College of Engineering, Pune (An Autonomous Institute of Govt. of Maharashtra, Permanently Affiliated to S.P. Pune University)

ACADEMIC RULES and REGULATIONS

For

UG PROGRAMS

(FOR AWARD of B.TECH.DEGREE)

[Latest Revised in June 2016; Applicable w.e.f A.Y. 2016-17]

1. Short Title and Commencement:

- These Regulations shall be called the "College of Engineering, Pune-COEP Regulations for the Award of B.Tech. Degree";
- They have been evolved, drafted and implemented after deliberations in and approvals from the Senate and the Board of Governors of the Institute, and are subject to change/modifications from time to time; (major modifications at a frequency of FOUR years in synchronization with the Curriculum Structure revision and minor changes as and when applicable)
- The latest revised version shall be applicable for students enrolling for B. Tech. Degree programs at the Institute from Academic Year 2015-16.

2. Definitions:

- (a) "B. Tech." means Bachelor of Technology, an Under Graduate Degree awarded by and from the University;
- (b) "Board" means Board of Governors of the Institute;
- (c) "Institute" means College of Engineering, Pune-COEP;
- (d) "Council" means All India Council for Technical Education;
- (e) "Dean" means Dean of the Institute, with the specific functions also indicated along with the title;
- (f) "Deputy Director" means Deputy Director of the Institute;
- (g) "Director" means Director of the Institute;
- (h) "Government" means Government of the Maharashtra;
- "Prescribed" means prescribed by these or any other Regulations of the Institute;
- (j) "Regulations" means College of Engineering, Pune Regulations for the Award of B. Tech. Degree;
- (k) "Senate" means Senate of the Institute;
- (I) "University" means Savitribai Phule Pune University

3. Preamble:

The Regulations prescribed herein have been made by COEP, an autonomous institution of Govt. of Maharashtra, permanently affiliated to the Savitribai Phule Pune University-SPPU, to facilitate the smooth and orderly conduct of its academic programmes and activities at the B. Tech level. It is expected that the Regulations will enable the students to take advantage of the various academic opportunities at the Institute and prepare themselves to face the challenges in their professional careers ahead. It may be noted that:

(a) The provisions made herein shall be applicable to all the B. Tech. Programmes

offered at the Institute, at present;

- (b) They shall also be applicable to all the new B. Tech. Programmes which may be started at the Institute in the future;
- (c) Academic and non-academic requirements prescribed by the Senate have to be fulfilled by a student for eligibility towards Award of B.Tech. degree.

4. Academic Calendar:

Table 1: Suggested Breakdown of Academic Year into Semesters

1. No. of Semesters/ Year	Three; Two being Main Semesters (Odd and Even) and One being a Supplementary Semester; (Note: Supplementary Semester is primarily to assist weak and/or failed students through make up courses, wherever possible. However, the Institute may use this Semester to arrange Add-On Courses for other students and/or for deputing them for practical training elsewhere.)
2. Semester Durations:	Main Semesters: Approx. 19 Weeks each; Supplementary Semester: Approx. 8 Weeks;
3. Academic Activities (Weeks):	Main Semester (Odd or Even) Registration of Courses- 0.5; Course work- 15.5; Examination Preparation-1.0; Examinations- 1.0; Declaration of Results- 1.0; Total: 19; Supplementary Semester (only for make-up Courses): Registration of Courses- 0.1; Course Work- 7.0; Examination Preparation-0.2; Examinations- 0.2; Declaration of Results- 0.5; Total: 8; Inter-Semester Recess: After each Main Semester- 2; After Supplementary Semester- 2; Total: 14 (for regular students) and 6 (for weak students) (Note: In each Semester, there shall be provision for students for Registration of Courses at the beginning, Dropping of Courses in the middle under the advice of Faculty Members and approved by Departmental Undergraduate Programme Committee (DUPC).
4. Examinations:	Continuous In-Sem Evaluation (CIE) and End Semester Examination (ESE), with the weightage in the proportion of 40:60, in the students' performance in Course Work/Laboratory Work and other activities; (Note: The CIE shall be conducted throughout the Semester on dates announced in advance in the Academic Calendar, and its results made known to the students from time to time. This would be of help to the students to decide on Dropping or Withdrawal from Courses in consultation with their Advisors. However, the dates for the CIE and ESE shall be fixed at the Institute level.

	 Care shall be taken to ensure that the total number of days for academic work are > 180/year;
5. Other Items:	 Academic schedules prescribed shall be strictly adhered to by all the Departments; Failure Students can take re-examination for maximum THREE failed courses, immediately after the ESE, as announced in Academic Calendar, in that case the
	scores of CIE will be carried forward.
	Supplementary Semester shall be mainly for Make-up
	Courses, to benefit weak or failed students to the extent possible;
	Students failed in a course shall attend a Course fully
	when it is offered again, and appear for all components
	of evaluation;

- (a) Each academic year shall be divided into two main semesters, each of 19 weeks, viz., odd semester (Jul. Nov.) and even semester (Dec. Apr.), and an 8-week supplementary semester (Apr.-Jun.).
- (b) The Institute shall arrange regular academic activities for the students during the two main semesters and makeup and other courses for the students during the supplementary semester;
- (c) The academic activities in a semester shall normally include course registration, teaching-learning process comprising of course work, continuous internal evaluation, dropping/withdrawal from courses, semester-end examination, and declaration of results.
- (d) The Institute shall announce the schedule for all the academic activities well before the commencement of the academic year and take all the necessary steps to follow them scrupulously.
- (e) The Institute shall also announce adequate intra-semester and inter-semester breaks for the students and ensure that a minimum of 180 academic working days are available during the academic year.
- (f) A typical breakdown of the academic year for the B. Tech programme at the Institute shall be as suggested in Table 1:

5. Admissions:

- (a) The intake capacity of each programme, including the number of seats to be reserved for students of different categories shall be decided and resolved by the Senate, approved by the Board and informed to the University, by following the Government directives and Council approvals. The same channel shall be followed for Inception of New UG programs in the Institute.
- (b) Admissions to the first year of all the UG programmes shall be made before the start of each academic year, through the Maharashtra Combined Entrance Test (MHCET) conducted by the Government, or on the basis of any other relevant Entrance Examination as decided and published by the Government for that year.
- (c) The Institute shall also admit to first year of the programmes, a limited number of students of Non-Resident Indian (NRI), Persons of Indian Origin (PIO)

and Foreign National categories, as per Government rules.

- (d) There shall also be a merit-based, lateral admission of students having Diploma qualification to the second year of all the programmes at the Institute in accordance with the Government rules applicable for such admissions.
- (e) The Institute reserves the right to revoke the admission made to a candidate, if it is found at any time after admission that he/she does not fulfil all the requirements stipulated in the offer of admission.
- (f) The Institute also reserves the right to cancel the admission of any student and discontinue his/her studies at any stage of studentship for unsatisfactory academic performance and/or undisciplined conduct. Also in case the Student wants to cancel his/her admission due to any personal reasons, at any juncture, he/she shall need to apply through proper channel (HoD -> Dean-Academics -> Students' Section), with the application endorsed by his/her parents. The admission shall be cancelled after obtaining 'NO-DUES' from ALL relevant sections of the Institute, as per norms.

6. In-campus Residence:

- (a) Interested students may apply for hostel accommodation at the time of admissions, as the Institute is partially residential and it can admit a limited number of boys and girls students in the hostels.
- (b) The method of admission to students' hostels, rent payable per each seat allotted and the discipline to be followed by the residents shall be governed by "rules and regulations" framed by the Institute in this regard.
- (c) Each student selected for hostel admission shall be provided a seat in one of the hostel rooms identified for this purpose and there shall be no family accommodation available in the hostel for married students.
- (d) Students residing in the hostels shall adhere to the prescribed hostel discipline and pay the hostel/mess charges regularly, as any failure to do so, may lead to withdrawal of hostel facilities to such students.
- (e) Hostel residents shall apply for leave of absence and get the same approved before leaving the hostel even for a few days, as any failure to do so may lead to cancellation of hostel admission to such students.
- (f) Students residing in the hostels shall be required to clear all the hostel dues and vacate their rooms at the end of each academic year, as they will be considered for hostel admission afresh for the New Year.

7. Attendance:

- (a) Each student shall be required to attend at least 75 per cent of all the conducted classes like, lectures, tutorials, laboratories, studios and workshops for being permitted to attend the semester-end examination.
- (b) Extra Academic Activities (EAC) like Yoga, NSS, Physical Training, NCC and, Boat Club shall be compulsory for students of the first year, with at least a minimum attendance of 75 percent in each of them.
- (c) Students shall also be required to take part in any other academic and co- & extracurricular activities and attend the camps, as and when arranged by the Institute during the academic year.

- (d) Students desirous of leave of absence for less than two weeks during a semester shall apply for it in advance to the Head of the Department giving reasons & supporting documents, if any and get it approved.
- (e) Absence due to illness or any other reason for a period less than two weeks in a semester, for which a student could not make prior application, may be condoned by the Head of the Department after proper verification.
- (f) The Dean, Academic Affairs shall be the Authority for sanctioning the leave of students outside clauses (d) and (e) above, after receiving their applications along with recommendations of the Heads of Departments.
- (g) In the case of long absence of a student in a semester with prior approval or otherwise, the Dean, Academic Affairs shall decide whether the student be asked to withdraw from the programme for that particular semester.
- (h) In all the cases of leave of absence as per Clauses (d)-(f) above, the period of leave taken shall not be condoned for the purposes of fulfilling the attendance requirements stipulated in the Clauses (a) and (b).
- (i) It shall be the responsibility of a student residing in the hostel to intimate the Warden of his/her hostel and also the concerned course instructors regarding his/her absence before proceeding on leave.

8. Code of Conduct and Discipline:

- (a) All students shall be required to conduct themselves in a manner befitting the students of a national institution of high reputation, within and outside the precincts of the Institute.
- (b) Unsocial activities like ragging in any form shall not be tolerated within or outside the precincts of the Institute and the students found indulging in them shall be dealt with severely and dismissed from the Institute.
- (c) The following additional acts of omission and/or commission by the students within or outside the precincts of the Institute shall constitute gross violation of code of conduct punishable as indiscipline:
 - i. Lack of courtesy and decorum, as well as indecent behaviour;
 - ii. Wilful damage of property of the Institute/Hostel or of fellow students;
 - iii. Possession/consumption/distribution of alcoholic drinks and banned drugs;
 - iv. Mutilation or unauthorized possession of library material, like. books;
 - v. Noisy and unseemly behaviour, disturbing peace in the Institute/Hostel;
 - vi. Hacking in computer systems, either hardware or software or both;
 - vii. Any other act considered by the Institute as of gross indiscipline.
- (d) In each case above, the punishment shall be based on the gravity of offence, covering from reprimand, levy of fine, expulsion from Hostel, debar from examination, rustication for a period, to outright expulsion.
- (e) The reprimanding Authority for an offence committed by students in the Hostels and in the Department or the classroom shall be respectively, the Rector of the Hostels and the Head of the concerned Department.
- (f) In all the cases of offence committed by students in jurisdictions outside the purview of Clause (5), the Dean, Students Affairs shall be the Authority to reprimand

them.

- (g) All major acts of indiscipline involving punishment other than mere reprimand, shall be considered and decided by the Chairman, Students Disciplinary Committee appointed by the Senate.
- (h) All other cases of indiscipline of students, like adoption of unfair means in the examinations shall be reported to the Dean, Academic Affairs, for taking appropriate action and deciding on the punishment to be levied.
- (i) In all the cases of punishment levied on the students for any offence committed, the aggrieved party shall have the right to appeal to the Director, who shall constitute appropriate Committees to review the case.

9. Change of Branch:

- (a) Change of branch shall be permissible for a limited number of special cases in the third semester as per following regulations.
- (b) Only those students who have completed the common credits required in the first two semesters in their first attempt with a minimum CGPA of 8.5 shall be eligible for making application for a change of branch.
- (c) There shall be a maximum number of only two students admitted in any discipline in the third semester through the branch change rule.
- (d) Intending students, eligible for change of branch, shall apply for the same to the Office of Dean-Academic Affairs of the Institute before the closing date notified at the beginning of odd semester of each academic year.
- (e) Such students shall be required to indicate up to three branches, in order of preference to which they wish to change over, as the change shall be strictly based on their merit, subject to availability of vacancies.
- (f) The change of branch shall be permitted purely on inter-se merit of all the eligible applicants. The CGPA of students at the end of the second semester shall be considered for rank ordering of the applicants seeking change of branch and in the case of a tie, the MHCET ranks shall also be considered.
- (g) All the changes of branch permitted for intending students as per the above clauses shall be effective from their third semester only and no further change of branch shall be permitted after this.
- (h) All the changes of branch permitted at this stage shall be final and binding on the applicants and no student shall be permitted, under any circumstances, to refuse the change of branch offered.
- (i) The candidates who have sought admission under Tuition Fee Waiver Scheme are not eligible for the branch change.

10. Course Structure:

- a) Each course offered in the B. Tech. curriculum at the Institute shall be listed by using a total of five/six digits, the first two being letters and the remaining being numerals, as follows:
 - i. The first two letters to represent the Department offering the Course in abbreviated form, e.g., CE for Civil Engineering;
 - ii. The first numeral that follows to represent the year of the programme, such as 1, 2, 3 and 4, leading to 100,- 400 series;

- iii. The next two numerals to represent the Course Number allotted for the subject by the Department, i.e., 01, 02, 03, up to 99;
- iv. Thus, as an example, courses offered at the Department of Civil Engineering could be listed from CE 101 up to CE 499;
- b) All the theory courses in the B. Tech. Curriculum shall be unitized, with 3-4 credits, being assigned to each course, after the student completes its teaching-learning process successfully.
- c) The assignment of credits to course work shall follow the well accepted practice at leading institutions, with one credit being defined to mean:
 - 1. Lecture course conducted for one hour per week in a semester;
 - 2. Tutorial conducted for one hour per week in a semester;
 - 3. Laboratory/Practical conducted for two/three hours per week in a semester;
 - Project work conducted for two hours per week in a semester;
- d) Each student for the B. Tech, Degree award shall be required to earn a total of 170 credits during his/her studentship at the Institute. While a student can register for more than 170 credits at the Institute, only 170 credits shall be reckoned for the Degree award. In case the student opts for Honors/Minor certification schemes from 5th to 8th semester, he/she has to earn additional 12 credits to qualify for such certification. On the other hand, a student having less than 170 credits shall have to earn the remaining credits to make up the total to 170 credits so as to qualify for the Degree award. The total number of credits earned to complete the program depends on the academic schema for which the student has enrolled for.
- e) In addition to the credit requirement prescribed above for the Degree award, each student shall have to complete the requirements of Extra Academic Activities (EAA) as referred to earlier in Clause 2 of Section 7, during the first two semesters of the programme. All the students shall receive certification as PP (for Passed), and NP (for Not Passed) in EAA, in the Grade Card. While obtaining certification as PP is a mandatory requirement for the Degree award of a student, this shall not be taken into account for computing the final Grade Point Average.
 - 1. Each student shall register for an average of 22 credits per semester during his/her studentship at the Institute, with the minimum and maximum credits being fixed as 16 and 28 credits per semester respectively. The exact number of credits to be registered by a student in a semester in a particular Department shall be decided by his/her Faculty Advisor based on the student's academic performance in the preceding semester and approval by the Departmental Undergraduate Programme Committee (DUPC).
 - 2. The medium of instruction for course work and examinations at the Institute shall be English. The course work for the Programme shall be broadly divided into SEVEN main subject groups, as follows:
 - Humanities, Social Sciences and Management Courses;
 - Engineering Foundation Courses
 - Basic Sciences including Mathematics;
 - Mandatory Learning & Liberal Learning Courses;
 - Professional Core and Elective Subjects;
 - Skill based Laboratory Courses



- Mini and Major Project
- 3. The total course package for the Programme at a Department shall have the following components:
 - Institutional Core subjects
 - Departmental Core subjects
 - Departmental Elective subjects
 - Other Elective subjects
- f) The DUPC shall be responsible for designing and planning the curriculum and syllabi for all the courses included for the Programme for approval by the Senate However, the Dean Academic Affairs along with the respective Heads of the Departments shall be in charge for Institute wide implementation of course work, time tables and related requirements for the Programme.
- g) Each Department shall have the flexibility to include industrial training and/or field work of 8 weeks for all its students as a compulsory requirement for the Degree award and this can be assigned credits, as approved by the Senate. However, these shall be arranged during the supplementary semester period following the sixth semester of studies at the Institute.
- h) Each Department shall assign Faculty Advisors for all its students in consultation with the Dean, Academic Affairs and Dean, Students Affairs. It shall be the responsibility of the Faculty Advisors to help the students in planning their course work and other academic activities at the Department and also to regularly monitor and advise them on their academic and other performance at the Institute. For students of the first two semesters in any Department, the Dean, Students Affairs may assign Faculty Advisors from among the faculty of Basic Science including Mathematics and HSS Departments.

11. Course Registration for the Semester:

- (a) Each student shall be required to register for course work by following the advice of the Faculty Advisor at the commencement of each semester on the day fixed for such registration and notified in the Academic Calendar.
- (b) Students who fail to register for course work on the notified day may be permitted by the Department for late registration on another day announced in the Academic Calendar after payment of an additional fee fixed by the Institute.
- (c) Only those students shall be permitted to register for course work who have:
 - i. Cleared all dues of the Institute, Hostel and Library including fines (if any) of the previous semester,
 - ii. Made all the required advance payments towards the Institute and Hostel dues for the current semester before the closing date, and
 - iii. Not been debarred from registration of courses on any other specific ground.
- (d) Each student shall fulfill the following conditions at the time of registration of course work in any semester:
 - i. Each student of the first year shall register for all the courses in the first two semesters, with flexibility to drop one/two courses up to the minimum permissible limit of 18 credits in each case. Similarly Direct admitted Diploma students will also register for all courses in third and fourth semester.
 - ii. A student shall be permitted to register for more than the average

- course load, i.e., up to a maximum of 28 credits, if he/she has shown outstanding performance in course work in the previous semesters, i.e., CGPA > = 8.0.
- iii. On the other hand, a student whose performance is not so good in the preceding semesters, i. e. CGPA = <5.0, shall be permitted to register 18 credits, the students who have secured CGPA in between 5 and 6 shall be allowed for normal credits (i.e. the credits offered by the department in that semester) and the students who have secured more than 6 CGPA, to register for one additional course. The students are mandatorily required to register for backlog subjects first. The faculty advisor is required to check for the pre-requisites if any at the time of registration.
- (e) All the students shall note the following special features of the credit system, which shall be strictly followed at the Institute:
 - i. ESE shall be conducted for the course once in a semester, but to give opportunity to failure but genuine students, with prior approval by Dean-Academics, the re-examination will be conducted for maximum THREE failed courses for a particular student.
 - ii. Thereafter, a student shall have to re-register in all the failed courses (i.e., Getting Grade FF) at any further semester when they are offered again, freedom being given to the student to change the course only if it is an elective.
 - iii. Also, a student getting certification as NP in the Extra Academic Activities (EAC), shall re- register for them in a following semester/s until he/she obtains certification as PP.
- (f) A student shall have the possibility to drop a course in the middle of a semester as per the Academic Calendar, without mention in the Grade Card, with the concurrence of the Faculty Advisor, and after intimating the concerned course instructor/s and the academic section. However, it shall not be possible for a student to register for an alternative course in that semester.

12. Supplementary Semester:

- (a) Departments shall have the flexibility to conduct supplementary semesters during summer months for FY B.Tech backlog subjects, as per the Academic Calendar. Such a semester shall be offered on the recommendation of DUPC and with the approval of the Dean, Academic Affairs. A student shall be allowed to register for a maximum of three subjects in a supplementary semester.
- (b) The supplementary semester shall be utilized primarily to facilitate the failed students to attend the FY courses in which they have failed and not for launching any new courses for credit. However, a Department shall be free to arrange any Add-On courses for its students during this semester.
- (c) The academic activity in the supplementary semester shall be at double the rate as compared to a normal semester; e.g., 1 credit of course work shall require two hours/week in the class room, so that the contact hours are maintained the same as in a normal semester. It shall also be necessary to fulfil the requirements of CIE and ESE for all the courses like in a normal semester.
- (d) Courses planned for the supplementary semester shall be announced by the Dean, Academic Affairs in each year, well before the conclusion of the even semester.

Students intending to avail of this facility shall have to register for the courses offered by paying the prescribed fees within the stipulated time.

- (e) It shall be the responsibility of the Department to plan in advance the faculty and non-teaching staff requirements to conduct the supplementary semester and take necessary steps including the institutional approvals for organizing the same.
- (f) The student who is either dropped or detained in the course/s during regular semester is not allowed to register for that course/s in summer.
- (g) Re-exam (ONLY for 60 marks equivalent to end semester exam) shall be conducted for all other classes three weeks after grade approval by DUPC/DPPC. The re-exam shall be conducted after every semester, for the subjects offered in that semester. For final grading, T1, T2 scores of respective semester shall be used. Grade ranges shall be same as that of regular semester for that subject. The students, who have dropped the course/s or have been detained for any reason in the course/s, shall NOT be allowed to take the re-examination for respective course/s. For a summer make-up term, organized for FY BTech courses, the re-examination of such courses may be synchronized with the Summer term's ESE.

13. Programme Duration:

- (a) The Programme duration for a student to complete the academic and other requirements at the Institute and qualify for the award of Degree by the University shall be normally 8 semesters.
- (b) However, it shall be possible for an outstanding student to qualify for the Degree award in less than eight semesters, by registering for more number of credits i.e., up to the maximum permissible limit of 28 credits per semester from the third semester onwards to complete the Programme requirements of 170 credits. In such a case, the Institute shall issue a Provisional Certificate to the student who shall await the completion of eight semesters for the Degree award by the University.
- (c) This flexibility shall also enable academically weaker students to conduct their studies at a slower pace and complete their Degree requirements in more than eight semesters. The maximum duration for the course completion will be 12 semesters.
- (d) Clause (c) above shall be applicable to two types of students at the Institute:
 - i. Those wishing to complete the Degree requirements comfortably without encountering failure in any course;
 - ii. Those who failed to complete the due credits of a particular semester and went on accumulating the backlogs.
- (e) In both the above cases, a student shall have to complete the Programme requirements for the Degree of 170 credits within 12 semesters. Failure to complete the Programme requirements by any student in this period shall lead to the cancellation of his/her admission to the Institute forthwith. The Senate on case to case basis on the recommendations of the Director and Dean-Academics can extend the term.
- (f) A student will not be awarded degree if his/her CGPA at the end of the course is less than 5. For such students the performance improvement scheme is recommended wherein he/she is eligible to take any three subjects for the improvement.

14. Temporary Withdrawal:

- (a) Student shall be permitted to withdraw temporarily from the Institute on the grounds like prolonged illness, grave calamity in the family or any other serious happening. The withdrawal shall be for periods which are integral multiples of a semester, provided that:
 - i. He/She applies to the Institute within at least 6 weeks of the commencement of the semester or from the date he/she last attended the classes, whichever is later, stating fully the reasons for such withdrawal together with supporting documents and endorsement of his/her guardian.
 - ii. The Institute is satisfied that, even by taking into account the expected period of withdrawal, the student has the possibility to complete the Programme requirements of 170 credits within the time limits specified earlier.
 - iii. The student shall have settled all the dues or demands at the Institute including those of Hostel, Department, Library and other units.
- (b) A student availing of temporary withdrawal from the Institute under the above provision shall be required to pay such fees and/or charges as may be fixed by the Institute until such time as the students name appears on the Roll List. However, it shall be noted that the fees/charges once paid shall not be refunded.
- (c) Normally, a student shall be entitled to avail of the temporary withdrawal facility only once during his/her studentship of the Programme at the Institute.

15. Termination from the Programme:

A student shall be required to leave the Institute on the following grounds

- i. Absence from classes for more than six weeks at a time in a semester without leave of absence being approved by the competent authorities, shall result in the student's name being struck off the Institute rolls.
- ii. Failure to meet the standards of discipline as prescribed by the Institute from time to time shall also result in the student being recommended by the Students Disciplinary Committee to leave the Institute.

16. Performance Assessment:

- (a) There shall be achievement testing of all the students attending a course, like lecture course, laboratory/design/drawing course or a combination of the two. This shall be in two parts, as follows, both of them being important in assessing the students performance and achievement in the particular course:
 - Sessional, involving Continuous Internal Evaluation (CIE), to be normally conducted by the subject teacher all through the semester; This shall include mid-term tests, weekly/fortnightly class tests, home work assignments, problem solving, group discussions, quiz, seminar, mini-project and other means. The subject teacher shall announce the detailed methodology for conducting the various segments of CIE together with their weightages at the beginning of the semester.
 - 2. <u>Terminal</u>, often designated as <u>End Semester- Examination (ESE)</u>, to be conducted by the subject teacher, preferably jointly with an external examiner; This shall include a written examination for theory courses and practical/design/drawing examination with built-in oral part for laboratory/

design/drawing courses.

- 3. CIE and ESE shall have 40:60 weightage. A student's performance in a subject shall be judged by taking into account the results of CIE and ESE together.
- 4. The evaluation of the project work shall be based on Sessional Work assigned by the project supervisor, seminar presentation, project report and assessment by Project Evaluation Committee, as covered in Clause(7) later in this Section.
- 5. In the case of other requirements, such as, seminar, comprehensive viva voce and EAA the assessment shall be made as determined by the Grade Awarding Authority of the Institute.
- 6. While the conduct of CIE (T1/T2) for a course shall be the responsibility of the subject teacher and the Department concerned, ESE shall be conducted centrally by the Examination Section of the Institute. The records of both CIE and ESE shall be maintained by the Examination Section.
- 7. The performance of students at every stage of the CIE shall be announced by the concerned subject teacher within a fortnight of the date of the particular assessment. The subject teacher shall also show the assessed answer books to the students before submission of the final marks to the Controller of Examinations.
- 8. The concerned subject teacher shall also be responsible to award letter grades to the students after the ESE is completed and to submit the final results of the course within one week of the last date of ESE to the Controller of Examinations through the Head of his/her Department.
- (b) Question Papers: For being able to conduct achievement testing of the students in an effective manner, good question papers shall be used as the principal tool, making it necessary for the question papers at CIE and ESE to:
 - i. Cover all sections of the course syllabus uniformly;
 - ii. Be unambiguous and free from any defects/errors;
 - iii. Emphasize knowledge testing, problem solving & quantitative methods;
 - iv. Contain adequate data/ other information on the problems assigned;
 - v. Have clear and complete instructions to the candidates.
 - vi. Be set taking into consideration Bloom's Taxonomy and align the questions to one or more Course outcomes (COs) as per philosophy of Outcome based Education (OBE).
- (c) Therefore, the question papers, particularly at ESE, shall be set covering the entire syllabus and the students given opportunity to answer questions from the full syllabus of the course by restricting their choice out of each unit in the syllabus. For this to be realized,
- (d) Besides, the course syllabi shall be well drafted, be defect-free and properly unitized (or modularized) to enable the distribution of questions in the question papers to cover the whole syllabus. These aspects shall have to be taken into account, in particular, by the concerned DUPCs.
- (e) There shall be two types of questions to be set by the subject teacher for the question papers at both CIE and ESE, viz.,
 - i. <u>Multiple Choice Questions</u>, having each question to be answered by tick marking the correct answer from the choices (commonly four) given against it. Such a question paper shall be useful in the testing of knowledge, skills, comprehension, application, analysis, synthesis, evaluation and understanding

- of the students. Usually, no more than 15- 20% of the questions in a paper for CIE or ESE shall be of this type.
- ii. <u>Comprehensive Questions</u>, having all questions of the regular type to be answered in detail. Such a question paper shall be useful in the testing of overall achievement and maturity of the students in a subject, through long questions relating to theoretical/practical knowledge, derivations, problem solving and quantitative evaluation.
- iii. The guidelines mentioned in 'i' and 'ii' are indicative of minimum standards of evaluation. However, the teachers are encouraged to follow innovation schemes of evaluating the students for CIE, after its intimation to the students well in advance.
- (f) Examinations: The Institute shall maintain a high standard in both CIE and ESE and ensure the declaration of final results including SGPA and CGPA of the courses attended by a student in a semester before the end of the semester as per the Academic Calendar. For meeting these requirements, the Institute shall take the following steps:
 - i. CIE shall be conducted exclusively by the subject teacher, who shall spell out the components of CIE in advance, maintain transparency in its operation, declare the evaluation results in time and return the answer scripts and assignment sheets to the students on a regular basis after the evaluation is completed. The teacher shall also solve the questions asked in the tests at the tutorial sessions for the benefit of weak students.
 - ii. ESE shall be preferably conducted jointly by the subject teacher and an external examiner appointed for this purpose by the Institute. In this case, considering the tight time schedule for the various tasks connected with ESE, the external examiner shall be associated with the teacher only in the setting of the question paper.
 - iii. The answer scripts of ESE shall be evaluated by the subject teacher only; but, an external review of the entire ESE shall be conducted under the aegis of the Board of Examiners of the Institute before declaring the results. This step shall be useful to the Institute to gain the confidence of the University on the fairness and transparency in the system.
 - iv. Suggested passing standard/threshold for each of the courses shall be 35-40 marks from the CIE and ESE scores taken together.
 - v. Attendance at all examinations, both CIE and ESE of each course shall be compulsory for the students. Students having the following deficiencies shall not be permitted to attend the ESE:
 - A. Disciplinary action by the Institute pending against him/her;
 - B. Irregular in attendance at lecture/laboratory and other classes;
 - C. Failure to meet the standards of attendance prescribed;
 - D. CIE Performance far below the passing standard
- (g) In the event of a final year student failing in a Laboratory course or scoring very low marks in the CIE of a subject or falling seriously ill during ESE, the subject teacher concerned shall have the discretion to grant the student extra time, not exceeding 12 weeks for satisfactorily completing the concerned course after awarding an I grade. If no such extra time is sought/granted, the concerned student shall have to re-register for the same in a succeeding semester and take steps to fulfill the

requirements for the Degree award. The I grade shall be required to be converted into a regular grade within stipulated period indicated in the academic calendar.

- (h) Make Up (Re-)Examination: This facility shall be available to students who may have missed to attend the ESE of one or more courses in a semester for valid reasons and given the I grade; also, students having the X grade shall also be eligible to take advantage of this facility. The make-up examination shall be held as per dates notified in the Academic Calendar. However, it shall be possible to hold a make-up examination at any other time in the semester with the permission of the Dean, Academic Affairs. The standard of conducting this examination shall be the same as the normal ESE.
- (i) Evaluation of Project work: The project work shall be normally conducted in two stages, spread over one or two sequential semesters.
 - i. At the end of first stage, the student shall be required to submit for evaluation, a preliminary report of the work done before a prescribed date to the Project Coordinator, DUPC and present the same before an Internal Project Evaluation Committee. This shall be followed by taking up the second stage of work either in the same or the following semester.
 - ii. The Controller of Examinations shall receive a panel of names from the Chairman, DUPC for identifying the project examiners for the student, at least two weeks before the submission of the second stage of project work. This shall comprise of three unbound, typed copies of the project report (one for each examiner), prepared according to the prescribed format to be submitted to the Department at least one week before the date of oral examination.
 - iii. The Department shall record the date of submission of the project report and arrange to send copies of the same to the examiners a few days before the date fixed for the oral examination. The project coordinator shall notify the date of the oral examination to the examiners and also the student, with a copy marked to the Controller of Examinations. Then the project report shall be evaluated by the Project Evaluation Committee and the result submitted to the Project Coordinator, who in turn shall forward it to the Controller of Examinations.
 - iv. On successful completion of the oral examination, the student shall be required to submit two bound copies of the final, corrected project report, one being for the Department and the other for the project supervisor(s).
 - v. A student desirous of extension of time, up to a maximum of 3 months from the prescribed date for submission of the project report, shall seek permission for the same from the Project supervisor(s) and Head of the Department. The DUPC shall consider such requests, case by case, before giving the permission.
 - vi. If the DUPC is convinced that the progress of a student in project work is insufficient, the concerned students shall be temporarily awarded the I grade. Further, if the project report of the student is not submitted within the extended time period, the 'I' grade shall be automatically converted to the FF grade.
 - vii. Such of the students who fail in the first stage assessment of project work shall be required to re-register for the first stage in the following semester. Likewise, those who obtain the FF grade in the second stage assessment

shall be required to re-register for the same in the subsequent semester(s).

(j) The evaluation of performance in EAAc shall be done by the concerned faculty members, who shall communicate the student's performance to the Examination Section, soon thereafter.

17. Grading System:

(a) The Institute shall follow the award of letter grades and the corresponding grade points to the students based on their performance at the end of every semester, as given in Table 2, In addition to the grades given in the Table 2, the instructors shall use two transitional grades I and X as described in Clause (3) in this Section.

Grade Grade Points AA 10 AB 9 BB 8 BC CC 6 CD 5 DD 4 FF 0 PΡ 0 (Only for Compulsory Non Credit Subjects) 0 AU (Audit Subject) NP (Only for Non Not Passed Credit Subjects)

Table 2: Letter Grades and Grade Points

- (b) A student is considered to have completed a course successfully and earned the credits if he/she secures a letter grade other than I, 'X' or FF in that course. Letter grade FF in any course implies failure in that course.
- (c) The Transitional Grades I and 'X' shall be awarded by the teachers in the following cases:
 - i. Grade I to a student only on satisfactory attendance at classes and performance in other components of assessment, but absence from ESE in a semester for valid and convincing reasons acceptable to the Department, such as,
 - A. Illness or accident, which disabled him/her from appearing at the examination;
 - B. A calamity in the family at the time of the examination, which required the student to be away from the Institute;
 - ii. Grades X to a student on his/her overall performance in the course during the semester, highly satisfactory, i.e., high CIE rating, but a very low ESE performance resulting in an overall F Grade in the course.
 - iii. All the I and X grades awarded to the students shall be converted by the

teachers to appropriate letter grades and communicated to the Academic Section (through Head of the Department) within two days of the respective make-up ESEs. Any outstanding I and X grades two days after the last scheduled make-up ESEs shall be automatically converted to FF grade.

(d) A Semester Grade Point Average (SGPA) shall be computed for all the students in a Department for each semester, as follows:

$$SGPA = (C \ 1 *G \ 1 + C \ 2 *G \ 2 + C \ 3 *G \ 3 + \dots + C \ n *G \ n) / (C \ 1 + C \ 2 + C \ 3 + \dots + C \ n)$$

where, n is the number of courses registered during the semester, $C_{\mathbf{i}}$ is the number of credits allotted to a particular course, and $G_{\mathbf{i}}$ is the grade points corresponding to the grade awarded for the course.

(e) A *Cumulative Grade Point Average* (CGPA) shall be computed for all the students in a Department at the end of each semester by taking into consideration their performance in the present and the past semesters as follows:

$$CGPA = (C \ 1 \ *G \ 1 \ + C \ 2 \ *G \ 2 \ + C \ 3 \ *G \ 3 \ + \dots + C \ m \ *G \ m) \ / \ (C \ 1 \ + C \ 2 \ + C \ 3 \ + \dots + C \ m)$$

where, m is the number of courses registered upto that semester, C_i is the number of credits allotted to a particular course, and G_i is the grade points corresponding to the grade awarded for the course.

- (f) Whenever, a student repeats or substitutes a course in any semester, the lower of the two grades obtained by him/her in the course shall be ignored in the computation of CGPA from that semester onwards and the students shall be given the benefit of a higher grade.
- (g) Both the SGPA and CGPA shall be rounded off to the second place of decimal and recorded as such for ease of presentation. Whenever the CGPAs are to be used for the purpose of determining the merit ranking in a group of students, only the rounded off values shall be made use of.
- (h) When a student gets the grade I or X for any course during a semester, the SGPA for that semester and the CGPA at the end of that semester shall be tentatively calculated ignoring the I and X graded course(s). The SGPA and CGPA for that semester shall be finally recalculated after conversion of I and X grade(s) to appropriate grade(s), taking into account the converted grade(s).
 - (i)Other academic requirements for the Programme include the following two certifications as indicated earlier in clause (5) of Section 10, viz., PP (Passed) and NP (Not Passed) for EAA. However, there shall be no grade points are associated with these certifications and they do not figure in the calculation of SGPA or CGPA. But, obtaining a PP shall be a mandatory requirement to qualify for, the Degree award.
- (j) It shall be open to each student to take additional courses for audit from the fifth semester onwards, with the concurrence of the Faculty Advisor. Students having CGPA $\dot{\epsilon}=8.0$ shall be normally encouraged to take such courses.

While the performance of the student in audited courses shall be included in the Grade Card, they do not contribute to SGPA or CGPA of the concerned student.

18. Method of Awarding Letter Grades:

- (a) The subject teacher(s) shall award the letter grade(s) to students based on the marks secured by them in both CIE and ESE together in the course(s) registered. This shall be done by following a relative grading system based on the use of statistics, for which the IUPC shall make available an appropriate software package.
- (b) The subject teacher(s) shall submit two copies of the result sheet for each course, giving both the marks and the grades awarded to the Head of the Department, before the due date specified in the Academic Calendar. This shall be forwarded to the Controller of Examinations soon thereafter by the Head of the Department, after preliminary scrutiny and moderation (if necessary) at the DUPC level.
- (c) All the evaluated answer scripts of CIE in a subject shall be returned to the students from time to time during the semester. However, the answer scripts of ESE shall only be shown to the students during the specified period after the evaluation and the detailed marks sheets together with ESE answer scripts and any other relevant papers connected with ESE shall be submitted by the subject teacher(s) to the Controller of Examinations who shall hold it for a period of at least one semester. Steps shall be taken to destroy the same only after obtaining permission from the Dean of Academic Affairs at the end of the prescribed period.
- (d) Appeal: A student shall have the possibility to appeal to the Director against a subject teacher for awarding lower grade in a course than that expected by him/her, on payment of prescribed fees, before the commencement of the next semester. In such a case, the DUPC shall arrange a meeting of the aggrieved student together with a Committee comprising of the subject teacher, another subject expert from the Institute and the Head of the Department, who shall reconsider the evaluation done, show the answer script to the student. If the student is satisfied, the matter shall be closed at this stage. On the other hand, if a revision of marks allotted is called for, the same shall be carried out and all the records, including the Grade Card, corrected soon thereafter. In the latter case, the prescribed fee paid by the student shall be returned.
- (e) Withholding of Grades: The Grades of a student in a semester shall be withheld and not declared if the student fails to pay the dues to the Institute or has disciplinary action pending against him/her.

19. Eligibility for the Award of Degree:

- (a) A student shall be eligible for the award of B. Tech. Degree from the Institute and the University provided, he/she has:
- (b) The Senate shall be the Recommending Authority for the award of B. Tech. Degree to students fulfilling the requirements specified under Clause (1) above and the Board shall be the Approving Authority.
- (c) The Degree award shall then be granted by the University.
 - i. Completed all the prescribed credit requirements for the award of Degree with

- grade DD or higher, in each of the courses, like Theory, Laboratory, Studio, Workshop, Seminar and Project Work;
- ii. Satisfactorily completed all the non-credit requirements with PP certification, covering EAA and Industrial Training, Field work, (if any);
- iii. Obtained a CGPA of >= 5.00 at the end of the semester in which he/she completes all the requirements for the award of Degree;
- iv. Paid all the dues to the Institute including the Department, Hostels, Library and other units; and,
- v. No case or disciplinary action pending against him/her.

20. Eligibility for the CGPA improvement after completion of prerequisite credits for the award of Degree:

Students who secure CGPA between 5 and 6.75 after completing the pre-requisite credits for the award of degree, and wish to improve their CGPA are permitted for CGPA improvement. Such students be permitted to withdraw their grade in a given course with poor grade and permitted to reappear for the examinations for improving the grade and in turn CGPA.

- a) Student can appear for grade improvement examination within one year from the date of passing his/her PG or UG Examination. He should not have taken (i) Leaving Certificate from the Institute and ii) Degree from University of Pune through convocation. He/she will submit a written application to dean academics seeking his/her permission to register for class improvement within one month from the date of declaration of result or one week before the date of convocation of University of Pune whichever is earlier. This application will be forwarded to dean academics through the Head of the Department from where he/she has graduated. No student will be admitted once the subject registration process of that semester ends.
- b) For grade improvement student will have to take maximum 3 subjects in which he/she has secured DD or CD grades from the same semester in one stretch.
- c) Student can choose maximum three theory courses from a particular semester offered for T.Y and B. Tech (either odd or even) in which he/she has secured DD or CD grade. Student will have to register for these courses in a particular semester in which those subjects are offered.
- d) At the time of registration student will surrender all the original mark lists given to him by the institute He will have to give an affidavit on 100 Rs. judicial stamp paper that he/she will not do any use of surrendered mark lists till he/she gets official result of the subjects for which he/she wishes to appear for grade improvement. No change of subjects or drop of subjects will be allowed after registration.
- e) Student wishing to improve his/her grade will have to pay appropriate fees as laid down by the institute time to time.
- f) Student wishing to appear for grade improvement is exempted from attending regular classes as he/she has already undergone the course instructions but he/she will have to appear for all the evaluation tests conducted for the particular subjects. No re-exam or retest will be allowed for the class improvement, in case of such students misses any of the tests or examinations. Absentee for Endsemester examination will automatically lead to award of FF grade in that subject.

- g) The grading process as used for the regular students appearing for that subject will be applicable and no concession of any sort will be granted on account of absentee for any of the examinations.
- h) Student wishing to use the facility of grade improvement will have to pass in all the three subjects at a time for which he/she has registered for. He/she will not be entitled for the summer term or re-examination in such cases.
- i) Only one attempt will be permissible for any candidate wishing to use the facility of grade improvement. If the student fails to secure higher grades resulting in reduction in overall CGPA then the original result of the student before registering for grade improvement will be retained.
- j) Student who improves his/her CGPA will be issued fresh mark lists by the institute. These mark lists will have star against the subjects for which he/she has appeared for grade improvement and will state "Grade Improvement". The date on the new mark lists will be that as issued for other students appearing in those subjects. Name of the student will be communicated to Pune University and he/she will have to apply for degree certificate from University of Pune thereafter.

21. Conversion Table for Grades to Marks (UG)

The senate, in its 36th and 37th Meetings (held on 14th Decemebr 2015 and 27th April 2016 respectively), approved the conversion expressions of CGPA to percentage of marks as **[(CGPA - 05 X 10)]**. However, the conversion formula was decided to be printed on the back side of the grade sheet for the batch admitted in AY 2015-16. For students on roll and thus passing out in year 2015-16, 2016-17, and 2017-18, the letter will be issued by Controller of Examinations on demand from recruiter or by the student or otherwise, stating that "The Institute does not express the conversion between grades and % marks and does not declare the CLASS based on acquired CGPA. The recruiter or the agencies requesting declaration on such conversion may refer to the AICTE or appropriate guidelines in this regard".

22. Honors and Minor Certification Schemes at the Institute (To be implemented w.e.f A.Y. 2017-18 for Third Year Students:

- Aspiring student has to register for additional FOUR THEORY courses and acquire additional (minimum) 12 credits (3 credits/course) for any ONE of the Schemes.
- Honors Certificate for Vertical/Specialization in his/her OWN Branch for Research orientation; Minor in any OTHER Branch for Improving Employability.

For MINOR scheme:

 Every Department to develop and submit 'Minor-Courses-List' of 5-6 Theory courses with Titles and detailed syllabi, separately.

- e.g. E & TC dept.: Linear & Digital ICs, DSP, Embedded Processors, Digital Communication, Communication Networks.
- Student from ANY department is ELIGIBLE to apply for Minor from ANY OTHER DEPARTMENT.
- The Scheme would start from 5th Semester of UG program and applicant must have a minimum CGPA of 6.0 (up to 4th Sem).
- Host Department to float a SINGLE course from Minor-List, ONE in EVERY Semester starting from 5th Semester (Four courses in Four Semesters viz. 5, 6, 7, 8).
- NO Lab course/Internship/Mini-project/MOOC permitted in Minor Scheme.
- All Minor Courses to be designed and delivered by Departments only.

For HONORS Scheme:

- Every Department to develop and submit a 'Honors-Courses-List' of 5-6 Theory courses with Titles and detailed syllabi. MOOCs are permitted to be part of the list, so also a few PG courses. Multiple Verticals are encouraged. (e.g. Digital Communication/Signal Processing/Communication Networks/VLSI Design/Embedded Systems/ etc.)
- Student from Host Department to undertake the Honors scheme for his/her own branch.
- Scheme would begin from 5th Semester of UG program.
- Applicant should have CGPA score of 6.0 (up to 4th Semester)
- Host Department to float the courses from Honors-List as ONE in each Semester (viz. 5th, 6th, 7th, 8th Sem, of which preferably the SECOND course could be a MOOC from NPTEL/edX/Coursera/Udacity//PurdueNext/Khan Academy/QEEE etc. with examination given by the Department.

Implementation:

- O1 Minor & 01 Honors each = 02 Courses in every Semester beginning from 5th Sem. upto 8th Sem. Total: 08 Courses.
- A Student opting for 'Honors' will NOT be ENTITLED to register for 'Minor'.
- Allotment of SLOT in the Time table on the line of ILOE (e.g. Mon-Wed: 9 to 10 am).
- Department to identify and appoint a faculty member as 'Honors/Minor Coordinator' for guiding the aspirants.

Specific Remarks:

 Normal UG program for B.Tech. degree is therefore of reduced credits in comparison to previous iterations of Curriculum revision, (170 credits across Eight semesters).

- Regular learners would find it bit easier to complete the program with good scores-CGPA, with such reduced credits, and they can receive B.Tech degree with 170 credits.
- But, for Brighter and interested Students opting Honors/Minor scheme, the UG program would be of 170 + 12 = 182 credits.
- The remedial assessment schemes such as Re-examination or Summer term will NOT be applicable for Minor or Honors schemes. Student failing in any of the Minor or Honors courses, at any stage will be discontinued from the Scheme.
- The schemes shall also be open for Second Year Direct Admitted Diploma Students, with CGPA of Second Year at COEP exceeding 6.0.
