

ACADEMIC REGULATIONS (R17)

B.Tech. - Regular Four Year Degree Program
(For batches admitted from the academic year 2017 - 18)

&

B.Tech. - Lateral Entry Scheme
(For batches admitted from the academic year 2018 - 19)

PREAMBLE

For pursuing four year under graduate Bachelor Degree Programme in Engineering (B.Tech.) offered by **CMR Institute of Technology** under Autonomous status will herein be referred to as CMRIT (Autonomous).

All the specified rules are herein approved by the Academic Council. These rules will be in force and are applicable to students admitted from the Academic Year 2017-18 onwards. Any reference to “Institute” or “College” in these rules and regulations stand for CMRIT (Autonomous).

All the rules and regulations specified shall hereafter be read as a whole for the purpose of interpretation, as and when a doubt arises, the interpretation of the Chairman, Academic Council is final. As per the requirements of statutory bodies, the Principal, CMRIT (Autonomous) shall be The Chairman, Academic Council.

1. UNDER GRADUATE PROGRAMS OFFERED (E&T)

CMR Institute of Technology, an autonomous college affiliated to JNTUH, offers 4 Year (8 Semesters) **Bachelor of Technology (B.Tech.)** Degree Programme, under Choice Based Credit System (CBCS) with effect from the Academic Year 2017 - 18 onwards, in the following Branches of Engineering:

- 1) B.Tech.- Civil Engineering
- 2) B.Tech. - Mechanical Engineering
- 3) B.Tech. - Electronics and Communication Engineering
- 4) B.Tech. - Computer Science and Engineering

2. ADMISSION CRITERIA AND MEDIUM OF INSTRUCTION

2.1. Admission into first year of four year B.Tech. (Regular) Degree Programme:

2.1.1. Eligibility: A candidate seeking admission into the first year of four year B. Tech. Degree Programme should have:

- (i) Passed either Intermediate Public Examination (IPE) conducted by the Board of Intermediate Education, Telangana, with Mathematics, Physics and Chemistry as optional subjects or any equivalent examination recognized by Board of Intermediate Education, Telangana or a Diploma in Engineering conducted by the Board of Technical Education, Telangana or equivalent Diploma recognized by Board of Technical Education for admission as per guidelines defined by the Regulatory bodies of Telangana State Council for Higher Education (TSCHE) and AICTE.
- (ii) Secured a rank in the TSEAMCET examination conducted by TSCHE for allotment of a seat by the Convener, TSEAMCET.

2.1.2. Admission Procedure: Admissions are made into the first year of four year B.Tech. Degree Programme as per the stipulations of the TSCHE.

(a) Category A: 70% of the seats are filled through TSEAMCET counseling.

(b) Category B: 30% of the seats are filled by the Management.

2.2. Admission into the second year of four year B. Tech. (Regular) Degree Programme Under Lateral Entry Scheme.

2.2.1 Eligibility: A candidate seeking admission under Lateral Entry Scheme (LES) into the II year I Semester B. Tech. Regular Degree Programme should have passed the qualifying examination (B.Sc. Mathematics or Diploma in concerned course) and have secured a rank at Engineering Common Entrance Test TSECET (FDH). Admissions are made in accordance with the instructions received from the Convener, TSECET and Government of Telangana State.

2.2.2 Admission Procedure: Admissions are made into the II year of four year B.Tech. (Regular) Degree Programme through Convenor, TSECET (FDH) against the sanctioned intake in each Programme of study as lateral entry student.

2.3. Branch Transfers: There shall be no Branch transfers after the completion of Admission Process.

2.4. Medium of Instruction: The Medium of Instruction and Examinations for the entire B.Tech. programme will be in **English** only.

3. B.Tech. PROGRAMME STRUCTURE

3.1 Admitted under Four year B. Tech. (Regular) degree Programme:

3.1.1 A student after securing admission shall pursue the under graduate programme in B.Tech. in a minimum period of **four** academic years (8 semesters), and a maximum period of **eight** academic years (16 semesters) starting from the date of commencement of first year first semester, failing which, students shall forfeit their seat in B.Tech course.

3.1.2 Each semester is structured to provide 24 credits, totaling to 192 credits for the entire B.Tech. programme.

3.1.3 Each student shall secure 192 credits (with CGPA ≥ 5) required for the completion of the under graduate programme and award of the B.Tech. degree.

3.2 Admitted under Lateral Entry Scheme (LES) into B. Tech. degree Programme:

3.2.1 The LES students after securing admission shall pursue a course of study for not less than three academic years (6 Semesters) and not more than six academic years (12 Semesters), failing which students shall forfeit their seat in B.Tech programme.

3.2.2 The student shall register for 144 credits and secure 144 credits with CGPA ≥ 5 from II year to IV year B.Tech. programme (LES) for the award of B.Tech. degree.

3.3 UGC / AICTE specified definitions / descriptions are adopted appropriately for various terms and abbreviations used in these Academic Regulations / Norms, which are listed below:

3.3.1 Semester Scheme:

Each B.Tech. (Regular) Programme is of 4 Academic Years (8 Semesters) and B.Tech. (LES) Programme is of 3 Academic Years (6 Semesters)), with the academic year being divided into two semesters of 22 weeks (≥ 90 Instructional days per semester), each Semester having - 'Continuous Internal Evaluation (CIE)' and 'Semester End Examination (SEE)', Choice Based Credit System (CBCS) and Credit Based Semester System (CBSS) as indicated by UGC and Curriculum / Course Structure as suggested by AICTE.

3.3.2 Credit Courses:

a) All Subjects / Courses are to be registered by a student in a Semester to earn Credits. Credits shall be assigned to each Subject / Course in a L: T: P: C (Lecture Periods: Tutorial Periods: Practical Periods : Credits) Structure based on the following general pattern:

- One Credit - for One hour /Week / Semester for Theory /Lecture (L) Courses; and
- One Credit - for Two hours / Week / Semester for Laboratory / Practical (P) Courses

All Mandatory Courses, Study Tour, Guest Lecture, Tutorials, etc., will not carry any Credits.

b) **Contact Hours:** Weekly contact hours - equal to 33 hours per week (i.e. 1 hour = 60 Minutes) including credit and non-credit courses.

3.3.3 Subject / Course Classification and Nomenclature:

CMRIT has followed almost all the guidelines specified by AICTE / UGC / JNTUH for the classification of all subjects / courses offered at B.Tech. programme and are mentioned below.

| S. No. | Broad Course Classification | Course Group / Category | Course Description | Range of Credits |
|--------|-----------------------------|-------------------------------------|--|------------------|
| 1 | Foundation Courses (FnC) | BS – Basic Sciences | Includes - Mathematics, Physics and Chemistry Subjects | 15%-20% |
| 2 | | ES – Engg. Sciences | Includes fundamental engineering subjects. | 15%-20% |
| 3 | | HS – Humanities and Social Sciences | Includes subjects related to Humanities, Social Sciences and Management. | 5%-10% |
| 4 | Core Courses (CoC) | PC – Professional Core | Includes core subjects related to the Parent Discipline/ Department/ Branch of Engg. | 30%-40% |
| 5 | Elective Courses (ElC) | PE – Professional Electives | Includes Elective subjects related to the Parent Discipline / Department / Branch of Engg. | 10%-15% |
| 6 | | OE – Open Electives | Elective subjects which include inter-disciplinary subjects or subjects in an area outside the Parent Discipline/ Department / Branch of Engg. | 5%-10% |
| 7 | Core Courses | Project Work | B.Tech. Project or UG Project or UG Major Project. | 10%-15% |
| 8 | | Industrial Training / Mini-Project | Industrial Training/ Internship/ UG Mini-Project/ Mini-Project. | |
| 9 | | Technical Seminar | Seminar / Colloquium based on core contents related to Parent Discipline/ Department/ Branch of | |

| | | | | |
|---|------------------------|------------------------|---|-----------------------|
| | | | Engg. | |
| 10 | Minor Courses | Minor Courses | 1 or 2 Credit Courses (subset of HS) | - |
| 11 | Mandatory Courses (MC) | MC - Mandatory Courses | These courses are non-credit courses with evaluation. | - |
| 12 | Audit Courses (AC) | AC - Audit Courses | These courses are non-credit courses without evaluation | - |
| Total Credits for UGP (B. Tech.) Programme | | | | 192 (100%) |

4. COURSE REGISTRATION

- 4.1** A ‘**faculty advisor or counselor**’ shall be assigned to each student, who advises the student about the B.Tech. programme, its course structure and curriculum, choice / option for subjects / courses, based on his/her competence, progress, pre-requisites and interest.
- 4.2** The academic section of the college invites ‘registration forms’ from students before the beginning of the semester through online submission, ensuring ‘**date and time stamping**’. The online registration requests for any ‘current semester’ shall be completed **before the commencement of SEEs (Semester End Examinations) of the ‘preceding semester’**.
- 4.3** A student can apply for **online** registration, **only after** obtaining the ‘**written approval**’ from his faculty advisor or counselor, which should be submitted to the college academic section through the Head of the Department. A copy of it shall be retained with Head of the Department, faculty advisor and the student.
- 4.4** A student may be permitted to register for his/her subjects/course of **choice** with a total of 24 credits per semester (minimum of 20 credits and maximum of 28 credits, permitted deviation being $\pm 17\%$), based on the student’s **progress** and SGPA / CGPA, and completion of the ‘**pre-requisites**’ as indicated for various subjects/courses, in the department course structure and syllabus contents. However, a **minimum** of 20 credits per semester must be registered to ensure the **studentship** in any semester.
- 4.5** Choice for ‘**additional subjects / courses**’ to reach the maximum permissible limit of 28 credits (above the typical 24 credit norm) must be clearly indicated, which needs the specific approval and signature of the faculty advisor / counselor.
- 4.6** If the student submits ambiguous choices or multiple options or erroneous (incorrect) entries during **online** registration for the subject(s) / course(s) under a given/specified course group / category as listed in the course structure, only the first mentioned subject / course in that category will be taken into consideration.
- 4.7** Subject / course options exercised through **online** registration are final and **cannot** be changed or inter- changed; further, alternate choices will not be considered. However, if the subject / course that has already been listed for registration by Head of the Department in a semester could not be offered due to any unforeseen or unexpected reasons, then the student shall be allowed to have alternate choice - either for a new subject (subject to offering of such a subject), or for another existing subject (subject to availability of seats), which may be considered. Such alternate arrangements will be made by Head of the Department, with due notification and time-framed schedule, within the **first week** from the commencement of class-work for that semester.
- 4.8** Dropping of subjects / courses may be permitted, only after obtaining prior approval from the faculty advisor / counselor (subject to retaining a minimum of 20 credits), ‘**within a period of 15 days**’ from the commencement of that semester.
- 4.9** **Open electives:** Students have to choose one open elective wherever offered from the list of

open electives given for their stream. However, student cannot opt for an open elective subject offered by their own (parent) department, if it is already listed under any category of the subjects offered by parent department in any semester.

4.10 Professional electives: Students have to choose professional elective wherever offered from the list of professional electives given. However, students may opt for professional elective subjects offered in the related area.

4.11 Mandatory Courses (Non-Credit): All mandatory courses where ever offered require prior registration.

4.11.1 NSS / Physical Education / Yoga Requirements:

- i) The student has to enroll for NSS / Physical Education / Yoga programme from the date of commencement of class work for I year I semester.
- ii) The NSS / Physical Education / Yoga programme schedule will be announced time to time by the respective coordinator(s).
- iii) The Student has to submit the NSS / Physical Education / Yoga certificate on or before the last instruction day of I year I semester, otherwise his / her Semester End Examination results will not be declared.

4.11.2 Micro Project Requirements:

- i) The student has to enroll for Micro-Project from the date of commencement of I Year II Semester class work in any topic of their choice, in consultation with the class coordinator / Counselor.
- ii) The student has to collect relevant information on Science / Engineering & Technological advancements, prepare and present a report to the department evaluation committee for assessment.

4.11.3 Internship / Industrial Training / Certification Course / MOOCs :

- i) Student has to Enroll for Internship / Industrial Training / Certification Course / MOOCs under the guidance and approval from the concerned faculty advisor / Counselor on or before the date of commencement of class work for II Year I Semester.
- ii) Internship / Industrial Training / Certification Course / MOOCs completion certificate must be submitted to the Head of the Department on or before the last instruction day of III Year II Semester, otherwise his / her Semester End Examination results will be withheld.

5. SUBJECTS / COURSES TO BE OFFERED

5.1 A subject/course may be offered to the students, **if only** a minimum 1/3 of students register to the course.

- i) More than **one faculty member** may offer the **same subject** (lab / practical's may be included with the corresponding theory subject in the same semester) in any semester. However, selection choice for students will be based on '**first come first serve** basis and CGPA criterion' (i.e. the first focus shall be on early **on-line entry** from the student for registration in that semester, and the second focus, if needed, will be on CGPA of the student).
- ii) If more entries for registration of a subject come into picture, then the concerned Head of the Department shall take necessary decision, whether or not to offer such a subject / course for **two (or multiple) sections**.

6. ATTENDANCE REQUIREMENTS

- 6.1 A student shall be eligible to appear for the semester end examinations, if the student acquires a minimum 75% of attendance in aggregate (excluding the days of midterm examinations) for all the subjects / courses (excluding attendance in mandatory courses) in that semester.
- 6.2 Condoning of shortage of attendance in aggregate up to 10% (65% and above, and below 75%) in each semester may be granted by the college academic committee on genuine and valid grounds, based on the student's representation with supporting evidence.
- 6.3 A stipulated fee shall be payable towards condoning of shortage of attendance.
- 6.4 Shortage of attendance below 65% in aggregate shall in **no** case be condoned.
- 6.5 **Students whose shortage of attendance is not condoned in any semester are not eligible to take their end examinations of that semester. They get detained and their registration for that semester shall stand cancelled. They will not be promoted to the next semester.** They may seek re-registration for all those subjects registered in that semester in which student was detained, by seeking re-admission into that semester as and when offered; in case if there are any professional electives and / or open electives, the same may also be re-registered, if offered. However, if those electives are not offered in later semesters, then alternate electives may be chosen from the **same** set of elective subjects offered under that category.
- 6.6 A student fulfilling the attendance requirement in the present semester shall not be eligible for readmission into the same class.

7. ACADEMIC REQUIREMENTS

The following academic requirements have to be satisfied, in addition to the attendance requirements mentioned in item no. 6.

- 7.1 A student shall be deemed to have satisfied the academic requirements and earned the credits allotted to each subject/course, if student secures not less than 35% marks in the semester end examination (SEE), and a minimum of 40% of marks in the sum total of the Continuous Internal Evaluation (CIE) and Semester End Examination (SEE) taken together; in terms of letter grades, this implies securing **C** grade or above in that subject / course.
- 7.2 A student shall be deemed to have satisfied the academic requirements and earned the credits allotted to industry oriented mini-project and seminar, if student secures not less than 40% of the total marks in each of them. The student would be treated as failed, if student (i) does not submit a report on his industry oriented mini-project, or does not make a presentation of the same before the evaluation committee as per the schedule, or (ii) does not present the seminar as required in the IV year I/II semester, or (iii) secures less than 40% of marks in industry oriented mini-project / seminar evaluations. Student may reappear once for each of the above evaluations, when they are scheduled again; if he fails in such 'one re-appearance' evaluation also, student has to reappear for the same in the next subsequent semester, as and when it is scheduled.

7.3 Promotion Rules

7.3.1 Four year B.Tech. (Regular):

| S. No. | Promotion | Conditions to be fulfilled |
|--------|---|---|
| 1 | First year first semester to first year second semester | Regular course of study of first year first semester. |
| 2 | First year second semester to second year first semester | (i) Regular course of study of first year second semester. (ii) Must have secured at least 24 credits out of 48 credits i.e., 50% credits upto first year second semester from all the relevant regular and supplementary examinations whether the student takes those examinations or not. |
| 3 | Second year first semester to second year second semester | Regular course of study of second year first semester. |
| 4 | Second year second semester to third year first semester | (i) Regular course of study of second year second semester. (ii) Must have secured at least 58 credits out of 96 credits i.e., 60% credits upto second year second semester from all the relevant regular and supplementary examinations, whether the student takes those examinations or not. |
| 5 | Third year first semester to third year second semester | Regular course of study of third year first semester. |
| 6 | Third year second semester to fourth year first semester | (i) Regular course of study of third year second semester. (ii) Must have secured at least 86 credits out of 144 credits i.e., 60% credits upto third year second semester from all the relevant regular and supplementary examinations, whether the student takes those examinations or not. |
| 7 | Fourth year first semester to fourth year second semester | Regular course of study of fourth year first semester. |

7.3.2 Four year B.Tech. (LES):

| S. No. | Promotion | Conditions to be fulfilled |
|--------|---|--|
| 1 | Second year first semester to second year second semester | Regular course of study of second year first semester. |
| 2 | Second year second semester to third year first semester | (i) Regular course of study of second year second semester. (ii) Must have secured at least 29 credits out of 48 credits i.e., 60% credits up to second year second semester from all the relevant regular and supplementary examinations, whether the student takes those examinations or not. |
| 3 | Third year first semester to third year second semester | Regular course of study of third year first semester. |
| 4 | Third year second semester to fourth year first semester | (i) Regular course of study of third year second semester. (ii) Must have secured at least 58 credits out of 96 credits i.e., 60% credits upto third year second semester from all the relevant regular and supplementary examinations, whether the student takes those examinations or not. |
| 5 | Fourth year first semester to fourth year second semester | Regular course of study of fourth year first semester. |

- 7.4 A student has to register for all subjects covering 192 credits (144 credits in case of LES) as specified and listed (with the relevant course / subject classifications as mentioned) in the course structure, fulfill all the attendance and academic requirements for 192 credits (144 credits in case of LES) securing a minimum of ‘C’ grade or above in each subject, and ‘earn all 192 credits (144 credits in case of LES) securing SGPA \geq 5.0 (in each semester), and CGPA (at the end of each successive semester) \geq 5.0, to successfully complete the under graduate programme.
- 7.5 After securing the necessary 192 credits (144 credits in case of LES) as specified for the successful completion of the entire under graduate programme, the student can avail exemption of two subjects up to 6 credits, that is, one open elective and one professional elective subject or two professional elective subjects for optional drop out from these 192 credits (144 credits in case of LES) earned; resulting in 186 credits (138 credits in case of LES) for under graduate programme performance evaluation, i.e., the performance of the student in these 186 credits (138 credits in case of LES) shall alone be taken into account for the calculation of ‘the final CGPA (at the end of under graduate programme, which takes the SGPA of the IV year II semester into account)’, and shall be indicated in the grade card of IV year II semester. However, the performance of student in the earlier individual semesters, with the corresponding SGPA and CGPA for which grade cards have already been given will not be altered.
- 7.6 If a student registers for some more ‘extra subjects’ (in the parent department or other departments / branches of engineering) other than those listed subjects totaling to 192 credits (144 credits in case of LES) as specified in the course structure of parent department, the performances in those ‘extra subjects’ (although evaluated and graded using the same procedure as that of the required 192 credits (144 credits in case of LES)) will not be taken into account while calculating the SGPA and CGPA. For such ‘extra subjects’ registered, % of marks and letter grade alone will be indicated in the grade card as a performance measure, subject to completion of the attendance and academic requirements as stated in regulations 6 and 7.1 to 7.5 above.
- 7.7 A student eligible to appear in the semester end examination for any subject / course, but absent from it or failed (thereby failing to secure ‘C’ grade or above) may reappear for that subject / course in the supplementary examination as and when conducted. In such cases, internal marks (CIE) assessed earlier for that subject / course will be carried over, and added to the marks to be obtained in the SEE supplementary examination for evaluating performance in that subject.
- 7.8 A student **detained in a semester due to shortage of attendance may be re-admitted when the same semester is offered in the next academic year for fulfillment of academic requirements.** The academic regulations under which student has been readmitted shall be applicable. However, no grade allotments or SGPA / CGPA calculations will be done for the entire semester in which student has been detained.
- 7.9 A student detained **due to lack of credits, shall be promoted to the next academic year only after acquiring the required academic credits.** The academic regulations under which student has been readmitted shall be applicable.

8. EVALUATION - DISTRIBUTION AND WEIGHTAGE OF MARKS

- 8.1 The performance of a student in each semester shall be evaluated subject-wise / course-wise (irrespective of credits assigned) with a maximum of 100 marks. These evaluations shall be based on 30 marks allotted for CIE (Continuous Internal Evaluation) and 70 marks for SEE (Semester End Examination), and a letter grade corresponding to the percentage of marks obtained shall be given.

8.2 Evaluation of Theory Subjects / Courses

A) Continuous Internal Evaluation: For each theory subject, during the semester, there shall be 2 mid-term examinations of 30 marks each. Each mid-term examination consists of subjective paper for 25 marks & assignment for 5 marks and the average of the two mid-term examinations marks shall be taken as the final marks.

- I. The first mid-term examination shall be conducted for the first 50% of the syllabus, and the second mid-term examination shall be conducted for the remaining 50% of the syllabus.
- II. The subjective paper shall be conducted for duration of 2 hours. Each subjective paper shall contain 2 parts (Part-A and Part-B). Part-A consists of one compulsory question with five sub questions carrying two marks each. Part-B consists of 3 essay questions carrying five marks each with internal choice; the student has to answer all 3 questions.
- III. First assignment should be submitted before the commencement of the first mid-term examinations, and the second assignment should be submitted before the commencement of the second mid-term examinations. The assignments shall be specified / given by the concerned subject teacher.

IV. Absence in mid-term examination(s):

- i) If any student is absent in one mid-term examination for any course on health grounds / any valid reasons approved by the college academic committee, only one test shall be conducted on all units by the college in each course at the end of each semester on payment of prescribed fee.
- ii) If any student is absent in both mid-term examinations for any course on health grounds / any valid reasons approved by the college academic committee, only one test for 25 marks shall be conducted on all units and the marks secured out of 25 shall be divided by two, which shall be awarded against the said mid-term examination(s) on payment of prescribed fee.

B) Semester End Examinations: The duration of SEE is 3 hours. The details of the question paper pattern are as follows:

- The end semester examinations will be conducted for 70 marks consisting of two parts viz. i) **Part- A** for 20 marks, ii) **Part - B** for 50 marks.
- Part-A is compulsory question which consists of ten sub-questions (two from each unit) carry 2 marks each.
- Part-B consists of five questions (numbered from 2 to 6) carrying 10 marks each. One question from each unit (may contain sub-questions) with internal choice.

8.3 Evaluation of Practical Subjects / Courses: In any semester, a student has to complete a minimum of 10 experiments / exercises in each laboratory course and get the record certified by the concerned Head of the Department to be eligible for Semester End Examination.

For practical subjects, there shall be a Continuous Internal Evaluation (CIE) during the Semester for 30 internal marks and 70 marks for Semester End Examination (SEE).

A) Continuous Internal Evaluation (CIE): Out of the 30 marks, 15 marks are allocated for day-to-day work evaluation and for the remaining 15 marks - two mid-term examinations of each 15 marks will be conducted by the concerned laboratory teacher for a duration of two hours and the average of the two mid-term examinations is taken into account.

I. Absence in Laboratory Internal Examinations:

- a. If any student is absent in one laboratory internal examination for any laboratory course on health grounds / for any valid reasons approved by the college academic committee, only one test shall be conducted for 15 marks on all experiments of that laboratory course, by the college at the end of the semester.
- b. If any student is absent in both the laboratory internal examinations on health grounds / for any valid reasons approved by the college academic committee, only one test shall be conducted on all experiments and the marks secured out of 15 marks shall be divided by two, which shall be awarded against the said laboratory internal examinations.

B) Semester End Examination (SEE): The SEE for practical subject / course shall be conducted at the end of the semester with duration of 3 hours by one internal and one external examiner appointed by the Head of the Institution as per the recommendation of the concerned Head of the Department.

- 8.4 Evaluation of Design / Drawing Subjects / Courses:** For the subjects such as Engineering Graphics, Machine Drawing and estimation, the distribution shall be 30 marks for CIE (15 marks for day-to-day work and 15 marks for internal examination) and 70 marks for SEE. There shall be two internal examinations in a semester and the average of the two shall be considered for the award of marks for internal examinations.
- 8.5 Evaluation of Industry-Oriented Mini-Project:** There shall be an industry-oriented mini-project, in collaboration with an industry of their specialization, to be registered immediately after III year II semester examinations, and taken up during the summer vacation for four weeks duration. The industry oriented mini-project shall be submitted in a report form and presented before the committee in IV year I semester. It shall be evaluated for 100 marks by the committee consisting of Head of the Department, concerned supervisor and two senior faculty members of the department. There shall be no internal marks for industry-oriented mini-project.
- 8.6 Evaluation of Technical Seminar:** The student has to enroll and get approval for technical seminar on a specialized topic from the concerned advisor / counselor in the beginning of IV year II semester. The student should collect the information on a specialized topic, prepare a technical report, give seminar presentation on the topic and submit it to the department as notified by the concerned Head of the Department. It shall be evaluated by the departmental committee consisting of Head of the Department, seminar supervisor and two senior faculty members. The seminar report and the seminar presentation shall be evaluated for 100 marks. There shall be no semester end examination for the seminar.
- 8.7 Evaluation of Major Project:** Student shall enroll for the project work during the IV year I semester, as per the instructions of the project guide / supervisor assigned by the Head of Department. Out of total 100 marks allotted for the project work 30 marks shall be for continuous internal evaluation and 70 marks for the end semester viva-voce examination. Out of 30 marks allocated for CIE, 15 marks shall be awarded by the project supervisor (based on the continuous evaluation of student's performance throughout the project work period), and the other 15 marks shall be awarded by a Departmental Committee consisting of Head of the Department and Project Supervisor, and two senior faculty members, based on the work carried out and the presentation made by the student during internal reviews (at least two internal reviews shall be conducted). The project viva-voce shall be conducted by a committee comprising an external examiner, Head of the Department and Project Supervisor.

8.8 Evaluation of Mandatory Non-Credit Courses: For Mandatory non credit courses ‘Satisfactory’ or “Unsatisfactory’ shall be indicated instead of marks or letter grade and this will not be counted for the computation of SGPA / CGPA.

- (i) For mandatory non-credit theory or practical courses such as Environmental Science & Technology, Gender Sensitization Lab, Human Values & Professional Ethics, Verbal Ability, Analytical Skills, Soft Skills, Quantitative Aptitude, the student has to secure $\geq 65\%$ attendance and not less than 40 marks out of 100 marks in the CIE, then the student is declared as **pass** and will be qualified for the award of the degree.
- (ii) For mandatory non-credit courses such as NSS / Physical Education / Yoga, Micro Project, Internship / Industrial Training / Certification Course / MOOCs, the student has to submit **satisfactory participation certificate** from the concerned authority.

9. GRADING PROCEDURE

9.1 Marks will be awarded to indicate the performance of each student in each theory subject, lab/practical's, design/drawing practice, technical seminar, industry oriented mini-project and major project. Based on the percentage of marks obtained in Continuous Internal Evaluation plus Semester End Examination, both taken together, as specified in item 8 above, a corresponding letter grade shall be given.

9.2 As a measure of the student's performance, a 10-point Absolute Grading System using the following letter grades (UGC Guidelines) and corresponding percentage of marks shall be followed...

| % of Marks Secured (Class Intervals) | Letter Grade (UGC Guidelines) | Grade Points |
|--|-------------------------------|--------------|
| 90% and above ($\geq 90\%$, $\leq 100\%$) | O (Outstanding) | 10 |
| Below 90% but not less than 80% ($\geq 80\%$, $< 90\%$) | A ⁺ (Excellent) | 9 |
| Below 80% but not less than 70% ($\geq 70\%$, $< 80\%$) | A (Very Good) | 8 |
| Below 70% but not less than 60% ($\geq 60\%$, $< 70\%$) | B ⁺ (Good) | 7 |
| Below 60% but not less than 50% ($\geq 50\%$, $< 60\%$) | B (above Average) | 6 |
| Below 50% but not less than 40% ($\geq 40\%$, $< 50\%$) | C (Average) | 5 |
| Below 40% ($< 40\%$) | F (Fail) | 0 |
| Absent | Ab | 0 |

9.3 A student obtaining ‘F’ grade in any subject shall be considered ‘**failed**’ and will be required to reappear as ‘**supplementary student**’ in the end semester examination (SEE), as and when offered. In such cases, his internal marks (CIE marks) in those subject(s) will remain same as those he obtained earlier.

9.4 A letter grade does not imply any specific % of marks.

9.5 In general, a student shall not be permitted to repeat any subject/course (s) only for the sake of ‘**grade improvement**’ or ‘SGPA/CGPA improvement’. However, he has to repeat all the subjects/courses pertaining to that semester if he is detained.

9.6 A student earns grade point (GP) in each subject/course, on the basis of the letter grade obtained by him in that subject/course (excluding mandatory non-credit courses). Then the corresponding ‘**credit points**’ (CP) are computed by multiplying the grade point with credits for that particular subject/course.

$$\text{Credit Points (CP)} = \text{Grade Point (GP)} \times \text{Credits}$$

9.7 The student passes the subject/course only when he gets $GP \geq 5$ (C grade or above).

9.8 The Semester Grade Point Average (SGPA) is calculated by dividing the sum of credit points (ΣCP) secured from all subjects / courses registered in a semester, by the total number of credits registered during that semester. SGPA is rounded off to **two** decimal places. SGPA is thus computed as

$$SGPA (S_i) = \sum (C_i \times G_i) / \sum C_i$$

Where C_i is the number of credits of the i^{th} course and G_i is the grade point scored by the student in the i^{th} course.

9.9 The Cumulative Grade Point Average (CGPA) is a measure of the overall cumulative performance of a student over all semesters considered for registration. The CGPA is the ratio of the total credit points secured by a student in **all** registered courses in **all** Semesters, and the total number of credits registered in **all** the semesters. CGPA is rounded off to **two** decimal places. CGPA is thus computed from the I year second semester onwards, at the end of each semester, as per the formula

$$CGPA = \sum (C_i \times S_i) / \sum C_i$$

where S_i is the SGPA of the i^{th} semester and C_i is the total number of credits in that semester.

| Illustration of calculation of SGPA | | | | | Illustration of calculation of CGPA | | | |
|--|-----------|----------------|--------------|--------------------|--|------------|------|-----------------------|
| Course /Subject | Credits | Letter Grade | Grade Points | Credit Points | Semester | Credits | SGPA | Credits x SGPA |
| Course 1 | 4 | A | 8 | $4 \times 8 = 32$ | Sem I | 24 | 7 | $24 \times 7 = 168$ |
| Course 2 | 4 | O | 10 | $4 \times 10 = 40$ | Sem II | 24 | 6 | $24 \times 6 = 144$ |
| Course 3 | 4 | C | 5 | $4 \times 5 = 20$ | Sem III | 24 | 6.5 | $24 \times 6.5 = 156$ |
| Course 4 | 3 | B | 6 | $3 \times 6 = 18$ | Sem IV | 24 | 6 | $24 \times 6 = 144$ |
| Course 5 | 3 | A ⁺ | 9 | $3 \times 9 = 27$ | Sem V | 24 | 7.5 | $24 \times 7.5 = 180$ |
| Course 6 | 3 | C | 5 | $3 \times 5 = 15$ | Sem VI | 24 | 8 | $24 \times 8 = 192$ |
| Total | 21 | | | 152 | Sem VII | 24 | 8.5 | $24 \times 8.5 = 204$ |
| SGPA = $152/21 = 7.23$ | | | | | Sem VIII | 24 | 8 | $24 \times 8 = 192$ |
| | | | | | Total | 192 | | 1380 |
| | | | | | CGPA = $1380/192 = 7.18$ | | | |

9.10 For merit ranking or comparison purposes or any other listing, **only** the ‘rounded off’ values of the CGPAs will be used.

9.11 For calculations listed in Item 9.6–9.10, performance in failed subjects/courses (securing **F** grade) will also be taken into account, and the credits of such subjects/courses will also be included in the multiplications and summations. However, mandatory courses will not be taken into consideration.

10 PASSING STANDARDS

10.1 A student shall be declared ‘**successful**’ or ‘**passed**’ in a semester, if student secures a $GP \geq 5$ (‘C’ grade or above) in every subject/course in that semester (i.e. when student gets an $SGPA \geq 5.00$ at the end of that particular semester); and a student shall be declared ‘**successful**’ or ‘**passed**’ in the entire under graduate programme, only when he/she gets a $CGPA \geq 5.00$ for the award of the degree as required.

10.2 A Student shall be declared ‘**successful**’ or ‘**passed**’ in any non-credit subject/ course, if he secures a ‘**Satisfactory Participation Certificate**’ for that mandatory course.

- 10.3** After the completion of each semester, a grade card or grade sheet (or transcript) shall be issued to all the registered students of that semester, indicating the letter grades and credits earned. It will show the details of the courses registered (course code, title, no. of credits, grade earned etc.), credits earned, SGPA, and CGPA.

11 DECLARATION OF RESULTS

- 11.1** Computation of SGPA and CGPA are done using the procedure listed in 9.6– 9.9.
- 11.2** For Final percentage of marks equivalent to the computed final CGPA, the following formula may be used:

$$\text{Percentage of Marks} = (\text{final CGPA} - 0.5) \times 10$$

12 AWARD OF DEGREE

- 12.1** After a student has satisfied the requirement prescribed for the completion of the program and is eligible for the award of B. Tech. degree he shall be placed in one of the following four classes based on CGPA:

| Class Awarded | Grade to be Secured | Remarks |
|------------------------------|-----------------------------|--|
| First Class with Distinction | ≥ 8 CGPA | From the aggregate marks secured from 192 Credits for Regular Students and 144 Credits for Lateral Entry Students. |
| First Class | ≥ 6.5 to < 8 CGPA | |
| Second Class | ≥ 5.5 to < 6.5 CGPA | |
| Pass Class | ≥ 5.00 to < 5.5 CGPA | |
| FAIL | CGPA < 5 | |

- 12.2** First class with distinction will be awarded to those students who clear all the subjects in single attempt during his / her regular course of study by fulfilling the following conditions:
- (i) Should have passed all the subjects/courses in ‘**first appearance**’ within the first 4 academic years (or 8 sequential semesters) for B.Tech. (Regular) and first 3 academic years (or 6 sequential semesters) for B.Tech. (LES) from the date of commencement of first year first semester for B.Tech. (Regular) and II year I semester for B.Tech. (LES).
 - (ii) Should have secured a CGPA ≥ 8.00 , at the end of each of the 8 sequential semesters (6 sequential semesters for LES), starting from I year I semester (starting from II year I semester for LES) onwards.
 - (iii) Should not have been detained or prevented from writing the end semester examinations in any semester due to shortage of attendance or any other reason, shall be placed in ‘**first class with distinction**’.
- 12.3 Award of Medals:** Students fulfilling the conditions listed under item 12.2 alone will be eligible for award of ‘**College Ranks**’ and ‘**Medals**’.
- 12.4 Graduation Day:** The College shall have its own Annual Graduation Day for the award of Degrees issued by the University.
- 12.5 Transcripts:** After successful completion of prerequisite credits for the award of degree a transcript containing performance of all academic years will be issued as a final record. Duplicate transcripts will also be issued if required after the payment of requisite fee and also as per norms in vogue.

13 WITH HOLDING OF RESULTS

If the student has not paid the fee to college at any stage, or has dues pending against his/her name due to any reason what so ever, or if any case of indiscipline is pending against him/her, the result of the student may be withheld, and he/she will not be allowed to go into the next higher semester.

14 SUPPLEMENTARY EXAMINATIONS

Supplementary examinations for odd semester subjects will be conducted along with even semester regular examinations and vice versa.

15. TRANSITORY REGULATIONS

A. For students detained due to shortage of attendance:

1. A Student who has been detained in I year of R09/R13/R15/R16 Regulations due to lack of attendance, shall be permitted to join I year I semester of R17 Regulations and he is required to complete the study of B.Tech. programme within the stipulated period of eight academic years from the date of first admission in I Year.
2. A student, who has been detained in any semester of II, III and IV years of R09/R13/R15/R16 regulations for want of attendance, shall be permitted to join the corresponding semester of R17 regulations and is required to complete the study of B.Tech. within the stipulated period of eight academic years from the date of first admission in I Year. The R17 Academic Regulations under which a student has been readmitted shall be applicable to that student from that semester.

See rule (C) for further Transitory Regulations.

B. For students detained due to shortage of credits:

3. A student of R09/R13/R15/R16 Regulations, who has been detained due to lack of credits, shall be promoted to the next semester of R17 Regulations only after acquiring the required credits as per the corresponding regulations of his/her first admission. The student is required to complete the study of B.Tech. within the stipulated period of eight academic years from the year of first admission. The R17 Academic Regulations are applicable to a student from the year of readmission onwards.

See rule (C) for further Transitory Regulations.

C. For readmitted students in R17 Regulations:

4. A student who has failed in any subject under any regulation has to pass those subjects in the same regulations.
5. The maximum credits that a student acquires for the award of degree, shall be the sum of the total number of credits secured in all the regulations of his/her study including R17 Regulations. The performance evaluation of the student will be done after the exemption of two subjects if total credits acquired are ≤ 206 , three subjects if total credits acquired are > 206 (see R16 Regulations for exemption details).
6. If a student readmitted to R17 Regulations, has any subject with 80% of syllabus common with his/her previous regulations, that particular subject in R17 Regulations will be substituted by another subject to be suggested by the CMRIT Academic Council.

Note: If a student readmitted to R17 Regulations, has not studied any subjects/topics in his/her earlier regulations of study which is prerequisite for further subjects in R17 Regulations, the Principal shall conduct remedial classes to cover those subjects/topics for the benefit of the students.

- D. Promotion Rule:** Where the credits allotted to a semester/year under the regulations studied in are different from that under R17 regulations for the corresponding semester/year, the promotion rules of R17 vide section 7.3 shall be applied after normalization. Normalization is done by scaling down or up the number of credits of a semester/year under the previous regulations to equal the number of credits of the corresponding semester/year under R17 regulations and revising the secured credits also in the same proportion.

16 STUDENT TRANSFERS

There shall be no transfers from other colleges / streams.

17 RULES OF DISCIPLINE

- 17.1** Any attempt by any student to influence the teachers, examiners, faculty members and staff of Controller of Examination office for undue favours in the exams, and bribing them either for marks or attendance will be treated as malpractice case and the student can be debarred from the college.
- 17.2** When the performance of the student in any subject(s) is cancelled as a punishment for indiscipline, student is awarded zero marks in that subject(s).
- 17.3** When the student's answer book is confiscated for any kind of attempted or suspected malpractice the decision of the Malpractice Prevention Committee is final.

18. MALPRACTICE

- 18.1 Malpractice Prevention Committee:** The committee shall examine the student's malpractice and indiscipline cases occurred, while conducting the examinations and recommend appropriate punishment to the Academic Council after taking explanation from the student and concerned invigilator as per the malpractice rules mentioned below. The committee consists of

- Controller of Examinations - Chairman
- Addl. Controller of Examinations.- Convener
- Subject Expert - Member
- Head of the Department of which the student belongs to - Member
- The Invigilator concerned - Member

18.2 Malpractice Rules: Disciplinary Action for Improper Conduct in Examinations

| S. No. | Nature of Malpractices / Improper Conduct | Punishment |
|--------|--|---|
| 1(a) | Possesses or keeps accessible in examination hall, any paper, note book, programmable calculators, Cell phones, pager, palm computers or any other form of material concerned with or related to the subject of the examination (theory or practical) in which he is appearing but has not made use of (material shall include any | Expulsion from the examination hall and cancellation of the performance in that subject only. |

| | | |
|------|---|---|
| | marks on the body of the candidate which can be used as an aid in the subject of the examination) | |
| 1(b) | Gives assistance or guidance or receives it from any other candidate orally or by any other body language methods or communicates through cell phones with any candidate or persons in or outside the exam hall in respect of any matter. | Expulsion from the examination hall and cancellation of the performance in that subject only of all the candidates involved. In case of an outsider, he will be handed over to the police and a case is registered against him. |
| 2 | Has copied in the examination hall from any paper, book, programmable calculators, palm computers or any other form of material relevant to the subject of the examination (theory or practical) in which the candidate is appearing. | Expulsion from the examination hall and cancellation of the performance in that subject and all other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted to appear for the remaining examinations of the subjects of that Semester/year. The Hall Ticket of the candidate is to be cancelled and sent to the Principal. |
| 3 | Impersonates any other candidate in connection with the examination. | The candidate who has impersonated shall be expelled from examination hall. The candidate is also debarred and forfeits the seat. The performance of the original candidate who has been impersonated, shall be cancelled in all the subjects of the examination (including practical's and project work) already appeared and shall not be allowed to appear for examinations of the remaining subjects of that semester/year. The candidate is also debarred for two consecutive semesters from class work and all examinations. The continuation of the course by the candidate is subject to the academic regulations in connection with forfeiture of seat. If the imposter is an outsider, he will be handed over to the police and a case is registered against him. |
| 4 | Smuggles in the Answer book or additional sheet or takes out or arranges to send out the question paper during the examination or answer book or additional sheet, during or after the examination. | Expulsion from the examination hall and cancellation of performance in that subject and all the other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the subjects of that semester/year. The candidate is also debarred for two consecutive semesters from class work and all examinations. The continuation of the course by the candidate is subject to the academic regulations in connection with forfeiture of seat. |
| 5 | Uses objectionable, abusive or offensive language in the answer paper or in letters to the examiners or writes to the examiner requesting him to award pass marks. | Cancellation of the performance in that subject. |
| 6 | Refuses to obey the orders of the Addl. Controller of examinations / any officer on duty or misbehaves or creates disturbance of any kind in and | In case of students of the college, they shall be expelled from examination halls and cancellation of their performance in that subject and all other subjects the candidate(s) has (have) |

| | | |
|----|--|--|
| | <p>around the examination hall or organizes a walk out or instigates others to walk out, or threatens the addl. Controller of examinations or any person on duty in or outside the examination hall of any injury to his person or to any of his relations whether by words, either spoken or written or by signs or by visible representation, assaults the addl. Controller of examinations, or any person on duty in or outside the examination hall or any of his relations, or indulges in any other act of misconduct or mischief which result in damage to or destruction of property in the examination hall or any part of the College campus or engages in any other act which in the opinion of the officer on duty amounts to use of unfair means or misconduct or has the tendency to disrupt the orderly conduct of the examination.</p> | <p>already appeared and shall not be permitted to appear for the remaining examinations of the subjects of that semester/year. The candidates also are debarred and forfeit their seats. In case of outsiders, they will be handed over to the police and a police case is registered against them.</p> |
| 7 | <p>Leaves the exam hall taking away answer script or intentionally tears of the script or any part thereof inside or outside the examination hall.</p> | <p>Expulsion from the examination hall and cancellation of performance in that subject and all the other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the subjects of that semester/year. The candidate is also debarred for two consecutive semesters from class work and all examinations. The continuation of the course by the candidate is subject to the academic regulations in connection with forfeiture of seat.</p> |
| 8 | <p>Possess any lethal weapon or firearm in the examination hall.</p> | <p>Expulsion from the examination hall and cancellation of the performance in that subject and all other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the subjects of that semester/year. The candidate is also debarred and forfeits the seat.</p> |
| 9 | <p>If student of the college, who is not a candidate for the particular examination or any person not connected with the college indulges in any malpractice or improper conduct mentioned in clause 6 to 8.</p> | <p>Student of the colleges expulsion from the examination hall and cancellation of the performance in that subject and all other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the subjects of that semester/year. The candidate is also debarred and forfeits the seat. Person(s) who do not belong to the College will be handed over to police and, a police case will be registered against them.</p> |
| 10 | <p>Comes in a drunken condition to the examination hall.</p> | <p>Expulsion from the examination hall and cancellation of the performance in that subject</p> |

| | | |
|----|--|--|
| | | and all other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the subjects of that semester/year. |
| 11 | Copying detected on the basis of internal evidence, such as, during valuation or during special scrutiny. | Cancellation of the performance in that subject and all other subjects the candidate has appeared including practical examinations and project work of that semester/year examinations. |
| 12 | If any malpractice is detected which is not covered in the above clauses 1 to 11 shall be reported to the principal for further action to award suitable punishment. | |

19. SCOPE

- i) The Academic Regulations should be read as a whole, for the purpose of any interpretation.
- ii) The above mentioned rules and regulations are applicable in general to both B.Tech. (Regular) and B.Tech. (LES), unless and otherwise specific.
- iii) In case of any doubt or ambiguity in the interpretation of the above rules, the decision of the Chairman of the Academic Council is final.

20. REVISION AND AMENDMENTS TO REGULATIONS

The Academic Council may revise or amend the academic regulations, course structure or syllabi at any time, and the changes or amendments made shall be applicable to all students with effect from the dates notified by the Academic Council.
