescribed examination.

The minimum and maximum period for completion of Diploma Courses are as given Below:

Diploma Course	Minimum Period	Maximum Period
Full Time	3 Years	6 Years
Full Time(Lateral Entry)	2 Years	5 Years
Sandwich	3½ Years	6½ Years
Part Time	4 Years	7 Years

6. Subjects of Study and Curriculum outline:

The subjects of study shall be in accordance with the syllabus prescribed from time to time, both in theory and practical subjects. The curriculum outline is given in Annexure - I

7. Examinations:

Board Examinations in all subjects of all the semesters under the scheme of examinations will be conducted at the end of each semester.

The internal assessment marks for all the subjects will be awarded on the basis of continuous internal assessment earned during the semester concerned. For each subject 25 marks are allotted for internal assessment and 75 marks are allotted for Board Examination.

8. Continuous Internal Assessment:

A. For Theory Subjects:

The Internal Assessment marks for a total of 25 marks, which are to be distributed as follows:

i) Subject Attendance

5 Marks

(Award of marks for subject attendance to each subject Theory/Practical will be as per the range given below)

80% - 83%	1 Mark
84% - 87%	2 Marks
88% - 91%	3 Marks
92% - 95%	4 Marks
96% - 100%	5 Marks

ii) Test

10 Marks

2 Tests each of 2 hours duration for a total of 50 marks are to be conducted. Out of which the best one will be taken and the marks to be reduced to:

05 marks

The Test – III is to be the Model test covering all the five units and the marks so obtained will be reduced to :

05 marks

Total 10 marks

TEST	UNITS	WHEN TO CONDUCT	MARKS	DURATION
Test I	Unit – I & II	End of 6 th week	50	2 Hrs
Test II	Unit – III & IV	End of 12 th week	50	2 Hrs
Test III	Model Examination - Compulsory Covering all the 5 Units. (Board Examinations-question paper-pattern).	End of 15 th week	75	3 Hrs

- From the Academic year 2015-2016 onwards.

Question Paper Pattern for the Periodical Test :(Test - I & Test- II)

With No Choice:

Part A Type questions: 4 Questions X 2 mark	8 marks
Part B Type questions: 4 Questions X 3marks	12 marks
Part C Type questions: 6 Questions X 5 marks	30 marks
Total		50 marks

iii) Assignment

10 Marks

For each subject Three Assignments are to be given each for 20 marks and the average marks scored should be reduced for 10 marks

All Test Papers and Assignment notebooks after getting the signature with date from the students must be kept in the safe custody in the Department for verification and audit. It should be preserved for 2 Semesters and produced to the flying squad and the inspection team at the time of inspection/verification.

B. For Practical Subjects:

The Internal Assessment mark for a total of 25 marks which are to be distributed as follows:-

a)	Attendance	:	5	Marks (Award of marks same as theory subjects)
b)	Procedure/ observation and tabulation/ Other Practical related Work	:	10	Marks
c)	Record writing	:	10	Marks
	TOTAL	:	25	Marks

- All the Experiments/Exercises indicated in the syllabus should be completed and the same to be given for final Board examinations.
- The Record for every completed exercise should be submitted in the subsequent Practical classes and marks should be awarded for 20 for each exercise as per the above allocation.
- At the end of the Semester, the average marks of all the exercises should be calculated for 20 marks and the marks awarded for attendance is to be added to arrive at the internal assessment mark for Practical. (20+5=25 marks)
- The students have to submit the duly signed bonafide record note book/file during the Practical Board Examinations.
- All the marks awarded for assignments, Tests and attendance should be entered in the Personal Log Book of the staff, who is handling the subject. This is applicable to both Theory and Practical subjects.

9. Life and Employability Skills Practical:

The Life and Employability Skills Practical with more emphasis is being introduced in IV Semester for Circuit Branches and in III Semester for other branches of Engineering. Much Stress is given to increase the employability of students.

Internal Assessment Mark

..... 25 Marks

10. Project Work:

The students of all the Diploma Courses (except Diploma in Modern Office Practice) have to do a Project Work as part of the Curriculum and in partial fulfillment for the award of Diploma by the State Board of Technical Education and Training, Tamilnadu. In order to encourage students to do worthwhile and innovative projects, every year prizes are awarded for the best three projects i.e. institution wise, region wise and state wise. The Project work must be reviewed twice in the same semester.

a) Internal assessment mark for Project Work & Viva Voce:

Project Review I	...	10 marks
Project Review II	...	10 marks
Attendance	...	05 marks (Award of marks same as theory Subject pattern)

Total	...	25 marks
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Proper record to be maintained for the two Project Reviews, and It should be preserved for 2 Semesters and produced to the flying squad and the inspection team at the time of inspection/verification.

b) Allocation of Marks for Project Work & Viva Voce in Board Examinations:

Viva Voce	...	25 marks
Demonstration/Presentation	...	20 marks
Total	...	45 marks

c) Written Test Mark (from 3 topics for 1 hour duration): \$

i) Entrepreneurship	5 questions X 2 marks	=	10 marks
ii) Environment Management	5 questions X 2 marks	=	10 marks
iii) Disaster Management	5 questions X 2 marks	=	10 marks
			30 marks

\$ - Selection of Questions should be from Question Bank, by the External Examiner.
No choice need be given to the candidates.

Project Work & Viva Voce in Board Examination	--	45 Marks
Written Test Mark (from 3 topics for 1 hour duration)	--	30 Marks
TOTAL	--	75 Marks

A neatly prepared PROJECT REPORT as per the format has to be submitted by individual student during the Project Work & Viva Voce Board examination.

11. Scheme of Examinations:

The Scheme of examinations for subjects is given in Annexure - II.

12. Criteria for Pass:

1. No candidate shall be eligible for the award of Diploma unless he/she has undergone the prescribed course of study successfully in an institution approved by AICTE and affiliated to the State Board of Technical Education & Training, Tamil Nadu and pass all the subjects prescribed in the curriculum.
2. A candidate shall be declared to have passed the examination in a subject if he/she secures not less than *40% in theory subjects* and *50% in practical subjects* out of the total prescribed maximum marks including both the Internal Assessment and the Board Examinations marks put together, subject to the condition that he/she secures at least a minimum of *30 marks out of 75 marks in the Board Theory Examinations* and *a minimum of 35 marks out of 75 marks in the Board Practical Examinations*.

13. Classification of successful candidates:

Classification of candidates who will pass out the final examinations from April 2018 onwards (Joined in first year in 2015-2016) will be done as specified below.

First Class with Superlative Distinction:

A candidate will be declared to have passed in **First Class with Superlative Distinction** if he/she secures not less than 75% of the marks in all the subjects and passes all the semesters in the first appearance itself and passes all subjects within the stipulated period of study 3/ 3½/ 4 years (Full Time/Sandwich/Part Time) without any break in study.

First Class with Distinction:

A candidate will be declared to have passed in **First Class with Distinction** if he/she secures not less than 75% of the aggregate marks in all the semesters put together and passes all the semesters except the I and II semester in the first appearance itself and passes all subjects within the stipulated period of study 3/ 3½/ 4 years (Full Time/Sandwich/Part Time) without any break in study.

First Class:

A candidate will be declared to have passed in **First Class** if he/she secures not less than 60% of the aggregate marks in all the semesters put together and passes all the subjects within the stipulated period of study 3/ 3½ / 4 years (Full Time/Sandwich/Part Time) without any break in study.

Second Class:

All other successful candidates will be declared to have passed in **Second Class**.

The above mentioned classifications are also applicable for the Sandwich / Part-Time students who pass out Final Examination from October 2018 /April 2019 onwards (both joined in First Year in 2015-2016)

14. Duration of a period in the Class Time Table:

The duration of each period of instruction is 1 hour and the total period of instruction hours excluding interval and Lunch break in a day should be uniformly maintained as 7 hours corresponding to 7 periods of instruction (Theory & Practical).

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