



LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING (AUTONOMOUS)
MYLAVARAM- 521 230, KRISHNA (DT), ANDHRA PRADESH, INDIA

ACADEMIC REGULATIONS R-17 FOR B.Tech (REGULAR)
(CHOICE BASED CREDIT SYSTEM)

Applicable for the students of B.Tech (Regular) from the Academic Year 2017-18

1. ELIGIBILITY CRITERIA FOR ADMISSION

The eligibility criteria for admission into B.Tech programme shall be as per the guidelines issued by the Andhra Pradesh State Council of Higher Education (APSCHE) or by any other competent authority.

2. PROGRAMMES OFFERED (UNDER GRADUATE)

A student shall be offered admission into any one AICTE-approved programme as given below:

<u>S.No</u>	<u>Programme</u>
1	Aerospace Engineering (AE)
2	Civil Engineering (CE)
3	Computer Science and Engineering (CSE)
4	Electronics and Communication Engineering (ECE)
5	Electrical and Electronics Engineering (EEE)
6	Electronics and Instrumentation Engineering (EIE)
7	Information Technology (IT)
8	Mechanical Engineering (ME)

3. AWARD OF DEGREE

A student will be declared eligible for the award of B. Tech. degree, if he/she fulfils the following academic requirements:

(i) **4 year B.Tech programme:**

- The student shall pursue a course of study for not less than four academic years and not more than eight academic years.
- The student shall register for 176 credits and secure all the 176 credits.
- The students, who fail to fulfill all the academic requirements for the award of degree within eight academic years from the year of their admission, shall forfeit their seat in B. Tech programme.
- Students shall secure a satisfactory grade (SA) in all non-credit courses/ activities.
- No disciplinary action pending against the student.

(ii) **3 year B.Tech programme under Lateral Entry Scheme (LES):**

- The student shall pursue a course of study for not less than three academic years and not more than six academic years.
- The student shall register for 132 credits and secure all the 132 credits.
- The students, who fail to fulfill all the academic requirements for the award of degree within six academic years from the year of their admission, shall forfeit their seat in B. Tech programme.
- Students shall secure a satisfactory grade (SA) in all non-credit courses/

activities.

- No disciplinary action pending against the student.

4. MEDIUM OF INSTRUCTION

The medium of instruction is English in all academic activities.

5. MINIMUM INSTRUCTION DAYS

The minimum instruction days for each semester shall be 90 days.

6. CATEGORIZATION OF COURSES

The curriculum of each programme shall contain various courses indicated in the following categories to train the students for employment, higher learning & research and entrepreneurship.

- i. **Humanities and Social Sciences (HS):** These courses include Technical English, Environmental Science and Engineering, Industrial Management, Managerial Economics & Financial Accountancy, Communication skills etc.
- ii. **Basic Sciences (BS):** These courses include Mathematics, Physics, Chemistry, Biology etc.
- iii. **Engineering Sciences (ES):** These courses include Basics of Electrical / Electronics / Mechanical / Civil / Computer Engineering / Instrumentation and Engineering practices/Engineering Graphics.
- iv. **Professional Core (PC):** These courses are the core courses that provide the requisite foundation in the chosen branch of engineering.
- v. **Professional Elective (PE):** These courses are the elective courses opted by the students relevant to the chosen branch of engineering that provides the requisite foundation in a specific area of specialization.
- vi. **Open Elective (OE):** These courses are inter-disciplinary in nature offered by other departments.
The department offers an elective course (OE/PE), if the number of students registered in such a course is a minimum of 30 or more.
- vii. **Add-on Courses:** Add-on courses are similar to the programme based elective courses. These are offered to a student, one each in the V, VI and VII semesters. The student registering for add-on courses shall be permitted to seek exemption from as many electives that are offered in the VIII semester in order to focus more on the project work. A student shall undertake the project work, either within the college or premier institutions/ research laboratories/industries, when he/she registers all 3 add-on courses.
- viii. **Online / self study courses:** An opportunity is given to the students to choose one online course offered by premier institutions like IITs/ Foreign institutions/ reputed universities to enhance the learning skills or a self-study course under a guidance of the faculty advisor to enhance the self-learning capabilities.
- ix. **Personality Development (PD):** These courses include Integrated Learning Practices (ILPs), Mandatory Courses (MCs) & Extra-curricular/Co-curricular activities and help the students into a well-trained professionals and good human beings with a high employability potential, good communication skills, soft skills, good engineering practices, personality transformation, professional presentation skills and networking skills.
 - **Integrated Learning Practices:** These courses include Mini project, Seminar, Internship, Comprehensive viva voce (CVV) and Project work. These courses are intended to provide students with specific learning outcomes in a branch of engineering, apart from broad skills are necessary for enhancing professional skills

among the future engineers.

- **Mandatory Courses:** The Professional Ethics & Human Values, Employability Enhancement Skills, Problem-assisted learning and Problem-based learning are non-credit courses and relevant for value education and also for enhancing employability skills.
- In addition to the above courses to enhance the overall personality & character of students and make them aware of societal needs, the extra-curricular/co-curricular activities are included, which do not carry any credits. These activities include National Service Scheme (NSS), National Cadet Corps (NCC), Yoga & Meditation, Sports & Games and Professional club activities.
- The students shall undergo Industrial training / In-house training to expose them to the practical environment.

7. CREDIT ASSIGNMENT

Each course is assigned a certain number of credits based on the following criteria:

Contact hours per week			Credits
L	T	P	
1	0	0	1
0	2	0	1
0	0	2	1

L : Lecture hours T : Tutorial hours P : Practical hours

8. SEMESTER-WISE DISTRIBUTION OF CREDITS

The entire course of study is for four academic years (three academic years in case of LES), all the years are on semester pattern. The distribution of credits in each semester is as follows.

Semester	Credits	
	Regular	LES
I	22	--
II	22	--
III	22	22
IV	22	22
V	22/25*	22/25*
VI	22/25*	22/25*
VII	22/25*	22/25*
VIII	13/16/19/22	13/16/19/22
Total	176	132

* With add-on course

Note:

- With 3- add-on courses registered, credits in VIII semester = 13
- With 2- add-on courses registered, credits in VIII semester = 16
- With 1- add-on course registered, credits in VIII semester = 19
- Without add-on courses registered, credits in VIII semester = 22

- A faculty advisor or counsellor shall be assigned to a group of 20 students, who will advise the students about the under graduate programme, its course structure and curriculum, choice/option for courses based on their competence, progress, pre-requisites and interest.

9. ASSESSMENT AND EVALUATION

The performance of a student in each course shall be evaluated based on Continuous Internal Evaluation (CIE) and Semester End Examination (SEE) or only Continuous Internal Evaluation.

S.No	Category of course	Marks	
		CIE	SEE
1	Theory courses	40	60
2	Laboratory courses	40	60
3	Mandatory courses	Professional ethics and human values	40
		Employability enhancement skills, Problem assisted learning and Problem based learning	100
4	Mini project	100	--
5	Seminar	100	--
6	Internship	100	--
7	Comprehensive viva voce	100	--
8	Project work	40	60

9.1 THEORY COURSES

9.1.1 Continuous Internal Evaluation (CIE):

The CIE of a theory course consists of four components as indicated in the following table.

S.No	Component	Marks
1	Mid-term examinations	20
2	Online quiz examinations	10
3	Assignments	5
4	Attendance	5
Total		40

(a) Mid-term Examinations (20 marks):

There shall be two mid-term examinations of 90 minutes each. The mid-term examinations shall be conducted with syllabi from units I & II for the first and units III, IV & V for the second. In each theory course, the question paper for the mid-term examination consists of three questions with ‘either’ / ‘or’ option. A student is required to answer all three questions for maximum 20 marks. In final assessment, 75% weightage for the better of the two mid-term examinations and 25% for the other shall be considered for awarding marks.

(b) Online Quiz Examinations (10 marks):

Two online quiz examinations of 20 minutes each shall be conducted with syllabi from units I & II for the first and units III, IV & V for the second. The online quiz examination shall have 20 multiple choice questions. In final assessment, 75% weightage for the better of the two online examinations and 25% for the other shall be considered for awarding marks.

(c) Assignments (5 marks):

Assignments shall be evaluated by the concerned faculty based on one assignment in each unit. The average of best four assignment marks shall be considered for awarding marks.

(d) Attendance (5 marks):

A student shall be awarded maximum 5 marks in each course based on the percentage of attendance as given below:

% of attendance	Marks
-----------------	-------

≥ 95	5
90 to < 95	4
85 to < 90	3
80 to < 85	2
75 to < 80	1

- For the courses like Engineering Graphics/Engineering Drawing, the CIE shall be 40 marks (20 marks for day-to-day work, 15 marks for two mid-term examination and 05 marks for attendance) and 60 marks for SEE. A student is required to answer all 3 questions for maximum 15 marks. The final assessment of mid-term examinations is based on 75% weightage for the better and 25% for the other. The question paper for the mid-term examination consists of 3 questions with 'either' / 'or' option.

9.1.2 Semester End Examinations (SEE)

The semester end examinations for theory courses (including Engineering Graphics and Engineering Drawing) will be conducted for duration of 3 hours. In each course, the question paper shall consist of 5 questions, one from each unit with 'either' / 'or' option, carrying 12 marks. A student is required to answer all 5 questions for maximum 60 marks.

9.2 LABORATORY COURSES

(a) Continuous Internal Evaluation (CIE)

The continuous internal evaluation for laboratory courses (including Computer aided engineering drawing, computer aided engineering graphics, Computer aided machine drawing etc.) is based on the following parameters:

Parameter	Marks
Day-to-day work	20
Internal test	10
Attendance	05
Viva voce	05
Total	40

(b) Semester End Examinations (SEE)

The performance of the student in laboratory courses shall be evaluated jointly by internal and external examiners for 3 hours duration as per the parameters indicated below:

Parameter	Marks
Procedure/Algorithm	10
Experimentation/Program execution	15
Observations/Calculations/Testing	15
Result/Inference	10
Viva voce	10
Total	60

- For the courses like design/ drawing (Computer aided engineering drawing, computer aided engineering graphics, Computer aided machine drawing / Building drawing etc.) the SEE evaluation is based on the following parameters.

Parameter	Marks
Procedure	10
Drawing / Model preparation	30
Result	10
Viva voce	10
Total	60

9.3 PERSONALITY DEVELOPMENT COURSES**9.3.1 INTEGRATED LEARNING PRACTICES****(a) MINI PROJECT**

A student is required to undergo a mini project of his/her choice by applying theoretical concepts to develop a practical component /element/system that includes design/ testing/ analysis. The performance of a student in the mini project shall be evaluated by a three-member committee constituted by the HoD as per the following parameters:

Parameter	Marks
Survey	10
Quality of work	30
Mini project Report	20
Presentation	20
Interaction	20
Total	100

The performance of a student in mini project shall be evaluated based on two reviews, each carrying 100 marks. The average marks of these two reviews will be awarded. However, a student who fails to secure minimum 40% marks or abstains will be permitted to reappear in the subsequent semester(s). There shall be no semester end examination.

(b) SEMINAR

A student shall deliver a seminar on any emerging topic of his/her choice from the core technical domain. The student shall submit a duly-certified seminar report. A three-member committee constituted by the HoD will finalize the CIE marks based on the following parameters:

Parameter	Marks
Survey	10
Quality of work	20
Seminar report	20
Presentation	30
Interaction	20
Total	100

A student who fails to secure minimum 40% marks or abstains will be permitted to reappear in the subsequent semester(s). There shall be no semester end examination.

(c) INTERNSHIP

Internship must involve practical work related to systems engineering, industry practices etc. The students shall undergo internship for a period of minimum 4 weeks continuously at the end of VI semester and shall be evaluated in VII semester. The internship can be carried out at premier institutions/ research laboratories/industries.

A student shall submit a report on the training undergone, along with a certificate from the organization. A three-member committee constituted by the HoD shall finalize the CIE marks based on the following parameters:

Parameter	Marks
Internship report	30

Quality of work	20
Presentation	30
Interaction	20
Total	100

A student, who fails to secure minimum 40% marks or abstains, will be permitted to reappear in the subsequent semester(s). There shall be no semester end examination.

(d) COMPREHENSIVE VIVA-VOCE (CVV)

The objective of CVV is to assess the quantum of knowledge acquired by a student in the core courses of his specialization and to evaluate their competence for employment / higher learning / research. The comprehensive viva voce is evaluated for 100 marks by a three - member committee constituted by the HoD. A student who fails to secure minimum 40% marks or abstains is permitted to reappear in the advanced supplementary examinations or when offered next. There shall be no semester end examination.

(e) PROJECT WORK

A student is required to undertake a project work by using the knowledge acquired by him/her during the course of study. The student is expected to design and build a complete system or subsystem on an area of interest. The project work consists of two parts namely, project survey and project implementation. A project work shall be carried out by a batch of students not exceeding 4 members, under a faculty supervisor.

i) Continuous Internal Evaluation:

The CIE for project work shall be based on project survey and project implementation and is evaluated by a three-member committee consisting of two senior faculty and a project supervisor constituted by the HoD.

• **Project survey:**

The performance of a student in project survey shall be evaluated in VII semester based on the following parameters:

Parameter	Marks
Survey report	05
Presentation	10
Interaction	05
Total	20

• **Project implementation:**

The performance of a student in project implementation shall be evaluated in VIII semester based on two reviews, each carrying 20 marks. The average marks of these two reviews will be considered. The evaluation criterion of each review is based on the following parameters:

Parameter	Marks
Contribution	05
Quality of work	05
Presentation	05
Interaction	05
Total	20

The marks secured by a student in project survey and project implementation shall be awarded cumulatively as CIE of the project work in VIII semester.

ii) Semester End Examination:

A batch of students shall submit a duly-certified project report to the department on a specified time. They shall make a presentation on the project work before a three-member committee consisting of external examiner, internal examiner (HoD) and a project supervisor. The performance of each student is evaluated as per the following parameters:

Parameter	Marks
Project report	20
Quality of work	10
Innovation	10
Presentation	10
Interaction	10
Total	60

A student who fails to secure minimum 40% marks or abstains is permitted to reappear in the advanced supplementary examinations or when offered next.

9.3.2 MANDATORY COURSES

(a) Courses with CIE & SEE: The Professional ethics & human values course is a non-credit course. The question paper pattern and evaluation process are similar to that of any other theory course. A student shall secure a minimum 40% marks exclusively at the SEE and a minimum 40% of marks in both CIE and SEE put together to secure a satisfactory grade (SA) otherwise unsatisfactory grade (US) will be indicated. However, a student who secures 'US' grade /abstains shall reappear in the subsequent semester(s).

(b) Courses with only CIE: The employability enhancement skills, problem assisted learning and problem based learning are non-credit courses.

(i) Employability enhancement skills: This course shall help the students to seek employment in core and other industries of his/her area of interest.

There shall be an internal test carrying 100 marks for 3 hours duration at the end of semester. A student shall secure minimum 40% marks to award a satisfactory grade (SA), otherwise unsatisfactory grade (US) will be indicated. However, a student who secures 'US' grade /abstains shall reappear in the subsequent semester(s).

(ii) Problem Assisted Learning: This course is student-centered learning practice carried out under the supervision of a faculty apart from class room learning for which a student needs to submit a report for assessment.

(iii) Problem Based Learning: A student is required to undertake a comprehensive study on an assigned problem area in his/ her technical domain and submit a report for assessment.

The problem assisted / based learning courses are learning activities based on theoretical concepts which are verified through experimentation / product (algorithm / code) development. The performance of the student is evaluated by a three-member committee constituted by the HoD as per the following parameters:

Parameter	Marks
Problem definition	10
Quality of work	20
Report writing	30

Presentation	20
Interaction	20
Total	100

The performance of a student in problem-assisted learning and problem-based learning shall be evaluated based on two reviews, each carrying 100 marks. The average marks of these two reviews will be considered. A student shall secure minimum 40% marks to obtain a satisfactory grade (SA), otherwise unsatisfactory grade (US) will be indicated. However, a student who secures 'US' grade /abstains shall reappear in the subsequent semester(s).

9.3.3 EXTRA-CURRICULAR/CO-CURRICULAR ACTIVITIES

- The participation of a student is compulsory in the extra- curricular & co-curricular activities (non-credit course) such as NSS, NCC, Yoga & Meditation, Sports & Games, Professional club activities during the semesters I to VII. The performance of a student in the extra-curricular & co-curricular activities is evaluated during VII semester by a three member committee constituted by HoD.
- A student shall secure a satisfactory grade (SA) which will be indicated in the VII semester grade card, if he/she obtains the following certificates.
 - (i) NSS/ NCC/ Yoga & Meditation certificate (20 contact hours) - 1 No.
 - (ii) Sports & games certificate (20 contact hours) - 1 No.
 - (iii) Co-curricular activity certificates - 2 No.
- For physically disabled students, the satisfactory grade (SA) will be awarded, if he/she obtains 4 certificates in co-curricular activities such as essay writing, debate competitions, technical & general quizzes, symposia etc.

However, a student who secures unsatisfactory grade (US) shall reappear in the subsequent semester(s).

9.3.4 INDUSTRIAL TRAINING/IN-HOUSE TRAINING

The students shall undergo Industrial Training/ In-House Training (non-credit) for a period of 2 weeks at the end of IV semester. It shall be evaluated in V semester by a three-member committee constituted by the HoD. A student is eligible to secure a satisfactory grade (SA) in Industrial Training / In-House Training which will be indicated in the V semester grade card. However, a student who secures unsatisfactory grade (US) shall reappear in the subsequent semester(s).

9.4 ONLINE (MOOCs) / SELF STUDY COURSE

A student shall be permitted to register for only one online / self-study course in lieu of the open electives, either in VII or VIII semesters as approved by the Departmental Academic Committee (DAC).

- A student is permitted to register for an online course offered by JNTUs/IITs/NITs and other Indian or foreign universities of repute. The DAC shall appoint a faculty member as coordinator for such courses. The evaluation done by the external agencies shall be converted into suitable grades as per the evaluation methodology

approved by a committee constituted by the head of the institution.

- A student is permitted to register for a self-study course, if he/she has a CGPA of 7.5 and above with no backlog of subjects. A self-study course shall be department concerned or inter-disciplinary. No formal lectures will be delivered for a self-study course. The syllabus of the course shall be approved by BoS. One faculty member for each course will be nominated by DAC to monitor the progress made by the student. The question paper pattern and evaluation process are similar to that of any other theory course.

9.5 ADD-ON COURSES

- The student once registers for a specific add-on course, he/she is required to acquire the minimum number of credits in that course only, and no change in courses will be allowed under any circumstances.
- The question paper pattern and evaluation process are similar to that of any other theory course.
- The grade secured in the add-on course will be indicated along with other courses of that semester in the grade card.

10. ATTENDANCE REQUIREMENTS

- (i) A student is eligible to appear in the semester end examinations only if he/she acquires a minimum of 75% of attendance in aggregate of all the courses.
- (ii) In case of shortage of attendance, condonation up to 10 % in the aggregate will be allowed on valid medical grounds (65% and above and below 75%) in each semester by the college in accordance with the rules stipulated by the affiliating university.
- (iii) A shortage of attendance below 65% in aggregate shall not be condoned under any circumstances.
- (iv) A student whose shortage of attendance is not condoned will be detained and shall have to seek readmission into the same semester.
- (v) A student is required to submit the application along with the valid medical certificate by paying the stipulated fee towards condonation of shortage in attendance.
- (vi) If any student fulfils the attendance requirements in the present semester, he/she shall not be eligible for readmission into the same semester.

11. MINIMUM ACADEMIC REQUIREMENTS

A student must satisfy the following academic requirements, in addition to the attendance requirements.

(i) Pass requirement:

- A student shall be deemed to have satisfied the minimum academic requirements if he/she has earned the credits allotted to each course and secures not less than a minimum 40% of marks exclusively at the Semester End Examination. However, the student should have secured minimum 40% of marks in both CIE and SEE put together to be eligible for passing the course.
- The student should have secured minimum 40% of marks for the courses with only CIE to be eligible for passing the course.

(ii) A student shall be promoted to next semester, if he/she satisfies the minimum attendance requirements.

(iii) Credits requirement:

- (a) **Promotion to III Semester:** A student shall be promoted to the III semester if he/she fulfils the academic requirement of 40% of the credits (17) up to II semester from all the examinations, whether or not the candidate appears in the examinations and secures the prescribed minimum attendance in II semester.
- (b) **Promotion to V Semester:**
- A student shall be promoted to the V semester if he/she fulfils the academic requirement of 40% of the credits (35) up to IV semester from all the examinations, whether or not the candidate appear in the examinations and secures the prescribed minimum attendance in IV semester.
 - The students admitted under lateral entry scheme shall be promoted to the V semester, if he/she fulfils the academic requirement of 40% of the credits (17) from all examinations of III and IV semesters, whether or not the candidate appears in the examinations and secures the prescribed minimum attendance in IV semester.
- (c) **Promotion to VII Semester:**
- A student shall be promoted to the VII semester if he/she fulfils the academic requirement of 40% of the credits up to VI semester from all the examinations, whether or not the candidate appears in the examinations and secures the prescribed minimum attendance in VI semester.
 - ✓ 52 credits without add-on-courses
 - ✓ 54 credits with one add-on-course
 - ✓ 55 credits with two add-on-courses
 - The students admitted under lateral entry scheme shall be promoted to the VII semester, if he/she fulfils the academic requirement of 40% of the credits from all examinations of III to VI semesters, whether or not the candidate appears in the examinations and secures the prescribed minimum attendance in VI semester.
 - ✓ 35 credits without add-on-courses.
 - ✓ 36 credits with one add-on-course
 - ✓ 37 credits with two add-on-courses
- (iv) Students who fail to earn 176 credits as indicated in the course structure within 8 academic years from the year of admission, shall forfeit their seat in B.Tech programme and admission stands cancelled.
- (v) The students admitted under lateral entry scheme, who fail to earn 132 credits as indicated in the course structure within 6 academic years from the year of admission, shall forfeit their seat in B.Tech programme and admission stands cancelled.

12. PROCEDURES FOR SEMESTER END EXAMINATIONS

- (i) **Supplementary examinations:** There shall be supplementary examinations along with regular semester end examinations for a student to reappear in the course(s) failed or, not attempted.
- (ii) **Advanced supplementary examinations:** Students who fail in the courses in VIII semester (theory/project work/CVV) can reappear in advanced supplementary examinations within one month after the declaration of the revaluation results. However, the students who fail in advanced supplementary examinations shall reappear when offered next along with regular students.
- (iii) **Recounting:** A student, who wishes to verify the total marks obtained by him/her in any theory course in SEE, can apply for recounting in response to the notification. The outcome of the recounting gets reflected in the results sheet and grade card.
- (iv) **Revaluation:** A student who wishes to apply for revaluation of a theory course in SEE can submit an application, along with the prescribed fee as per the notification issued.

- (a) If the variation in marks of the first valuation and revaluation is $\leq 15\%$ of the total marks, then the better of the two evaluations shall be considered as the final marks.
- (b) If the variation in marks of the first valuation and revaluation is $>15\%$ of the total marks, then there shall be a third evaluation by another examiner. The average marks of two nearer evaluations shall be taken into consideration. In case of any fractional value of marks, it can be rounded off to the next integer value.
- (c) If a student secures a higher grade in the revaluation, that grade will be declared as the final grade, otherwise, the original grade will remain valid.
- (v) **Revaluation by Challenge:** Challenge evaluation of any theory course in SEE shall be performed as per the following procedure:
 - (a) An application for 'revaluation by challenge' needs to be submitted in the prescribed format along with the fee as per the notification issued.
 - (b) The 'revaluation by challenge' will be carried out by a three-member committee comprising an external subject expert, internal subject expert and a senior faculty appointed by the head of the institution.
 - (c) After the challenge evaluation, in case of an improvement in grade or a change in status i.e., fail to pass, the improved grade shall be awarded, otherwise, the previous grade will remain valid.
 - (d) If the betterment in grades is more than two, the entire fee will be refunded.

13. AWARD OF LETTER GRADES

A letter grade and grade points shall be awarded to a student in each course based on his/her performance as per the 10-point grading system given below.

Marks	Letter Grade	Grade Points	Level
≥ 90	O	10	Outstanding
80 to <90	A+	9	Excellent
70 to <80	A	8	Very Good
60 to <70	B+	7	Good
50 to <60	B	6	Above average
45 to <50	C	5	Average
40 to <45	P	4	Pass
<40	F	0	Fail
	Ab	0	Absent
Non-credit courses			
≥ 40	SA	--	Satisfactory
<40	US	--	Unsatisfactory
	Ab	--	Absent

- A student who secures 'F' grade in any course shall be considered 'Failed' and is be required to reappear as 'Supplementary student' in SEE, as and when offered. In such cases, his/her CIE marks in those courses will remain same as obtained earlier.
- A student, who is absent for any examination shall be treated as 'Failed'.
- In general, a student shall not be permitted to repeat any course (s) for the sake of 'Grade improvement' or 'SGPA/CGPA improvement'.

14. COMPUTATION OF SGPA & CGPA

- **Semester Grade Point Average (SGPA)**

The performance of each student at the end of each semester is indicated in terms of SGPA. The SGPA is the ratio of sum of the product of the number of credits and the grade points scored by a student in all the courses to the sum of the number of credits of all the courses.

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

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.

- **Cumulative Grade Point Average (CGPA)**

The CGPA is a measure of the overall cumulative performance of a student. The CGPA is calculated in the same manner taking into account all the courses undergone by a student over all the semesters of a programme.

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

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

- The SGPA and CGPA is rounded off to 2 decimal points and reported in grade cards.

15. AWARD OF CLASS

After a student has satisfied the minimum requirements prescribed for the completion of a programme and is eligible for the award of B.Tech degree, he/she shall be placed in one of the following four classes on a 10 point scale.

Class awarded	CGPA	From the CGPA secured from 176 credits (in case of LES 132 credits)
First Class with Distinction	≥ 7.75	
First Class	6.75 to < 7.75	
Second Class	5.75 to < 6.75	
Pass Class	4.0 to < 5.75	

- A student shall be awarded ‘First Class with Distinction’, when he/she secures 176 credits only within 4 consecutive academic years (in case of lateral entry students 132 credits within 3 consecutive academic years).
- Equivalent percentage = $(CGPA - 0.75) \times 10$

16. GAP YEAR

- A student is permitted to make use of the gap year facility at the beginning of V / VII semester of the programme and undergo training programs at premier institutions / research laboratories/ industries for a maximum period of one year (two consecutive semesters of academic year), if he/she secures a CGPA of 7.5 and above with no backlog of courses.
- A student is permitted to avail the gap year facility only once during the entire course of study.
- The students are permitted to re-join the programme after availing gap year facility. However, their re-joining is subject to the regulations prevailing at that time.
- The total period for completion of the programme reckoned from, the commencement of the first semester to which the student was admitted shall not exceed the maximum period in order that the student eligible for the award of the degree.
- If a student fails to report to the department after the expiry of 2 semesters, his/her readmission will be subject to the decision of competent authority.
- A student seeking a gap year needs to apply in the prescribed format before the last working day of the present semester. The application submitted by the student shall be evaluated by DAC and forwarded to the head of the institution for approval.
- The duration of the gap year shall be reflected in the consolidated grade card.

17. ACADEMIC FLEXIBILITY

- A student can opt for 1 / 2 / all 3 add-on courses offered in V, VI and VII semesters.
- The student registering for add-on courses shall be permitted to seek exemption from as many electives that are offered in the VIII semester.
- A student shall be permitted to take up only project work either within the college or at any premier institutions/ research laboratories/industries, when he/she registers all 3 add-on courses.
- A student is permitted to register for one online course / self-study course in lieu of open electives offered in the VII/VIII semesters.
- Scope is provided to the students for choosing the programme electives of their choice and to enhance their knowledge subsequently.
- Scope is provided to the students for choosing the open electives of their choice and to enhance their knowledge in inter-disciplinary areas.
- Scope is provided for the students to opt for on-line/self-study course of their choice to enhance their self learning capabilities.
- Gap year facility is provided to merit students to undergo training programs at premier institutions/ research laboratories/industries.

18. DISCIPLINE

- A student is required to observe discipline and decorum both inside and outside the college and not to indulge in any activity that may tarnish the prestige of the college. The head of the institution shall constitute a disciplinary committee to enquire into acts of indiscipline and notify the college about the disciplinary action taken. In case of any serious disciplinary action, which leads to suspension or dismissal, a committee shall be constituted by head of the institution for taking final decision.
- Those students who indulge in examination related malpractices shall be punished as per the scale of punishment notified by JNTUK, Kakinada (Annexure-I).
- Those students involved in the illegal acts of ragging shall be punished as per the provisions of Act 26, 1997 of Govt. of Andhra Pradesh (Annexure-II).

19. REVISION OF REGULATIONS, CURRICULUM AND SYLLABI

The college may revise, amend or change the regulations, curriculum, syllabus and scheme of examinations from time to time subject to decisions/recommendations of Boards of Studies and the College Academic Council.

20. WITHHOLDING OF RESULTS

If a student has not cleared dues, if any, payable to the institution or any case of indiscipline is pending against him, the result of the student will be withheld. Also, the award of his/her degree is withheld in such cases.

21. TRANSITORY REGULATIONS

- A student, who is detained or discontinued in the semester, on readmission shall be required to do all the courses in the curriculum prescribed for the batch of students in which the student joins subsequently. However, exemption will be given to those students who have already passed courses in the earlier semester(s) he/she was originally admitted into and substitute courses are offered in place of them as approved by the Board of Studies.
- In general, after transition, there will be a fitment formula approved by the competent authority in order to balance course composition and the number of credits.

- Students admitted by transfer from other institutions shall follow transitory regulations with suitable fitment formulae approved by the competent authority.
- A student who is seeking readmission shall apply in the prescribed format within one week after the commencement of the class work. However, the readmission of a student shall be approved by the competent authority.

22. GENERAL

- (i) Wherever the words “he”, “him”, “his”, occur in the regulations, they include “she”, “her”, “hers”.
- (ii) The academic regulations should be read as a whole for the purpose of any interpretation.
- (iii) In case of any doubt or ambiguity in the interpretation of the above rules, decision of the Chairman of the CAC is final and binding.
- (iv) The college may change or amend academic regulations or syllabi at any time subject to approval of the competent authority and the changes or amendments made shall be applicable to all students with effect from the dates notified.

23. STATUTORY DECLARATION

In case the regulations do not specify application of an appropriate rule in a unique case, the decision of the competent authority of the college shall be final.

* * * * *

ANNEXURE-I

MALPRACTICE RULES

DISCIPLINARY ACTION FOR MALPRACTICE/ IMPROPER CONDUCT IN EXAMINATIONS

	Nature of Malpractices/Improper Conduct	Punishment
1(a)	If a student possesses or tries to access any paper, note book, programmable calculators, Cell phones, pager, palm computers or any other form of material concerned with or related to the subject of the examination(theory or practical) in which he is appearing but has not made use of(material shall include any marks on the body of the candidate which can be used as an aid in the subject of the examination)	Expulsion from the examination hall and cancellation of the performance in that subject only.
(b)	If as student gives assistance or guidance or receives any such help from any other candidate orally or through gestures, communicates through cell phones with any candidate or persons in or outside the exam hall.	Expulsion of all the candidates involved from the examination hall and cancellation of the performance in that subject. In case of an outsider, he will be handed over to the police and a case will be registered against him.
2.	If a student is found to have copied in the examination hall from any paper, book, programmable calculators, palm computers or any other form of material relevant to the subject of the examination (theory or practical) in which he/she is appearing.	Expulsion from the examination hall and cancellation of the performance in that subject as well as all other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted to appear in the remaining examinations of that Semester. The Hall Ticket of the candidate will be cancelled and sent to the University.
3.	Impersonates any other candidate in connection with the examination.	The candidate who has impersonated shall be expelled from examination hall. The candidate is also debarred from the college and forfeits his seat. The performance of the original candidate who has been impersonated, shall be cancelled in all the subjects of the examination (including practicals and project work) already appeared and shall not be allowed to appear in examinations of the remaining subjects of that semester. The candidate is also debarred for two consecutive semesters from class work and all University examinations. The continuation of the course by the candidate is subject to the academic regulations in connection with forfeiture of seat. If the imposter is an outsider, he will be handed over to the police and a case is registered against

		him
4.	If a student smuggles inside the exam hall an Answer book or additional sheet or takes out or arranges to send out the question paper, or answer book or additional sheet during or after the examination.	Expulsion from the examination hall and cancellation of performance in that subject and all the other subjects, the candidate has already appeared including practical examinations and project work; and shall not be permitted for the remaining examinations of the subjects of that semester. The candidate is also debarred from class work for two consecutive semesters and all University examinations. The continuation of the course by the candidate is subject to the academic regulations in connection with forfeiture of seat.
5.	If a student uses objectionable, abusive or offensive language in the answer paper or in letters to the examiners or writes to the examiner requesting/threatening him/her to award pass marks.	Cancellation of the performance in that subject.
6.	If a student refuses to obey the orders of the Chief Superintendent / CoE / any officer on duty or misbehaves or creates disturbance of any kind in and around the examination hall or organizes a walk out or instigates others to walk out, or threatens the officer-in charge or any person on duty in or outside the examination hall, causes injury to his person or to any other persons whether by words, either spoken or written or by signs or by visible representation, assaults the officer-in-charge, or any person on duty in or outside the examination hall or indulges in any other act of misconduct or mischief, which result in damage to or destruction of property in the examination hall or any part of the college campus or engages in any other act which in the opinion of the officer on duty amounts to use of unfair means or misconduct or has the tendency to disrupt the orderly conduct of the examination.	Such a student(s) shall be expelled from the examination hall along with cancellation of their performance in that subject and all other subjects the candidate(s) has (have) already appeared and shall not be permitted to appear for the remaining examinations of the subjects of that semester. The candidate(s) will be debarred from the college and forfeit their seats. In case of outsiders, they will be handed over to the police and a police case is registered against them.
7.	If a student leaves the exam hall taking away answer script or intentionally tears/mutilates/deforms the script or any part thereof inside or outside the examination hall.	Expulsion from the examination hall and cancellation of performance in that subject and all the other subjects the candidate has already appeared, including practical examinations and project work and shall not be permitted for the remaining examinations of the subjects of that semester. The candidate is also debarred from class work and University examinations for two consecutive semesters. The continuation of the

		course by the candidate is subject to the academic regulations.
8.	If a student is in possession of any lethal weapon or firearm in the examination hall.	Expulsion from the examination hall and cancellation of the performance in that subject and all other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the subjects of that semester. The candidate is also debarred and forfeits the seat.
9.	If student of the college, who is not a candidate for the particular examination or any person not connected with the college indulges in any malpractice or improper conduct mentioned in clause 6 to 8.	Student of the colleges expulsion from the examination hall and cancellation of the performance in that subject and all other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the subjects of that semester. The candidate is also debarred and forfeits the seat. Person(s) who do not belong to the College will be handed over to police and, a police case will be registered against them.
10.	If a student comes to the examination hall in a drunken condition	Expulsion from the examination hall and cancellation of the performance in that subject and all other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of that semester.
11.	If copying is detected on the basis of internal evidence, such as, during valuation or during special scrutiny.	Cancellation of the performance in that subject and all other subjects the candidate has appeared including practical examinations and project work of that semester examinations.
12.	Any other malpractice not covered in the above clauses i.e. from 1 to 11 shall be reported to the University or further action/ suitable punishment.	






ANNEXURE-II



Prohibition of ragging in educational institutions Act 26 of 1997

Salient Features

- Ragging within or outside any educational institution is prohibited.
- Ragging means doing an act which causes or is likely to cause Insult or Annoyance of Fear or Apprehension or Threat or Intimidation or outrage of modesty or Injury to a student

	Imprisonment upto		Fine Upto
Teasing, Embarrassing and Humiliation	 6 Months	+	Rs. 1,000/-
Assaulting or Using Criminal force or Criminal intimidation	 1 Year	+	Rs. 2,000/-
Wrongfully restraining or confining or causing hurt	 2 Years	+	Rs. 5,000/-
Causing grievous hurt, kidnapping or Abduction or rape or committing unnatural offence	 5 Years	+	Rs. 10,000/-
Causing death or abetting suicide	 10 Years	+	Rs. 50,000/-

ABSOLUTE NO TO RAGGING

1. Ragging is prohibited as per Act 26 of A.P. Legislative Assembly, 1997.
2. Ragging entails heavy fines and/or imprisonment.
3. Ragging invokes suspension and dismissal from the College.
4. Outsiders are prohibited from entering the College and Hostel without permission.
5. All the students must carry their Identity Cards and show them when demanded.
6. The Principal and the Wardens may visit Hostels and inspect the rooms any time.

* * * * *