

DR. A.P.J. ABDUL KALAM TECHNICAL UNIVERSITY  
LUCKNOW



Rules and Regulations

For

Undergraduate Course  
(B. Tech.)

On

**AICTE MODEL CURRICULUM**

(Effective from the Session: 2018-19)  
(Revised)

# Dr. A.P.J. Abdul Kalam Technical University Lucknow

## *MODEL CURRICULUM ORDINANCE GOVERNING THE DEGREE OF BACHELOR OF TECHNOLOGY (B.Tech.).*

### MODEL CURRICULUM:

The Model Curriculum provides flexibility in designing curriculum and assigning credits based on the course content and hour of teaching. The Model Curriculum provides an opportunity for the students to choose courses from the prescribed courses comprising core, elective and open elective courses. The MODEL CURRICULUM provides a cafeteria type approach in which the students can take courses of their choice, learn at their own pace, undergo additional courses and acquired more than the required credits, and adopt an interdisciplinary approach to learning. The courses shall be evaluated on the grading system, which is considered to be better than the conventional marks system. It is necessary to introduce the grading system to make the uniformity among all technical institutions of India. This will benefit the students to move across institutions within India to begin with and across countries. The uniform grading system will also enable potential employers in assessing the performance of the candidates. In order to bring uniformity in evaluation system and computation of the Cumulative Grade Point Average (CGPA) based on student's performance in examinations, the AICTE has formulated the guidelines to be followed.

### DEFINITIONS OF KEY WORDS:

- (i) University: Dr. APJ Abdul Kalam Technological University, Lucknow (APJAKTU).
- (ii) Academic Year: Two consecutive (one odd + one even) semesters constitute one academic year.
- (iii) Semester: Each semester will consist of 15-18 weeks of academic work equivalent to 90 actual teaching days. The odd semester may be scheduled from July to December and even semester from January to June.
- (iv) Model Curriculum: The Model curriculum provides choice for students to select from the prescribed courses (*core, elective and Foundation Courses*).
- (v) Programme: An educational programme leading to award of a Degree.
- (vi) Course: Usually referred to, as 'papers' is a component of a programme. All courses need not carry the same weightage. The courses should define learning objectives and learning outcomes. A course may be designed to comprise lectures/ tutorials/laboratory work/ field work/ outreach activities/ project work/ vocational training/viva/ seminars/ term papers/assignments/ presentations/ self-study etc. or a combination of some of these.
- (vii) Branch: Specialization or discipline of B.Tech. Degree Programme, like Civil Engineering, Agriculture Engineering, etc.
- (viii) Letter Grade: It is an index of the performance of students in a said course. Grades are denoted by letters A<sup>+</sup>, A, B<sup>+</sup>, B, C, D, E and F.
- (ix) Grade Point: It is a numerical weightage allotted to each letter grade on a 10-point scale.
- (x) Credit: A unit by which the course work is measured. It determines the number of hours of instructions required per week. One credit is equivalent to one hour of teaching (lecture or tutorial) or two hours of practical work/field work per week.
- (xi) Credit Point: It is the product of grade point and number of credits for a course.

- (xii) Semester Grade Point Average (SGPA): It is a measure of academic performance of student/s in a semester. It is the ratio of total credit points secured by a student in various courses registered in a semester and the total course credits taken during that semester. It shall be expressed up to two decimal places.
- (xiii) Yearly Grade Point Average (YGPA): It is a measure of academic performance of student/s at the end of the academic year. The formula used to calculate YGPA is given in section 14.4 (b). It shall be expressed up to two decimal places.
- (xiv) Cumulative Grade Point Average (CGPA): It is a measure of overall cumulative performance of a student over all semesters and it will display at the end of the programme. The CGPA is the ratio of total credit points earned by a student in various courses in all semesters and the sum of the total credits of all courses in all the semesters. It is expressed up to two decimal places.
- (xv) First Attempt: If a student has completed all formalities and become eligible to attend the examinations and has attended at least one subject of passing, such attempt (first sitting) shall be considered as first attempt.
- (xvi) Transcript or Grade sheet or Certificate: Based on the grades earned, a grade sheet/certificate shall be issued to all the registered students at the end of every academic year. The grade sheet/certificate will display the course details (code, title, number of credits, grade secured) along with SGPA of both semesters and YGPA earned till that academic year. Final year grade sheet shall also display the CGPA.

The Model curriculum provides choice for students to select from the prescribed courses.

### **Sequencing Plan for the B.Tech. Degree Curriculum**

<i>Semesters</i>	<i>Course Coverage</i>
I –II	Applied Science Courses and Common Engineering Courses for all Branches; Mandatory Courses
III-IV	Applied Sciences Courses ( Common for all Branches) and Engineering Core Courses: Core/Elective
V-VI	Humanities and Mandatory Courses, Engineering Core & Electives Courses; Other Electives; Branch-wise Orientation
VII-VIII	Engineering Core & Electives Courses; Open Electives; Branch-wise Orientation Electives/Elective; Other Electives, Internship, Project work

### **Credit Structure for Course Work**

Lectures (hrs/wk/Sem)	Tutorial(hrs/wk/ Sem)	Lab.Work (hrs/wk/Sem)	Credits
3	1	0	4
2	1	0	3
0	1	0	1
0	0	2	1
0	0	3	2
0	1	3	3
0	1	2	2

## **1. ADMISSION**

- 1.1 Admission to B.Tech. First year in 1<sup>st</sup> semester and lateral admission in B.Tech. second year in 3<sup>rd</sup> semester (for diploma holder/B.Sc. candidates only) will be made as per the rules prescribed by the Academic Council of the Dr. A.P.J. Abdul Kalam Technical University (APJAKTU) Lucknow.
- 1.2 Admission on migration of a candidate from any other University to the University is not permitted.

## **2. ELIGIBILITY FOR ADMISSIONS**

### **2.1 Admission to B. Tech. First Year through Entrance Examination:**

(a) Eligibility for admission to under graduate courses in First year shall be as per guidelines of All India Council for Technical Education (AICTE) / Related Council and according to the latest U.P. Government notifications/rules.

### **2.2 Admission to B.Tech. Second Year through Lateral Entry Scheme:**

- (a) Candidates who have passed 3/4 year Diploma (with minimum 60% marks) from institutions recognized by the U.P. Board of Technical Education in any branch of Engineering/Technology except Agriculture Engineering are eligible for admission to Second year in any branch of Engineering./Technology except Agriculture Engineering
- (b) Candidates who have passed 3/4 year Diploma (with minimum 60% marks) from institutions recognized by the U.P. Board of Technical Education in Agriculture Engineering are only eligible for admission to Second year of Agriculture Engineering.

2.3 Direct admission on vacant seats at institution/college level: The eligibility criteria for direct admission on seats remaining vacant in first year after entrance examination counselling shall be such as may be notified from time to time.

2.4 The Academic Council shall have power to amend or repeal the eligibility criteria laid down at clause 2.1. & 2.2, as per the guidelines of AICTE.

## **3. ATTENDANCE**

- 3.1 Every student is required to attend all the lectures, tutorials, practicals and other prescribed curricular and co-curricular activities. The attendance can be condoned up to 25% on medical grounds or for other genuine reasons beyond the control of students.
- 3.2 A further relaxation of attendance up to 15% for a student can be given by Head of Institution/college provided that he/she has been absent with prior permission of the Head of the institution/college for the reasons acceptable to him.

- 3.3 No student will be allowed to appear in the end semester examination if he / she do not satisfy the overall average attendance requirements of Clause Nos. 3.1, and 3.2. and such candidate(s) shall be treated as having failed due to detained and will be further governed by clause no. 4.2 & 4.3 and annexure I.
- 3.4 In each semester, the attendance shall be counted from the date of admission in the college or start of academic session whichever is later.

#### **4. DURATION OF COURSES**

- 4.1 Total duration of the B.Tech. Course shall be 4 years, each year comprising of two semesters. Each semester shall normally have teaching for the 90 working days or as prescribed by A.I.C.T.E. from time to time.
- 4.2 The student admitted to 1st year B.Tech shall complete the course within a period of seven academic years from the date of first admission, failing which he/she has to discontinue the course. The students admitted under lateral entry scheme (2nd Year B.Tech) shall complete the course within a period of six academic years from the date of first admission, failing which he/she has to discontinue the course.
- 4.3 A candidate, who has failed twice in first year due to any reason (either due to his/her non-appearance or he/she being not permitted to appear in semester examinations) shall not be allowed to continue his/her studies further. Provided further that if a student wishes to continue third time in first year he/she may be allowed on the terms and conditions laid down by the University for such permission but the maximum time allowed for completing the course will remain the same as in clause 4.2.
- 4.4 The minimum credit requirement for B.Tech degree is 160 credits.

#### **5. CURRICULUM**

- 5.1 The 4 year curriculum has been divided into 8 semesters and shall include lectures, tutorials, practicals, seminars and projects etc. in addition to industrial training and educational tour etc. as defined in the scheme and executive instructions issued by the University from time to time.
- 5.2 The curriculum will also include such other curricular, co-curricular and extracurricular activities as may be prescribed by the University from time to time.

#### **6. CHANGE OF BRANCH**

- 6.1 Change of branch may be allowed against the vacant seats in the following two stages, provided criteria at following sub clauses is satisfied:
- (a) In first year, after the last date of admission to the B.Tech. I<sup>st</sup> semester, on the basis of merit of entrance examination on vacant seat subject to clause 6.2.
  - (b) In the second year, on the basis of merit at the B.Tech. first year examination for those who are pass without any carry over paper subject to clause 6.2.
- 6.2 After change of branch, number of students in branch(s) shall neither increase over the intake approved by A.I.C.T.E. nor it will decrease below 75% of intake approved by A.I.C.T.E.

- 6.3 Change of branch facility is not applicable to following: -
- (a) Candidates admitted in B.Tech. Agricultural Engineering/Biotechnology courses.
  - (b) Candidates admitted in second year of B.Tech. courses as per clauses 2.2
- 6.4 The change of branch if allowed will become effective from B.Tech. IIIrd semester.
- 6.5 The Branch change process must be completed by 30<sup>th</sup> August of each academic session.  
Further change of branch shall not be permitted.

## **7. CHANGE OF COLLEGE**

- 7.1 Change of College shall not be permitted.
- 7.2 Change of study center shall not be permitted.

## **8. EXAMINATION**

- 8.1 The performance of a student in a semester shall be evaluated through continuous class assessment and end semester examination. The continuous assessment shall be based on class tests, assignments/tutorials, quizzes/viva-voce and attendance. The marks for continuous assessment (Sessional marks) shall be awarded at the end of the semester. The end semester examination shall be comprised of written papers, practicals and viva-voce, inspection of certified course work in classes and laboratories, project work, design reports or by means of any combination of these methods.
- 8.2 The distribution of marks for sessional, end semester theory papers, practicals and other examinations, seminar, project and industrial training shall be as prescribed. The practicals, viva-voce, projects and reports shall be examined/evaluated through internal and external examiners as and when required.
- 8.3 The marks obtained in a subject shall consist of marks allotted in end semester theory paper and sessional work.

## **9. ELIGIBILITY OF PASSING**

- 9.1 A student who obtained Grades A<sup>+</sup> to E shall be considered as passed. If a student secured "F" grade, he /she has to reappear for the examination. It is mandatory for a student to earn the required credits as mentioned in each semester.
- (a) For a pass in a Theory Subject, a student shall secure minimum of 30% of the maximum marks prescribed by the University in the end semester examination and 40% of aggregate marks in the subject including sessional marks. i.e. Minimum Passing Grade is "E".
  - (b) For a pass in a Practical/Internship/Project/Viva-voce examination, a student shall secure a minimum of 50% of the maximum marks prescribed by the University in the relevant Practical/Internship/Project/Viva-voce examination and 40% of marks in the aggregate in

the Practical/Internship/Project/Viva-voce including sessional marks. i.e. Minimum Passing Grade in a course is “E”.

(c) For a pass in the subject which has only sessional component and No End semester exam component, such as Seminar, a student shall secure a minimum of 40% of the maximum marks prescribed. i.e. Minimum Passing Grade is “E”.

(d) For a pass in a subject having Theory and Practical component, a student shall secure minimum of 30% of the maximum marks prescribed by the University in theory examination and 50% of marks in practical examination; in addition the student must secure 40% of marks in the aggregate in the subject including theory, practical, theory sessional and practical sessional marks. i.e. Minimum Passing Grade in a course is “E”..

9.2 The students who do not satisfy the condition 9.1 or the student who remains absent shall be deemed to have failed in that subject and may reappear for the University examination in the subsequent examinations. However, the Sessional marks awarded to the student/s at previous attempt in the concerned subject will be carried forward.

9.3 A student may, at his/her desire, opt to abandon his/her performance of a semester in following manner.

(a) A student may opt to abandon his/her performance only in end semester examination of university for a given semester.

(b) A student may opt to abandon his/her Total Performance of a Semester which includes performance in university end semester examination and sessional marks of all theory and practical subjects.

(c) A student may opt to abandon his/her performance in University Examination of any or both semesters of the same academic year only.

(d) A student shall be allowed to abandon the performance maximum twice during the entire course of study.

(e) Performance of a semester, once abandoned, cannot be claimed again.

9.4 The student, who opts to abandon the performance of a semester as per clause 9.3, shall abandon performance in all the courses of that semester, irrespective of the fact whether the student has passed or failed in any subject of that semester.

9.5 A student, who opts to abandon the total performance of the semester including sessional marks as per 9.3(b) and 9.3(c), has to take readmission for the relevant semester(s). Readmission to the First semester in such cases shall not be considered as fresh admission i.e., the student will continue to have the same University Roll Number, which was allotted earlier.

9.6 The student, who opted to abandon his / her performance only in the university end semester examination of a semester and does not desire readmission, shall be permitted to re-appear for examinations of all the subjects of the semester in the subsequent examinations as an Ex-

Student. However, the sessional marks obtained by the student in the abandoned semester shall be retained.

9.7 Such students who opted to abandon the performance at any stage of his/her study and has cleared any paper in more than one attempt are eligible for the award of *DIVISION* at the B.Tech. degree level but are not eligible for the award of RANKS and HONOURS degree.

9.8 The student who passes a course of a semester as per 9.1 shall not be allowed to appear for the same again, unless he/she opts for *abandoning of results* as per 9.3-9.7.

9.9 A student shall be declared to have completed the program of B.Tech. degree, provided the student has undergone the stipulated course work as per the regulations and has earned at least 160 Credits.

## 10. ELIGIBILITY FOR PROMOTION

10.1 There shall not be any restriction for promotion from an odd semester to the next even semester.

10.2 For promotion from even semester to the next odd semester (i.e. of the next academic year) the student has secured either of the semester of an academic year is fully cleared or earned the credit greater than or equal to minimum credit of either of the semester for example.

### Example 1

**1. A Student of 1st year earned 10 credit in I semester and 8 credit in II semester. The total credit of I semester is 17.5 and II semester is 20.5.**

Minimum Credit Threshold for Promotion Check Point	Credit* Threshold
First Year to Second Year	<b>17.5 credits in First Year (I&amp;II sem.)</b>

**Total credit earned by student is 18(10+8) therefore he / she is eligible for promotion from 1<sup>st</sup> to 2<sup>nd</sup> year.**

### Example 2

**A Student of 1st year earned 17.5 credit in I semester and 18 credit in II semester. The total credit of I semester is 17.5 and II semester is 20.5.**

Minimum Credit Threshold for Promotion Check Point	Credit* Threshold
First Year to Second Year	<b>17.5 credits in First Year (I&amp;II sem.)</b>

**His / Her I semester is fully cleared therefore he / she is eligible for promotion to 2<sup>nd</sup> year.**



10.3 In yearly result, a student shall be declared PASS only if he/ she secures “E” or above grades in all the subjects and minimum Semester Grade Point Average (SGPA) of 5.0, in each semester of an academic year.

10.4 Student himself can decide to abandon the performance of any or both the semesters of same academic year as per clause 9.3 and reappear in abandoned semester examination as per clauses 9.4, 9.5 & 9.6.

## 11. Carry over System

11.1 Following rules shall be followed for carry over papers:

- (a) A candidate who satisfies the requirements of clause 9.1 (a) and 9.1 (b) will be required to appear in those theory papers / practical during respective end semester exams in which he/she failed.
- (b) A candidate satisfying clause 9.3 (a) shall be required to appear in theory papers / practical examination to fulfil the requirements of clause 9.1(a) and 9.1 (b).
- (c) A candidate shall be required to exercise his/her choice of minimum theory papers in which he/she desires to appear in the examination for improvement of SGPA to fulfil the requirements of clause 10.3.
- (d) Candidate appearing for carry over paper in any semester shall be examined with the examination paper of that subject running in that semester.

11.2 All carryover examinations shall be held only with end semester examination.

## 12. RE-ADMISSION IN THE INSTITUTION/ COLLEGE

A candidate may be allowed for re-admission provided he/she satisfies one of the following conditions:

- (a) A candidate is declared fail.
- (b) A candidate did not appear in a semester examination / or he/she was not granted permission to appear in the examination.
- (c) A candidate has been detained by the institute and subsequently has been permitted to take re-admission.
- (d) A candidate has own desire to abandon the performance of semester(s) as stated in clause 9.3 (b) and 9.3 (c).

## 13. COURSES

13.1 There will be four types of courses.

- (i) Foundation Courses: The Foundation Courses are of two kinds: *Compulsory Foundation* and *Elective foundation*.

“Compulsory Foundation”: These courses are the courses based upon the content that leads to Knowledge enhancement. They are mandatory for all disciplines.

“Foundation Electives”: These are value based courses aimed at man making education.

(ii) Core Courses: This is the course which is to be compulsorily studied by a student as a core requirement to complete the requirements of a program in a said discipline of study.

(iii) Elective Courses: This is course, which can be chosen from the pool of papers. It may be supportive to the discipline/ providing extended scope/enabling an exposure to some other discipline / domain / nurturing student proficiency skills.

(iv) Mandatory Courses: These courses are mandatory for students joining B.Tech. Program and students have to successfully complete these courses before the completion of degree.

13.2 The minimum number of students to be registered for an Elective to be offered shall be not less than twenty.

13.3 A student shall exercise his option in respect of the electives and register for the same at the beginning of the concerned semester. The student may be permitted to opt for change of elective subject within 15 days from the date of commencement of the semester as per the calendar of the University.

#### 14. COMPUTATION OF SGPA, YGPA AND CGPA

14.1 The Dr. A.P.J.Abdul Kalam Technical University (APJAKTU) Lucknow adopts absolute grading system wherein the marks are converted to grades and every semester results will be declared with semester grade point average (SGPA). Yearly Grade Point Average (YGPA) shall be calculated at each year by calculating from the formula given in section 14.4 (b) of an academic year. The Cumulative Grade Point Average (CGPA) shall be calculated at the end of last semester of the program. The grading system is with the following letter grades and grade points scale as given below:

Level	Outstanding	Excellent	Very Good	Good	Above Average	Average	Poor	Fail
Letter Grade	A <sup>+</sup>	A	B <sup>+</sup>	B	C	D	E	F
Grade Points	10	9	8	7	6	5	4	00
Score (Marks) Range	≥ 90	<90	<80, ≥70	<70, ≥60	<60, ≥50	<50, ≥45	<45, ≥40	< 40

##### 14.2

- (a) A student obtaining Grade 'F' in a subject shall be considered failed in that subject and will be required to reappear in the examination. Such students after passing the failed subject in subsequent examination(s) will be awarded with grade according to marks he/she scores in the subsequent examination(s).

- (b) If a student's SGPA in a semester is less than 5 to be declared pass in that semester as laid down by clause 10.3 of the ordinance, he/she shall be allowed to appear in the improvement examination of the theory subjects of that semester. Such student after passing the said subjects in subsequent examination(s) will be awarded with grade according to marks he/she scores in the subsequent examination(s).

#### 14.3

- (a) The University has right to scale/moderate the theory exam/practical exam/sessional marks of any subject whenever required for converting of marks in to letter grades on the basis of the result statistics of university as in usual practice.
- (b) The modality for moderation of marks before the declaration of result shall be decided by a committee of Pro-Vice Chancellor, Dean UG, Assoc. Dean UG and Controller of Examination.
- (c) The modality for moderation of marks if needed after the declaration of result shall be decided by a committee of Pro-Vice Chancellor, Dean UG, Assoc. Dean UG, Controller of Examination and an external member not below the rank of Professor nominated by the Vice Chancellor.
- (d) If the candidate(s) appeared in the examination but theory marks are not available due to missing of copy by any reason, the average marks may be awarded as decided by the committee mentioned in 14.3(a). In case of missing/unavailable of sessional marks, Controller of Examination can take decision as per the provision laid down by the Examination Committee.
- (d) The Committee defined in 14.3 (a) shall also fix up the responsibility and recommend the punishment for occurrence of such case(s) in 14.3(c).
- (e) All the matters defined under 14.3(a) to 14.3 (d) shall be executed subject to the approval of Academic Council of the APJAKTU.

#### 14.4 Computation of SGPA, YGPA and CGPA

The following procedure to compute the Semester Grade Point Average (SGPA), Yearly Grade Point Average (YGPA) and Cumulative Grade Point Average (CGPA):

- (a) The SGPA is the ratio of sum of the product of the number of credits with the grade points scored by student in all the courses taken by a student and the sum of the number of credits of all the courses undergone by a student, i.e  $SGPA (S_i) = \frac{\sum (C_i \times G_i)}{\sum C_i}$  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.
- (b) The YGPA (Yearly Grade Point Average) is calculated at end of each year as:

$$YGPA = (SGPA_{(odd)} * \sum C_{i(odd)} + SGPA_{(even)} * \sum C_{i(even)}) / (\sum C_{i(odd)} + \sum C_{i(even)})$$

- (c) The CGPA is also calculated in the same manner taking into account all the courses undergone by a student over all the semesters of a programme, i.e.  $CGPA = \sum (C_i \times S_i) / \sum C_i$  where  $S_i$  is the SGPA of the  $i$ th semester and  $C_i$  is the total number of credits in that semester.
- (d) The SGPA shall be calculated at end of each semester and YGPA shall be calculated at the end of each academic year. CGPA shall be calculated at the end of last semester of the Program and shall be rounded off to 2 decimal places and reported in the transcripts / grade Sheet.

### Illustration for Computation of SGPA, YGPA and CGPA

Computation of SGPA of odd semester Illustration No.1

Course	Credit	Grade letter	Grade point	Credit Point (Credit x Grade)
Course 1	5.5	B <sup>+</sup>	8	5.5x8 = 44
Course 2	4	C	6	4x6 = 24
Course 3	5	B	7	5x7 = 35
Course 4	3	A <sup>+</sup>	10	3x10= 30
<b>Total</b>	<b>17.5</b>			<b>133</b>

Thus,  $SGPA = 133/17.5 = 7.6$

Computation of SGPA of even semester Illustration No.2

Course	Credit	Grade letter	Grade point	Credit Point (Credit x Grade)
Course 1	5.5	B <sup>+</sup>	8	5.5x8 = 44
Course 2	4	C	6	4x6 = 24
Course 3	5	B	7	5x7 = 35
Course 4	3	A <sup>+</sup>	10	3x10= 30
Course 5	3	F	0	3x0= 00
<b>Total</b>	<b>20.5</b>			<b>133</b>

Thus,  $SGPA = 133/20.5 = 6.48$

$$YGPA = (SGPA_{(odd)} * \sum C_{i(odd)} + SGPA_{(even)} * \sum C_{i(even)}) / (\sum C_{i(odd)} + \sum C_{i(even)})$$

$$\text{Thus, } YGPA = 7.6 * 17.5 + 6.48 * 20.5 / (17.5 + 20.5) = 6.99$$

Illustration No.2a

Course	Credit	Grade letter	Grade point	Credit Point (Credit x Grade)
Course 5	3.0	E	4	3.0 x 4 = 12

$$C_i (\text{First Attempt}) + C_i (\text{Subsiquent Attempt}) = 133 + 12 = 145$$

$$\text{Thus SGPA} = 145/20.5 = 7.07$$

CGPA after Final Semester

Semester	I	II	III	IV	V	VI	VII	VIII
Credit	17.5	20.5	21.0	21.0	21.0	21.0	20	18.0
SGPA	7	8.5	9.2	6.86	8.18	7.73	8.68	9.4

$$\text{Thus, CGPA} = (17.5 \times 7 + 20.5 \times 8.5 + 21 \times 9.2 + 21 \times 6.86 + 21 \times 8.18 + 21 \times 7.73 + 20 \times 8.68 + 18 \times 9.4) / 160 = 8.66$$

14.5 Grade sheet: Based on the above recommendations on Letter grades, grade points, SGPA of each semester and YGPA of an academic year, a consolidated grade sheet indicating performance in a particular academic year.

14.6 CGPA (calculated at the end of the last semester of the program) shall be issued.

## 15. CONVERSION OF CGPA INTO PERCENTAGE

Conversion formula for the conversion of CGPA into Percentage is  $(\text{CGPA}) \times 10 =$  Percentage of marks scored.

## 16. AWARD OF DIVISION, RANK AND MEDALS

16.1 Division and CGPA shall be awarded only after the eighth and final semester examination based on integrated performance of the candidate for all the eight semesters (six semesters for lateral entry) as per following details.

- (a) After successful completion of 160 credits, a student shall be eligible to get under graduate degree in engineering/technology. A student will be eligible to get undergraduate degree with honours only, if he/ she voluntary completes additional University recommended courses only (equivalent to 20 credits offered by NPTEL of 4 weeks, 8 weeks and 12 weeks shall be of 2, 3 and 4 credits respectively) through MOOCs. For registration to MOOCs courses, the students shall follow NPTEL site <http://nptel.ac.in/> as per the NPTEL policy and norms. These students can register for their courses through NPTEL directly as per the course offering in odd/even semesters at NPTEL. The registration fees will be borned by the student. These NPTEL courses (recommended by the university) may be cleared during the B.Tech degree program (not necessary one course in each semester). After successful completion of these MOOCs courses the students, shall, provide their successful completion NPTEL status/ certificates to the university (COE) through their college of study only. The student shall

be awarded **First division with Honours** Degree only if he/she secures 7.50 or above CGPA and passed each subject of that degree program in single attempt without any grace marks, without any gap along with successful completion of MOOCS based course of 20 credits.

- (b) The student shall be awarded **First division with Distinction** Degree only if he/she secures 7.50 or above CGPA and passed each subject of that degree program in single attempt without any grace marks and without any gap.
- (c) A candidate who qualifies for the award of the degree by securing E or above grades in all subjects of all the semesters (eight semesters/six semesters) as applicable, and secures CGPA less than 7.5 and greater than or equal to 6.5 shall be declared to have passed the examination in **FIRST DIVISION**.
- (d) All other candidates who qualify for the award of degree by securing E or above grades in all subjects of all semesters (eight semesters/six semesters as applicable) and secures CGPA below 6.5 and greater than or equal to 5.0 shall be declared to have passed the examination in **SECOND DIVISION**.

16.2 For award of ranks in a branch, a minimum of 10 students should have appeared in the 8th semester examination. The total number of ranks awarded shall be 10% of total number of students appeared in 8th semester or 10 students, whichever is less in that branch.

Illustration:

1. If 1028 students appeared for the 8th semester in Electronics and Communication Engineering Branch, the number of ranks to be awarded for Electronics and Communication Engineering will be 10.
2. If 90 students appeared for the 8th semester in Biomedical Engineering Branch, the number of ranks to be awarded for Biomedical Engineering will be 09.

For award of rank in a branch of Engineering / Technology, the CGPA secured by the student from

- (a) 1st to 8th semester for the students admitted to B.E./B.Tech. Program from 1st year, and
- (b) 3rd to 8th semester for the students admitted to B.E./B.Tech. Program from 2nd year (Lateral Entry)

shall be considered.

A student shall be eligible for a rank at the time of award of degree in each branch of Engineering / Technology, provided the student

- (a) Has passed 1st to 8th (students joining from 1st semester) or 3rd to 8th (in case of lateral entry) semester in all the subjects in first attempt only
- (b) Has not repeated/rejected any of the lower semesters.

If two students get the same *CGPA*, the tie should be resolved by considering the number of times a student has obtained higher *SGPA*; but, if it is not resolved even at this stage, the number of times a student has obtained higher grades like A<sup>+</sup>, A, B<sup>+</sup>, B etc shall be taken into account in rank ordering of the students in a program.

16.3 The Gold, Silver and any other Medals as decided by the university shall be awarded to students falls in the top ranks of various courses as per university rules.

## **17. SCRUTINY AND RE-EVALUATION**

17.1 Scrutiny and re-evaluation shall be allowed in only theory papers.

17.2 Revaluation of theory/practical papers is permitted only with certain conditions as laid down by university.

## **18. UNFAIR MEANS**

Cases of unfair means shall be dealt as per the rules and regulations of the University (ANNEXURE-II).

## **19. AWARD OF SESSIONAL MARKS**

Sessional marks for theory subjects, practicals and project shall be awarded as prescribed and at present the break-up of sessional marks shall be as follows:

(a) Theory Subjects :

(i) Class test which will comprise 30 % of total theory marks with two mid-term tests of equal weightage.

(ii) Teacher Assessment Tutorial/Assignment/ Quizzes/ Attendance comprises 20% of total theory marks.

(b) Practical,

(i) Two mid-term viva-voce/tests of equal weightage 30% of total Practical marks.

(ii) Teacher Assessment: Lab, Record/ Attendance 20% of total Practical marks.

(c) Make-up test may be held only for those students who could not appear in any one of mid-term class tests due to genuine reasons for which the prior permission from the Head of Institution/College was taken. Make up test shall ordinarily be held about two weeks before the semester examination. The syllabus for the make-up test shall be the whole syllabus covered by the subject teacher upto that time.

## **20. AWARD OF SEMINAR INDUSTRIAL TRAINING, EDUCATIONAL TOUR MARKS AT INSTITUTION/COLLEGE LEVEL**

20.1 The marks of Seminar, Industrial Training, Educational tour marks shall be awarded on the following basis:

(i) Write-up / Report 50%

(ii) Presentation 50%

20.2 The marks in Seminar, Industrial Training and Educational Tour shall be awarded by a committee consisting of following members:

(i) Head of the Department or his/her nominee.

(ii) Concerned Officer – Incharge.

(iii) Senior Faculty Member of the department nominated by the Head of Department.

## **21. CANCELLATION OF ADMISSION**

The admission of a student at any stage of study shall be cancelled if :

- (a) He / She is not found qualified as per AICTE / State Government norms and guidelines or the eligibility criteria prescribed by the University. or
  - (b) He / She is found unable to complete the course within the stipulated time as prescribed in clause 4.2 or
  - (c) He / She is found involved in creating indiscipline in the Institution / College or in the University.
- (a) The Academic Council shall have the power to relax any provision provided in the ordinance in any specific matter/situation subject to the approval of Executive Council of the University.

### **ANNEXURE-I**

#### **STATUS OF DETAINED STUDENTS**

##### **1. Following amendments have been approved for status of detained students in any semester**

- (a) An academic year consists of two semesters (Odd and Even semester) comprising of 15 to 18 weeks of academic work equivalent to 90 actual teaching days. Attendance of the student shall be counted from the date of admission in the college or start of academic session whichever is later in a given semester.
- (b) Students detained in ODD semester shall be given an option to choose either to discontinue the study in Even semester and abandon the entire academic year (both semester) as laid down in clause 9.3 and repeat the entire year course in the next academic year OR to abandon only the ODD semester as laid down in section 9.3 of the ordinance. If the student chooses to Abandon the relevant semester only, he/she shall be further governed by the clause 9.4 and 9.5 of the ordinance.
- (c) If such a student abandons only the ODD semester performance and prefers to study in EVEN semester and attains the minimum credits to meet the eligibility for promotion as given in clause 10.2 (From the performance of only EVEN semester), he/she then have to study only the ODD semester (in which the student was detained) in the subsequent academic year as a re-admitted student. If he fails to get minimum credits required for promotion in EVEN semester he will be considered FAIL in entire year and will have to repeat both semester in the subsequent year.
- (d) Students detained in EVEN semester shall be given an option to choose either to abandon the entire academic year (both semester) as laid down in clause 9.3 and repeat the entire year course in the next academic year OR to abandon only the EVEN semester as laid down in section 9.3 of the ordinance. If the student chooses to Abandon the relevant semester only, he/she shall be further governed by the clause 9.4 and 9.5 of the ordinance.



- (e) If such a student abandons only the EVEN semester performance then it will be verified whether he/she has attained the minimum credits required to be promoted to next year as given in clause 10.2 (From the performance of only ODD semester). If he/she did then he/she have to study only the EVEN semester (in which the student was detained) in the subsequent academic year as a re-admitted student. Otherwise he/she will be considered fail in entire year and will have to repeat both semester in the subsequent year.

**For example:**

If a student is detained in 3<sup>rd</sup> semester of academic session 2019-20, he shall be allowed to study 4<sup>th</sup> semester as given in clause 10.1. If the student scores 21 credit in 4<sup>th</sup> semester then he fulfills the promotion criteria laid down by clause 10.2. He shall then take admission as re-admitted student in academic session 2020-21 in 3<sup>rd</sup> semester and complete the requirements of 3<sup>rd</sup> semester in odd semester of 2020-21. After the odd semester examination his 2<sup>nd</sup> year result (YGPA) shall be declared. However, the student can take admission in 5<sup>th</sup> semester only in the next academic year i.e. 2021-22. Similarly, if a student is detained in 4<sup>th</sup> semester of academic session 2019-20 and if the student has scored 21 credit in 3<sup>rd</sup> semester then he fulfills the promotion criteria laid down by clause 10.2. He shall then take admission in 4<sup>th</sup> semester as re-admitted student in academic session 2020-21 in 4<sup>th</sup> semester and complete the requirements of 4<sup>th</sup> semester in even semester of 2020-21. After the even semester examination his 2<sup>nd</sup> year result (YGPA) shall be declared. However, the student can take admission in 5<sup>th</sup> semester only in the next academic year i.e. 2021-22.

**2. Method to convert the of results of students who were admitted in non MODEL CURRICULUM system however due to failing in any year now studying as re-admitted student in MODEL CURRICULUM system.**

It was proposed that the old examination of result of such students shall be converted to grading system by the computation of SGPA, YGPA and CGPA methods as laid down in section 14.1 and 14.4 of the MODEL CURRICULUM ordinance implemented in University since academic year 2016-17. However, if a student who was declared PASS in old system and as per the calculation of MODEL CURRICULUM system if the SGPA of the student falls below 5.0, such student shall be exempted from minimum criteria of SGPA in a given semester.

**ANNEXURE-II**

**INSTRUCTIONS AND PENALTY FOR USE OF UNFAIR MEANS**

Procedure to be followed by the invigilator / centre superintendent / observer in case of unfair means:

1. As soon as any case of unfair means comes to the notice of the Invigilator, he/she shall bring it to the notice of the Examination Center Superintendent of the examination centre as well as the Observer appointed by the University.
2. The invigilator shall take possession of the Answer Book of the candidate along with paper or other material found in his possession and immediately provide the candidate a second Answer Book.
3. The Superintendent shall record the time when the case was brought to his notice. He shall also record the time of issue on the second Answer Book. “(A): UFM-Main Answer Script” should be written on the page cover of the main answer script and “(B): UFM-Second Answer Script” on the cover page of the second answer book.
4. The Invigilator, who detects the use of UFM by a candidate, shall also record his statement about the UFM case on specified UFM format.
5. Centre Superintendent shall also give his statement in specified UFM format.
6. The statements of Invigilator and Centre Superintendent shall be in presence of the observer and shall also submit his / her statement about the incident on the specified format.
7. In case the candidate refuses to give his statement, he should NOT BE forced to do so, only the fact of his refusal and the time of occurrence of the incident should be recorded by the Invigilator/s on duty. The statement of the candidate if any and the statement of the Invigilator/s are attested by the Centre Superintendent and countersigned by the observer.
8. The Examination Center Superintendent / Observer shall also provide the details of the UFM case to the control room of the University through E-mail ONLY.
9. In case a student is found to have written something on the body part a photo of same may be taken on the web cam available etc., if possible.
10. No extra time will be given for completing the Examination as a result of this procedure.
11. After the Examination is over, both of the answer books marked as A (confiscated copy) and B (freshly issued copy) along with the material found in possession and COMPLETELY filled and signed the prescribed FORM and COUNTERSIGNED BY THE OBSERVER SHALL BE SEND IN SEPARATE ENVELOPE MARKED **UFM** TO THE OFFICE OF THE CONTROLLER OF EXAMINATION OF UNIVERSITY.
12. In case a candidate has smuggled out an Answer Book, the Centre Superintendent should call the student directly and try to secure the Answer Book. In case of non availability of the Answer Book, the matter should be reported to the police and a copy of the FIR are sent to the office of the Controller of Examination along with the statement of the Invigilator present in the room, statement of the observer and also of the candidate (if candidate is available).
13. In case of impersonation, the Centre Superintendent shall report the matter to the POLICE. Center superintendent shall also report the incident to the Controller of

Examination of the University along with the detailed report with necessary documents duly countersigned by the observer.

14. In cases of misconduct of serious nature, the matter should be reported to the police, if necessary. Statement of the Invigilator/s and that of the other concerned (e.g. Security person etc.) may be obtained and sent to the office of the Controller of Examination.
15. In case of electronic gadgets, the clear photocopy of that from front and back, and the enlarged photocopy of the screen shot / the printout of the material stored in the electronic gadgets duly signed by the candidate, invigilator, Center Superintendent, and countersigned by observer MUST be attached with UFM report. The electronic gadgets need NOT to be sent to the University.

**CONVENING OF COMMITTEE ON UNFAIR MEANS:**

A Committee (Standing Committee) appointed by the Vice-Chancellor shall enquire into cases of unfair means in the Examination. The student who is involved in UFM cases will be given a chance to submit their representation to the committee, if they want, during a period as specified via circular by the office of the Controller of Examination. The Committee shall thoroughly examine the cases on the basis of the material / documents placed and student report (if any). The committee shall submit its recommendations after laying down clearly the nature of the offence to the Vice Chancellor for consideration and necessary orders.

**TABLE SHOWING PUNISHMENT DETAILS FOR UNFAIR MEANS W. E. F. FROM EVEN SEMESTER OF SESSION 2017-18 OF THE UNIVERSITY:**

A	1. Doesn't follow the instructions given by the Center Superintend / Invigilator.	Warning will be issued to the candidate not to repeat in future. If repeated, CONCERNED PAPER will be awarded ZERO marks or "F" grade.
	2. Communicates with another examinee or try to pass on information even after a word of caution from the invigilator or any competent authority.	
	3. Any sort of writing on the question paper except the Roll No. at the given space.	
	4. Any exam relevant literature found near or just beneath his/her seat but he/she has not copied from the said material as ascertained by the Center Superintend / Observer / invigilator.	
	5. Use of indecent or abusing words in the answer book.	
	6. Attempts to remove Encrypted code / Bar Code or any sticker from the answer book.	
	7. Indulges in writing the matter relevant to subject before commencement of examination	
	8. Attempts oral communication with another examinee	
	9. Indecent behaviour at the examination centre or in the examination hall	
B	1. If the examinee is found in possession notes, chits, answer book of any other examinee, etc. however he/she has not written from the said material in his/her answer book	Cancellation of result of CONCERNED PAPER and will be awarded ZERO marks or "F" grade in that paper.
	2. Deliberately reveals his identity or intentionally makes	

	some irrelevant symbols, sketches etc. in the answer book which may reveal his identity.	
	3. Possess any sort of exam relevant material in the examination hall or even outside the examination hall like toilet, lobby etc. or tries to contact any unauthorized person during the exam timings	
	4. Brings any electronic gadgets (except memory less scientific calculator if permitted in that paper) in the examination hall.	
	5. Attempts to bribe the examiner by mentioning address, contact detail, Mobile No. etc. or to contact the examiner directly or through any representative for his/her favor	
	6. Any sort of writing on the question paper regarding solution of the questions.	
C	1. Examinee has copied from the subject exam relevant material, Scribble on chits, compass box, calculator, pad, cloth, handkerchief, dress or any part of the body or stored in electronic-gadgets including mobile-phone.	Cancellation of result of the CONCERNED PAPER and two other paper in which the candidate has secured the minimum marks percentage among the rest of the papers except the paper in which candidate has UFM. That is total three papers will be awarded ZERO marks or "F" grades.
	2. Examinee has indulged in exchange of answer book with other examinee.	
	3. Examinee has copied from another examinee or deliberately allows other examinee to copy from his own answer book or pass on the exam relevant material or literature in any form to another examinee in exam hall.	
	4. If the examiner find some written/printed papers etc. of exam related material from the answer book of an examinee	
	5. Attempts to get rid of or to destroy any kind of exam relevant prohibited material with which he is caught or helps other in such an act	
	6. Examinee is found to throw away his answer book, supplementary, question paper, practical job or part thereof	
	7. If examinee is found to have torn the answer book, question paper, any other exam related material or part thereof of his/her own or other examinee	
	8. If the examiner reports that in the examinee's answer book is written with more than one type of hand writing	
	9. If the examiner reports about missing pages or additional pages in the answer book of examinee	
	10. If the examinee obstructs the process of conducting the examination in any way.	
	11. If the examinee tries to destroy the evidence by chewing the chit or in any other manner, which was found in his possession during examination	
	12. If the examinee attempt to bribe by way of Keeping currency notes in his/her answer book	
	13. If the examination committee is satisfied from the report	

	of the examiner that the candidate has copied from one another or from any other sources or involving in mass copying during the examination.	
	14. Possess any sort of exam relevant material written/printed compass box, calculator, pad, cloth, hand kerchief, dress or any part of the body or stored in electronic-gadgets including mobile-phone. in the examination hall or even outside the examination hall like lobby etc.	
D	1. If the examinee obstructs/threatens orally or assaults the invigilator or any competent authority on exam duty.	Cancellation of result of the all the theory papers in that semester (all the theory papers in that semester will be awarded ZERO marks or "F" grades).
	2. Tries to bring duly written answer book or supplementary from outside	
	3. If the examinee is found with bulk material like book, note book, and short notes etc. related with the concerned paper.	
E	1. If person impersonates as examinee and if this is detected during or after the examination.	Cancellation of result of the all the theory papers and practical examination in that semester will be cancelled. (All the theory and practical papers will be awarded ZERO marks or "F" grades in that semester).
	2. If the examinee carries away an answer book, supplementary or practical job or part thereof outside the exam hall.	
	3. Leaves the examination hall without submitting his answer book or tries to destroy it.	
	4. If the examinee is not appearing in that particular examination but who is a candidate of other examination of the university behaves in an indisciplin manner during particular examination or helps other examinee in using unfair means.	
F	1. Possesses Gun, Revolver, Knife or any other prohibited weapon in or around exam hall.	Cancellation of result of the all the theory papers and practical examinations (i.e. the papers and practical examination will be awarded ZERO marks or "F" grades) in that YEAR and candidate has to repeat that session.
	2. Physically assaulting invigilator or any competent authority on exam duty.	
G.	1. ( <i>In a Carryover Paper</i> ). If unauthorized material is found with the candidate in bulk such as books, huge cheating material, etc. which shows the clear intention of copying.	The candidate shall be awarded zero marks or 'F' grade in that Carryover paper and will not be allowed to appear in that paper for next one year.
H.	1. If during the examination or afterwards any examinee is found to have indulged in unfair means other than specified in A to G as above and which has been bearing on the examination or result of the examinee and/or any other examinee.	The examination committee shall decide the penalty depending upon the nature and complexity of involvement of the examinee is concerned on case to case basis.

***The result of the student will be declared after implementation of the decision of examination committee.***