C-24 - CURRICULUM
FOR DIPLOMA PROGRAMMES IN TELANGANA

PREAMBLE

The State Board of Technical Education and Training, Telangana under the aegis of the Department of Technical Education, Telangana regularly reviews the Curricula in tune with the developments both in academic and industry requirements. However, recognizing the changing needs as stated by the catchment industries, the Board has decided to bring about the revision of curriculum. Thus, the Board, with the assistance of senior faculty of the branches concerned, has reviewed C-21 Curriculum in force. On finding the merits and reviewing the existing C-21 Curriculum, the faculty have made a thorough assessment of the curricular changes that have to be brought in. It was felt that there is an urgent need to improve hands-on experience among the students pursuing Diploma courses. Further, the urgency of enhancing communication skills in English has also been highlighted in the feedback and suggestions made by the user industries. Keeping these in view, a number of meetings and deliberations were held at State level, with experts from industry, academia and senior faculty of the department. The new Curricula for the different Diploma courses have been designed with the active participation faculty members of the Polytechnics of Telangana, besides reviewed by Expert Committee constituted with eminent academicians.

Preparation of C-24:

This curriculum is designed under the guidance of Chairman, SBTET, Secretary, SBTET, Officers of SBTET, Officials of NITTTR (HQ), Chennai & Extension centre Hyderabad and 26 team leaders taking into account of all State curriculum policies of India, Asian countries on par with International standards. The prepared C-24 draft for all programmes is vetted by NITTTR, Chennai.

The new C-24 curriculum is designed, duly taking into consideration the Outcome Based Education (OBE) model as per NBA norms. The primary objective of the curriculum revision is to produce best technicians in the country by correlating growing needs of the industries with the academic inputs and also introducing Major, Minor concept in awarding Diploma.

The revised New Curriculum i.e., Curriculum – 2024 or C-24 is planned and designed by including 6 months industrial training is mandatory. Salient Features:

1. Duration of course is 3 years of Regular Academic instruction.

▪ The Curriculum is Outcome based, Semester Pattern, more practical oriented, flexible, and relevant to the industry needs and oriented to develop entrepreneurship skills in students pursuing Diploma courses.

▪ In V semester Two specialised Electives offered with codes 505 & 506 with two courses each i.e. 505A, 505B, 506A & 506B

▪ Students are also permitted to study relevant courses from SWAYAM / NPTEL to a maximum of 20% and corresponding credits (16.6) will be awarded for award of Diploma.

▪ The Open Book System is introduced from the academic year, 2021-22, for amenable subjects with a condition to allow two reference books in the respective courses. The same is continued in the new Curriculum C-24 is being implemented for 501 subject for all branches / programmes.

▪ A robust curriculum structure is designed to enable the students to get equipped with sound knowledge and hands-on practical skills.

▪ Course structure contains 6 theory courses and 4 Laboratory courses in each semester other than industrial training semester.

▪ All theory and Practical courses will be of Lecture -Tutorial-Practicals (L: T: P) pattern.

▪ In order to ensure continuous evaluation, total course content is divided into 3 parts (two units per part) i.e., Mid Semester- I would be conducted for 20 marks from part I and Mid Semester- II would be conducted for 20 marks from part II, End Examination would be conducted for 40 marks of which 20 marks would be covered from part III, 20 marks covered from overall course contents.

▪ Question paper pattern is designed in such a way that it is made mandatory for the students to answer questions from every unit/major topic in order to achieve every Course Outcome (CO).

▪ The Internal marks of 20 are assigned to 2 slip tests, assignments and seminars/quiz/paper presentation.

▪ The question paper pattern comprises of short answer questions, descriptive type questions and application based questions covering the attributes of remembering, understanding and application.

▪ Students will be awarded Grades considering minimum of Absolute and Relative Grade point cut off i.e., Hybrid Grade Point.

▪ The policy decisions taken at the State and Central Government level are implemented with regard to the environmental science by introducing relevant topics in C-24, Chemistry courses with the titles, 1. General Engineering Chemistry for first semester and 2. Applied Engineering Chemistry for second semester. This is also in accordance with the Supreme Court guidelines issued in Sri Mehta's case.

▪ Keeping in view, the increased need of communication skills that is playing a vital role in the success of Diploma Level students in the Industries, emphasis is given for learning and acquiring, listening, speaking, reading and writing skills in English. Communication Skills and Life Skills Lab is introduced in III Semester and Employability Skills Lab introduced in IV Semester for all the programmes.

▪ Latest topics relevant to the needs of the industry and global scenario suitable to be taught at Diploma level are also incorporated in the curriculum.

▪ Every student is exposed to the computer lab at I semester itself in order to familiarize himself with skills required for keyboard/mouse operation, internet usage and e-mailing.

2. Programming in 'C' Theory and Lab are made mandatory for all Diploma programmes to cope up with the demand of the market needs and to become more suitable for employment.

3. CAD is specific to certain branches and it has been given more emphasis in the curriculum. Preparing drawings using CAD software has been given more importance from second semester onwards.

4. The number of teaching hours allotted to a particular unit has been rationalized keeping in view of the past experience.

5. Upon reviewing the existing C-21 curriculum, more emphasis is given to the practical content of Laboratories and workshops and thus strengthening the hands-on practical skills in new Curriculum, C-24.

6. The course contents in all the courses is thoroughly reviewed and structured as outcome based. The course content in certain courses felt overloaded is reduced and in rest of the courses the content has been enhanced as per the industry needs.

7. The Members of the working group are grateful to Sri B. Venkatesham, IAS.,

Commissioner of Technical Education & Chairman, S.B.T.E.T. (TS) for his constant guidance and valuable inputs in revising, modifying and updating the curriculum.

8. The Members acknowledge thanks for cooperation and guidance extended by Sri A. Pullaiah, Secretary, SBTET and Dr C. Srinath, RJD and other officials of Directorate of Technical Education and the State Board of Technical Education, Telangana.

9. The Members acknowledge thanks for cooperation and guidance extended by Dr. Umashanker Sahu, Professor and Head of NITTTR, ECH, Hyderabad and experts from industry, academia from the universities and higher learning institutions and all teaching fraternity from the Polytechnics who are directly and indirectly involved in preparation of the curricula.

II. RULES AND REGULATIONS

1. ADMISSION PROCEDURES:

1.1 DUR ATION AND PATTERN OF THE COURSES

All the Diploma programs run at various institutions are of 3 years duration of Academic Instruction approved by AICTE. All the Diploma programmes are run on semester-wise pattern except Pharmacy Program which is of 2 years of Academic Instruction. The Diploma in Pharmacy Programme runs on year-wise pattern approved by PCI.

1.2 PROCEDURE FOR ADMISSION INTO THE DIPLOMA COURSES:

Selection of candidates is governed by the Rules and regulations laid down in this regard from time to time.

a) Candidates who wish to seek admission in any of the Diploma programme will have to appear for Common Entrance Test for admissions into Polytechnics (POLYCET) conducted by the State Board of Technical Education and Training, Telangana, Hyderabad.

b) Candidates who wish to seek admission into Pharmacy (ER-2020) have to apply in DOST portal.

1.3 The candidates satisfying the following requirements only are eligible to appear for the Common Entrance Test for admissions into Polytechnics (POLYCET).

a) The candidates seeking admission should have appeared for the X class examination, conducted by the Board of Secondary Education, Telangana or equivalent examination at the time of making application to the Common Entrance Test for Polytechnics for admissions into Polytechnics (POLYCET). In case of candidates who

apply with pending results of their qualifying examinations, their selection shall be subject to submission of proof of their passing the qualifying examination in one attempt or compartmentally at the time of counselling for admission.

b)   The reservation rules stipulated by the Government of Telangana from time to time are implemented for the admissions into Polytechnics, for 1st year (1st semester) based on the merit obtained in the Common Entrance Test (POLYCET), students selected by Women and Child Welfare Department and Lateral Entry admissions for Inter Vocational Students/LPCET for ITI students into II year (3rd semester).

c)   The candidates who seek admission into the Diploma in Pharmacy Programme (ER-2020) have to apply in DOST Portal conducted by TSCHE and the qualification is 10+2.

1.4   MEDIUM OF INSTRUCTION

The medium of instruction and examination shall be in English.

1.5   PERMANENT IDENTIFICATION NUMBER (PIN)

A Permanent Identification Number (PIN) will be allotted to each candidate, which is computer generated so as to maintain the student information and tabulation of results.

Example of PIN – 24001-CS-001 (PIN FORMAT is '24' year of study, '001' college code, 'CS' Branch code, '001' roll number)

1.6   NUMBER OF WORKING DAYS PER SEMESTER:

a).   The Academic Year for all the Courses usually commences from 2nd week of June of the year of admission to 31st March of the succeeding year.

b).   The Working days in a week shall be from Monday to Saturday.

c).   There shall be 7 periods of 50 minutes duration on all working days.

d).   The minimum number of Instructional working days for each semester shall be 90 days excluding examination days/ Public holidays/ orientation programme/ Sports and games days. If this prescribed minimum is not achieved due to any reason, special arrangements shall be made to conduct classes to cover the syllabus.

1.7   ELIGIBILITY OF ATTENDANCE TO APPEAR FOR THE END EXAMINATION

a).   A candidate shall be permitted to appear for the end examination in all courses, if he or she puts up a minimum attendance of 75% of Instructional working days during the Semester.

b).   Condonation of shortage of attendance in aggregate upto 10% (65%   and above and below 75%) in each semester may be granted on medical grounds.

c).   Candidates having less than 65% attendance shall be detained.

d).   Student attendance is recorded, twice a day using Aadhar Based Biometric Attendance System with a minimum gap of 6 hours for full day and three hours for half a day attendance.

e).   Students whose shortage of attendance is not condoned in any semester are not eligible to take their end examination of that class and their admissions shall stand cancelled. They may seek re-admission for that semester when offered next.

f).   A stipulated fee shall be payable towards condonation for shortage of attendance. (as per the Board norms)

1.8   RE-ADMISSION

Re-admission shall be granted to eligible candidates by the respective Principal of the institutions concerned. 10% of approved intake are eligible for Re-admission and preference will be given to first-cum-first-serve basis, while according permission for re-admission of the Diploma candidates:-

1.   The percentage of attendance to a readmitted candidate is to be calculated from the first day of beginning of the class work of that year / semester, but not from the date of readmission

S No	Year/Semester	No. of Working days	No. of working days required for 75% attendance	No. of working days required for 65% attendance
1	Any Semester (Except for Industrial Training	90	67.5	58.5
2	Pharmacy	180	135	117

2.   The Principals of all Polytechnics shall ensure that the re-admission cases should be considered and granted:-

a)   Within 15 days after commencement of class work in any semester and within 30 days for Pharmacy students.

b)   Otherwise such cases shall not be considered for re-admission for that Semester/year, and the candidates concerned may be advised to seek re-admission in the next subsequent semester/year.

c)   Principals shall select the Re-admission student PIN in SBTET Portal from Principal LOGIN and readmit in SBTET Portal without fail.

Before issuing re-admission orders, an undertaking letter from the student is to be obtained, stating that he/she will agree to the rule that the percentage of attendance to him/her shall be calculated from the first day of beginning of the regular class work for that year / semester, as officially announced by DTE/SBTET but not from the day on which he/she has actually reported to the class work. Once re-admission is granted he/she will complete the Diploma in twice the duration of the programme from the date of the first admission, otherwise he/she will forfeit the claim for qualifying for the award of Diploma.

2.   SCHEME OF EXAMINATION

2.1   I, II, III, IV, V and VI Semesters:

THEORY EXAMINATION: Each Semester End Examination (SEE) carries 40 marks in respect of specified courses of 2 hours duration, along with 60 marks for continuous evaluation out of which 40 are under external evaluation in the form of mid semester examinations.

▪   The Semester End Examination paper shall be set for 40 marks

▪   PRACTICAL EXAMINATION: Each laboratory course carries 40 marks of 3 hours duration and 60 Internal marks for continuous internal evaluation.

2.2   ASSESSMENT SCHEME

I.   **A) Assessment:** In order to ensure continuous evaluation the examination pattern is formulated as:

Type of Exam	Max. Marks
Semester End Examination	40 marks
Mid Sem 1	20 marks
Mid Sem 2	20 marks
Internals	20 marks
Total marks	100 Marks

II. B) Marking Scheme (Question Paper Blue Print)

MID SEM-I EXAM

S.No	Unit Name	R	U	A	Remarks
1	Unit-I	1, 2	5(a) 5(b)	7(a) 7(b)	
2	Unit-II	3, 4	6(a) 6(b)	8(a) 8(b)	
Total Questions		4	4	4	

MID SEM –II EXAM

S.No	Unit Name	R	U	A	Remarks
1	Unit-III	1, 2	5(a) 5(b)	7(a) 7(b)	
2	Unit-IV	3, 4	6(a) 6(b)	8(a) 8(b)	
Total Questions		4	4	4	

Semester End Examination

Sl No	Unit No.	Questions to be set for SEE			Remarks
		R	U	A	
1	I	4	1	9(a)	13(a)	
2	II				
3	III		2	10(a)	14(a)	
4	IV				
5	V		3 — 5, 6	9(b)	13(b)	
				11(a)	15(a)	
				11(b)	15(b)	
6	VI		7,8	10(b)	14(b)	
				12(a)	16(a)	
				12(b)	16(b)	
Total Questions		8	8	8	
Legend:	Remembering (R)	1 Mark			
	Understanding (U)	3 Marks			
	Application (A)	5 Marks			

➢ Total course content shall be divided into three parts as Part-I, Part-II, Part-III

➢ Mid sem 1 Exam should be conducted from Part-I

➢ Mid sem II Exam should be conducted from Part-II

➢ End Examination to be conducted for 40 marks of which

• 20 Marks should be covered from Part-III

• Remaining 20 marks covered from over all course contents

➢ The Internals shall consist of following marks division

1. Slip test 1	--	5 marks
2. Slip test 2	--	5 Marks
3. Assignments	--	5 Marks
4. Seminar/paper presentation/group discussion/quiz--		5 Marks

III. Mid semester Question paper pattern

A. General

✓ Part A shall consist of 'Remember' based questions

✓ Part B shall consist of 'Understanding' based questions

✓ Part C shall be of 'Application' based Questions

B. Open book System

✓ Part – A, B & C consists of Understanding and Application based questions only.

IV. Semester End Examination:

➢ The Regular End Semester Examinations shall be conducted in the month of October/ November and March/April for ODD & EVEN Semesters.

➢ Backlog examinations should be held once after the end of current Academic Year (i.e., before the commencement of Academic Year to give sufficient time for the student to prepare for Backlog examinations.)

V. Examination Pattern (Semester End Examination):

A. General

Part A	Part 3 Unit 5&6	'Remember' based questions
	Overall course **content**	'Remember' based questions
Part B	Part 3 Unit 5&6	'Understanding' based questions
	Overall course **content**	'Understanding' based questions
Part C	Part 3 Unit 5&6	'Application' based questions
	Overall course **content**	'Application' based questions

B.   Open Book System

Part A	Part 3 Unit 5&6	Understanding and Application based questions only.
	Overall course **content**	
Part B	Part 3 Unit 5&6	
	Overall course **content**	
Part C	Part 3 Unit 5&6	
	Overall course **content**	

VI.   Award of Grades and Grade points criteria for C-24 Curriculum

1.   **Marks :** In order to ensure continuous evaluation the examination pattern is formulated as:

Theory	
End Examination	40 marks
Mid Sem-I	20 marks
Mid Sem-II	20 marks
Internal	20 marks
Total marks	100 Marks

Practical	
End Examination	40 marks
Mid Sem-I	20 marks
Mid Sem-II	20 marks
Internal	20 marks
Total marks	100 Marks

2.   Hybrid grading system for regular students:

Grade	Grade Point	Absolute Grade Cut off		Relative Grade Cut off	Hybrid Grade Cut off
		Theory Subjects	Practical & Drawing		
A+	10	> 90%	> 90%	Min of Top 1/8	Min of Abs. or Rel. grade %
A	9	> 80 to < 90%	> 82.5 to < 90%	Min of Top 2/8	Min of Abs. or Rel. grade %
B+	8	> 70 to < 80%	> 75 to < 82.5%	Min of Top 3/8	Min of Abs. or Rel. grade %
B	7	> 60 to < 70%	> 67.5 to < 75%	Min of Top 4/8	Min of Abs. or Rel. grade %
C+	6	> 50 to < 60%	> 60 to < 67.5%	Min of Top 5/8	Min of Abs. or Rel. grade %
C	5	> 40 to < 50%	> 55 to < 60%	Min of Top 6/8	Min of Abs. or Rel. grade %
D	4	> 35 to < 40%	> 50 to < 55%	Min of Top 7/8	Min of Abs. or Rel. grade %
E	0		Rest of the Candidates		

Based on the minimum of Absolute Grade cut off and Relative Grade cut off, a Hybrid grade cut off shall be arrived and the appropriate grade shall be allotted to the student and based on the Grade, a Grade point shall be allotted in each course provided the Candidate passes in the course.

3. **Pass Criteria for Regular Candidate:** The Candidate is declared pass only if he/she secures the Hybrid Grade cut off of 'D' grade or above and 35% or above in Theory Examination and 50% or above in Practical and Drawing Examinations, as per the formula below in Sem End Examination:-

$$\frac{\text{End semester marks secured X 100}}{\text{End semester Topper marks}}$$

4. **Grades for backlog subjects :** (a) The Candidate shall be awarded 'P' or 'F' Grade based on 'Pass' or 'Fail' respectively in the Backlog Subjects. The Candidate shall get P Grade if he/she secures the Hybrid Grade cut off marks of 'D' grade or above or Regular exam of that batch and 35% or above in Theory Examination and 50% or above in Practical and Drawing Examinations, as per the formula below in End Sem Examination:-

$$\frac{\text{End semester marks secured X 100}}{\text{End semester Topper marks of Regular exam of that batch}}$$

(b) The candidate who passed in backlog examination will be awarded minimum grade points i.e., 'D'

5. **Conversion of CGPA into equivalent Percentage:**
The equivalent percentage of CGPA is calculated as **(CGPA – 0.5) x 10**

VII. **Credits:**

For theory courses--   2.5 Credits

For Laboratory courses-   1.25 Credits

Total credits per semester   20 Credits

➢   IVC/LPCET candidates should be awarded 40 credits at the time of award of Diploma.

➢   For re-admission candidates from C-18 & C-21 scheme to C-24 Scheme, the credits are calculated by an equivalency ratio of 0.8 (20/25) for Subsequent semesters from 2nd Semester onwards.

➢   CGPA shall be calculated based on the Grade Points secured in the courses**.**

➢ To obtain Diploma, student has to get 120 out of 120

VIII. **Electives:**

a) The students are permitted to choose two electives in V semester.

b) The students are permitted to choose courses related to the branch through MOOC like SWAYAM / NPTEL (https://swayam.gov.in/ & https://nptel.ac.in/LocalChapter/). The students who obtained SWAYAM certificate will be awarded 2.5 credits for each course and will be considered for award of Diploma.

c) The student has to complete one Project Assessment in V Semester

IX. **Industrial Training (VI Semester):**

➢ **After completion of 4th Semester, the students of about 50% of each Programme in an institution will take up V semester and balance 50% will take up VI semester industrial training in Odd Semester. In Even Semester, they will be swapped into VI and V semesters respectively.**

➢ **Evaluation and assessment of Industrial Training**, shall be done and marks be awarded in the following manner, provided the candidates concerned have put up minimum of 90% attendance during Industrial Training.

Mid-I Industrial assessment at Industry : 300 marks

Mid-II Industrial assessment at Industry : 300 marks

Institutional Internal Evaluation : 300 marks

Semester End Examination : 100 marks
(Seminar/viva-voice at Institution)

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TOTAL 1000 marks

➢ **Mid – I & II Industrial Assessment parameters at Industry:**

S.No	Learning Parameter	Assessment I (First Quarter)	Assessment II (Second Quarter)
1	Attendance and punctuality	20	20
2	Familiarity of tools and material	30	30
3	Engineering skills	50	50
4	Application of knowledge & Problem solving skills	50	50
5	Comprehension and observation	10	10
6	Professionalism/Professional ethics	20	20
7	Safety and environmental consciousness	10	10
8	Communication skills	20	20
9	Supervisory skills	50	50
10	General conduct during the period	40	40
Total marks for Industry Evaluation		300	300
		600 marks	

Institutional internal Assessment parameters

Institution Level Evaluation Scheme			
Sl No	**Criteria**	**Marks**	**Time**
1	1st Report Submission	50	After 8 Weeks
2	Seminar-I	50	9th to 10th week
3	2nd Report Submission	50	After 18 weeks
4	Log book	100	Before Viva-Voice
5	Seminar-II	50	Before Viva-Voice
	Institute Evaluation Total	**300**	
Semester End Examination			
1	Viva-Voice	50	After 24 weeks
2	Presentation/Demonstration of skills	50	
	Total	**100**	

▪ The assessment at the institute level will be done by a minimum of three members i.e. Internal Faculty, Industrial Experts/External Examiner and H.O.D. and the same shall be averaged.

X. Assessment Procedure:

a)   Theory Courses: Theory Courses carry 20 marks for Mid Sem I and 20 marks for Mid Sem II and 20 marks for Internals which consists of Slip Test-I 5 Marks, Slip Test-II 5 Marks, Assignment-5 Marks and Seminar /Quiz/Paper Presentation-5 Marks. Mid Sem examinations will be conducted on the dates specified by SBTET. The remaining 40 marks of theory courses will be conducted as End Semester Examination by SBTET.

b)   Practicals: Student's performance in Laboratories / Workshop shall be assessed during each semester of study for 40 marks in end practical course and internal assessment carries 20 marks for Mid Sem I Lab exam and 20 marks for Mid Sem II lab exam and 20 marks for Internal assessment of regular lab practice. Each student has to write a record / log book for assessment purpose. In the course of Drawing, which is also considered as a practical paper, the same rules hold good. Drawing exercises are to be filed in seriatim.

c)   Internal assessment in Labs / workshops / Survey field etc., during the course of study shall be done and Internal marks shall be awarded by the concerned Lecturer / Senior Lecturer / Workshop superintendent with the concurrence of concerned HOS as the case maybe.

d)   For practical examinations, there shall be two examiners. External examiner shall be appointed by the Principal in consultation with respective head of the department preferably choosing a person from an Industry/Academician. External Examiner from Industry   should be appointed for at least one of the core labs. The Internal examiner shall be the person concerned with internal assessment as in (c) above.

e)   Question Paper for Practicals: Question paper should cover all the experiments / exercise prescribed.

f)   Records pertaining to internal assessment marks of both theory and practical courses are to be maintained for official inspection.

3   RULES OF PROMOTION FOR NEXT LEVEL:

3.1   For Diploma Courses for 1st ,2nd, 3rd, 4th, 5th and 6th Semesters:

1.   A candidate shall be permitted to appear for first Semester examination provided he / she puts the required percentage of attendance (i.e., 75%) and pays the examination fee. However, attendance can be condoned by the Principal on Medical grounds upto 10% (i.e. attendance after condonation on Medical grounds should not be less than 65%) and he/she has to pay the condonation fee along with examination fee as prescribed by SBTET from time to time.

2.   A candidate shall be promoted to 2nd semester if he/she puts the required percentage

of attendance (i.e., 75% in general and 65% on medical grounds) in the first semester and pays the examination fee. A candidate who could not pay the first semester examination fee has to pay the promotion fee as prescribed by State Board of Technical Education and Training from time to time before commencement of **2ⁿᵈ** semester.

A candidate is eligible to appear for the **2ⁿᵈ** semester exam if he/she puts the required percentage of attendance (i.e., 75% in general and 65% on medical condonation) in the **2ⁿᵈ** semester.

3. A candidate shall be promoted to 3ʳᵈsemester if he/she puts the required percentage of attendance (i.e., 75% in general and 65% on medical grounds) in the **2ⁿᵈ** semester and pays the examination fee.

A candidate who could not pay the **2ⁿᵈ** semester examination fee has to pay the promotion fee as prescribed by State Board of Technical Education and Training from time to time before commencement of 3ʳᵈ semester.

A candidate is eligible to appear for the 3ʳᵈ semester exam if he/she puts the required percentage of attendance (i.e., 75% in general and 65% on medical condonation) and pays the examination fee in the 3ʳᵈ semester.

4. A candidate shall be promoted to 4ᵗʰ semester provided he/she puts the required percentage of attendance (i.e., 75% in general and 65% on medical condonation) in the 3ʳᵈsemester and pays the examination fee.

IVC students and ITI candidates admitted through LPCET admitted into 3ʳᵈ semester through lateral entry shall be promoted to 4th Semester, **if he/she** puts the required percentage of attendance (i.e., 75% in general and 65% on medical grounds) and pays examination in the 3ʳᵈ semester.

A candidate, who could not pay the 3ʳᵈsemester exam fee but fulfilling all other conditions has to pay the promotion fee as prescribed by State Board of Technical Education and Training from time to time before commencement of 4ᵗʰ semester.

A candidate is eligible to appear for the 4ᵗʰ semester exam if he/she puts the required percentage of attendance (i.e., 75% in general and 65% on medical condonation) and pays the examination fee in the 4ᵗʰ semester.

5. A candidate shall be promoted to 5ᵗʰsemester provided he / she puts the required

percentage of attendance (i.e., 75% in general and 65% on medical grounds) in the 4thsemester and pays the examination fee.

A candidate, who could not pay the 4thsemester examination fee has to pay the promotion fee as prescribed by State Board of Technical Education and Training from time to time before commencement of 5thsemester as the case may be.

A candidate is eligible to appear for the 5th semester exam if he/she puts the required percentage of attendance (i.e., 75% in general and 65% on medical condonation) and pays the examination fee in the 5th semester.

6. A candidate shall be promoted to 6thsemester provided he / she puts the required percentage of attendance (i.e., 75% in general and 65% on medical grounds) in the 5thsemester and pays the examination fee.

A candidate, who could not pay the 5thsemester examination fee, has to pay the promotion fee as prescribed by State Board of Technical Education and Training from time to time before commencement of 6th semester as the case may be.

(a) A candidate is eligible to appear for the 5th Odd Semester (Theory) exam if he/she

i. Puts the required percentage of attendance in the 5th semester

ii. Should have appeared for 4th semester examination.

(b) A candidate is eligible to appear for 6th (Industrial Training) Even Semester examination if he/she

i) Puts the required percentage of attendance i.e., 90% in 6th semester (Industrial Training)

ii) Should have completed the Industrial Training

iii) Should have submitted Industrial Training assessment report.

(c) In case a candidate does not successfully complete the Industrial training, he / she will have to repeat the training at his / her own cost.

4.1   EXAMINATION FEE SCHEDULE:

The examination fee shall be paid as per the notification issued by State Board of Technical Education and Training from time to time.

4.2   ISSUE OF CONSOLIDATED MEMORANDUM OF GRADES (CMG):

All candidates who appear for the end examination shall be issued CMG without any payment of fee. However, candidates who lose the original Grade Card have to pay the prescribed fee to the Secretary, State Board of Technical Education and Training, Telangana for each duplicate CMG.

4.3 MAXIMUM PERIOD FOR COMPLETION OF DIPLOMA COURSES:

Maximum period for completion of the course is twice the prescribed duration of the course from the date of First admission (includes the period of detention and discontinuation of studies by student etc) failing which they shall have to forfeit the claim for qualifying for the award of Diploma. (They shall not be permitted to appear for examinations after that date). This rule applies for all Diploma courses of 3 years of engineering and non-engineering courses including candidates seek admission under lateral entry. In respect of Pharmacy courses the completion period is 4 years as the prescribed duration of the course is 2 years.

4.4 ELIGIBILITY FOR AWARD OF DIPLOMA

a. A candidate is eligible for award of Diploma Certificate if he / she fulfill the following academic regulations.

He / She pursued a course of study for not less than 3 academic years & not more than 6 academic years and not more than 4 academic years for LPCET / IVC / Pharmacy candidates.

He / she should have earned 120 credits out of 120 credits.

b. Students who fail to fulfill all the academic requirements for the award of the Diploma within 6 academic years for regular students and 4 years for LPCET/IVC/Pharmacy students from the year of admission shall forfeit their seat in the course & their seat shall stand cancelled.

c. The students who adapted minor subjects as per the Annexure – I are awarded respective minor Diploma in addition to the Major Diploma, if they secure 15 credits in the minor subjects.

4.5 RE-VALUATION / ISSUE OF COPY OF ANSWER SCRIPT:

4.5.1 a) As per the SBTET notification.

A candidate desirous of applying for Revaluation / issue of copy of valued answer scripts shall submit the application online to the Secretary, State Board of Technical Education and Training, Telangana., Hyderabad – 500 028 as per the notification issued for Revaluation /issue of copy of answer Script.

4.5.2 MALPRACTICE CASES:

If any candidate resorts to any Mal Practice during examinations, he / she shall be booked and the Punishment shall be awarded as per rules and regulations framed by SBTET,TS from time to time.

4.5.3 DISCREPANCIES/PLEAS:

Any Discrepancy regarding results etc., shall be represented to the Board within one month from the date of issue of results. Thereafter, no such cases shall be entertained in any manner.

4.6   EQUIVALENCE AND DIVISION:

In general there is no equivalency of CGPA and marks percentage. However conversion of CGPA into equivalent Percentage is calculated as (CGPA – 0.5) x 10

 For Example: CGPA of 6.50 equivalent to 60%

                     CGPA of 6.00 equivalent to 55%

CGPA of 5.50 equivalent to 50%

With respect to the intermediate vocational candidates/LPCET, who are admitted directly into diploma course at the 3^{rd}semester (i.e., second year) level, the CGPA over 4 semesters shall alone be taken into consideration for award of Diploma.

S.No.	CGPA	Aggregate Percentage of Marks*	Division#
1	10	95	First class with Distinction
2	9	85	
3	8	75	
4	7	65	First Class

5	6	55	Second Class
6	5	45	
7	4	35	

*Aggregate %	:	(CGPT-0.5)X10
#First Class with Distinction	:	CGPA>=8
First Class	:	8>CGPA>=6.5
Second Class	:	6.5>CGPA>=4
Pass	:	CGPA<4 (Subject to Earning of 120 Credits)

5   ISSUE OF CERTIFICATES :

5.1   ISSUE OF DUPLICATE DIPLOMA:

If the candidate desires for a duplicate certificate of Diploma, he/she may obtain on payment of prescribed fee, duly following the procedure.

5.2   ISSUE OF MIGRATION CERTIFICATE AND TRANSCRIPTS:

The Board on payment of prescribed fee shall issue these certificates for the candidates who intend to pursue Higher Studies in India or Abroad.

5.3   GENERAL

i.   The Board may change or amend the academic rules and regulations or syllabi at any time and the changes or amendments made shall be applicable to all the students, for whom it is intended, with effect from the dates notified by the competent authority.

ii.   All legal matters pertaining to the State Board of Technical Education and Training are within the jurisdiction of Hyderabad.

iii.   In case of any ambiguity in the interpretation of the above rules, the decision of the Secretary, SBTET (TS) is final.

For further information visit SBTET Website: https://sbtet.telangana.gov.in/   & Help Desk No: 040-23222192.

1	AA		

ANNEXURE			
MINOR SUBJECTS			
S.No.	Branch	Sub_Code	Sub_Name
1	AA	AA-309	Architectural Graphics
		AA-405	Climatology
		AA-404	Urban Planning
		AA-406	Model Making Lab

S.No.	Branch	Sub_Code	Sub_Name
		AA-501	Professional Practice And Building Bye Laws
		AA-503	Modern Architects
		AA-504	Building Acoustics
		AA-505B	Green Buildings
2	AI	AI-306	Fundamentals Of AI
		AI-405	Fundamentals Of Data Science
		CS-303	Data Structures Through C
		CS-406	Operating Systems
		CS-402	Java Programming
		CS-403	Python Programming
		CS-404	RDBMS
		CS-206	WEB TECHNOLOGIES
3	AU	AU-403	Automobile Electrical Systems.
		AU-405	Motor Transport Organisation.
		AU-502	Farm Tractors and Special Types of Vehicles.
		AU-406	Automobile Servicing & Maintenance.
		AU-503	Automobile Electronics.
4	BM	EC-205	Semiconductor Devices
		EC-302	Digital Electronics
		BM-304	Basic Human Anatomy And Physiology
		EC-402	Microcontrollers & Applications
		BM-404	Biomedical Instrumentation
		BM-405	Biomedical Eqipment
		BM-503	Biomedical Signal Processing
		BM-504	Medical Imaging Equipment
5	CCB	CCB-403	Cloud Computing & Virtualisation
		CCB-504	Big Data & Hadoop
		CS-303	Data Structures Through C
		CS-304	Oops Through C++
		CS-406	Operating Systems
		CS-402	Java Programming
		CCB-404	RDBMS
		CS-206	WEB TECHNOLOGIES

S.No.	Branch	Sub_Code	Sub_Name
6	CCP	CCP-202	Book Keeping
		CCP-302	Accountancy
		CCP-305	Business Statistics
		CCP-503	Business Organisation & Management
		CCP-204	Office Organisation & Correspondence
		CCP-403	Banking & Financial Services
		CCP-502	Business Economics
		CCP-503	Marketing Management
7	CE	CE-105	Basic Surveying

S.No	Branch	Sub_Code	Sub_Name
		CE-205	Building Materials & Construction Practice
		CE-302	Engineering Mechanics
		CE-303	Hydraulics
		CE-306	Building Drawing
		CE-403	Transportation Engineering
		CE-404	Quantity Surveying
		CE-503	Water Supply & Sanitary Engineering
8	CH	CH-302	Fluid Mechanics
		CH-303	Mechanical Unit Operations
		CH-304	Material And Energy Balance
		CH-402	Inorganic Chemical Technology
		CH-403	Organic Chemical Technology
		CH-404	Heat Transfer
		CH-502	Thermodynamics And Reaction Engineering
		CH-503	Mass Transfer Operations
		CH-504(A)	Instrumentation And Process Control
9	CPS	EC-404	Data Communication And Computer Networks
		CPS-304	Cps & Iot
		CPS-405	Network Security
		CPS-502	Cyber Security And Laws
		CPS-503	Digital forensics
		CPS-402	Microcontroller Programming
		EC-302	Digital Electronics
		CS-403	Python Programming
10	CS	CS-305	Computer Architecture
		CS-303	Data Structures Through C
		CS-406	Operating Systems
		CS-402	Java Programming
		CS-403	Python Programming
		CS-404	RDBMS
		CS-206	WEB TECHNOLOGIES
		CS-306	Computer Hardware And Networking

S.No	Branch	Sub_Code	Sub_Name
11	EC	EC-105	Basic Electrical And Electronics Engineering
		EC-205	Semiconductor Devices
		EC-302	Digital Electronics
		EC-303	Electronic Devices & Circuits
		EC-304	Communication Systems
		EC-402	Microcontrollers & Applications

		EC-403	Linear Integrated Circuits & Applications
		EC-404	Communication Systems
12	EE (For Circuit Branches)	EE-303	D.C Machines and Batteries
		EE-306	Electrical and Electronics Measuring Instruments
		EE-305	Electrical Power Systems - Generation
		EE-403	A.C.Machines
		EE-404	Electrical Estimation and Installation
		EE-405	Electrical Power Systems - T & D
		EE-503	A.C.Motors
		EE-506A	Switchgear and Protection
13	EE (For Circuit Branches)	EE-106	Basic Electrical Engineering
		EE-206	Electronic Devices
		EC-302	Digital Electronics
		EE-303	D.C Machines and Batteries
		EE-305	Electrical Power Systems - Generation
		EE-403	A.C.Machines
		EE-502	Power Electronics
		EE-503	A.C.Motors
14	EI	EI-502	Distributed Control Systems
		EI-405	Process Control
		EC-306	Electronic Measuring Instruments
		EI-504	Analytical & Biomedical Instrumentation Engineering
		EI-304	Sensors And Transducers
		EI-503	Instrumentation In Process Industries.
		EC-402	Microcontroller Programming
		EC-302	Digital Electronics
15	ES	EC-402	Digital Electronics
		ES-404	Microcontrollers & Applications
		ES-405	Embedded Communication Systems
		ES-502	Embedded Systems Design
		ES-503	Linux And Python Programming

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		ES-504	Advanced Microcontroller
		ES-505	Embedded C
		ES-602	Digital Circuit Design Using Verilog Hdl

S.No	Branch	Sub Code	Subject Name
16	EV	EC-105	Basic Electrical and Electronics Engineering
		EC-205	Semiconductor Devices
		EC-302	Digital Electronics
		EV-303	Analog and Digital Communication Systems
		EC-304	Network analysis
		EC-402	Microcontrollers & Applications
		EC-403	Linear Integrated Circuits & Applications
		EV-405	Television Studio & Broad casting Techniques
17	HS	HS-106	Garment Construction
		HS-206	Food Adultration and Preservation
		HS-305	Advanced Fashion Designing
		HS-306	Human Values,Ethics and Indian Constitution
		HS-404	Traditional textiles of india
		HS-405	Interior Decoration
		HS-406	House Keeping and Reception
		HS-506 E/A	Community Nutrition
18	LF	LF-105	Basics of Leather & Fashion Technology
		LF-205	Basics of Post Tanning Technology
		LF-304	Process of Heavy, Industrial and Sports Goods Leather Manufacture
		LF-403	Leather Machinery Maintenance Engineering
		LF-404	Process of Light Leathers
		LF-405	Elements of Fashion Illustration
		LF-502	Leather Dyeing and Finishing
		LF-505	Analytical Chemistry and Quality Control in Leather Manufacture
19	LG	LG-105	Introductory Leather Products Technology
		LG-205	Basic Footwear Fabrication Technology
		LG-304	Footwear Upper Fabrication Technology
		LG-404	Advanced Footwear Fabrication Technology
		LG-302	Elementary Footwear Designing
		LG-402	Footwear Computer Aided Designing
		LG-602	Advanced Footwear Designing
		LG-405	Testing And Quality Control
20	ME	ME-206	Manufacturing Technology
		ME-302	Strength of Materials
		ME-402	Design of Machine Elements
		ME-303	Thermodynamics
		ME-403	Thermal Engineering
		ME-404	Industrial Engineering, Estimation & Costing

		ME-502	Refrigeration and Air-Conditioning
		ME-503	Computer Aided Design & Manufacturing
S.No	**Branch**	**Sub Code**	**Subject Name**
21	MN	MN-105	Elements Of Mining Technology
		MN-205	Basic Mining Geology
		MN-304	Fundamentals Of Mine Surveying
		MN-403	Underground Coal Mining Technology
		MN-404	Applied Mine Surveying
		MN-501	Mine Management And Entrepreneurship
		MN-502	Mine Legislation
		MN-602	Surface Mining Technology
22	MT	MT-304	Physical Metallurgy
		MT-303	Iron Making
		MT-405	Steel Making
		MT-304	Physical Metallurgy
		MT-402	Heat Treatment Technology
		MT-403	Material Testing
		MT-306	Foundry Technology
		MT-504	Non Ferrous Extractive Metallurgy
		MT-503	Welding Technology
23	PK	PK-105	Elements of Packaging Technology
		PK-205	Conventional Packaging Materials
		PK-305	Ancillary Packaging Materials & Bulk Packaging
		PK-403	Packaging Materials and Test Procedures
		PK-404	Package Design & Printing
		PK-502	Packaging Machines
		PK-503	Drug & Pharmaceutical Packaging
		PK-574	Product Packaging
		PK-584	Refrigeration & Cold Storage
24	PT	PT-105	Printing Systems & Materials
		PT-205	Sheet-Fed Offset
		PT-302	Print Finishing & Elements Of Packaging
		PT-303	Bitmap & Vector Graphic Designing Software
		PT-304	Flexography Printing
		PT-404	Paper & Ink
		PT-405	Gravure & Screen Printing
		PT-605	Web Offset Printing
25	TT	TT-106	Textile Fibres
		TT-206	Basic Yarn Manufacture
		TT-304	Basic Fabric Manufacture
		TT-305	Basic Textile Chemical Processing
		TT-403	Basic Apparel Production Technology

SECRETARY