MRSPTU CHOICE BASED CREDIT SYSTEM-2016

1. PREAMBLE:

Maharaja Ranjit Singh Punjab Technical University, Bathinda (MRSPTU) has been established as an affiliating University vide Punjab Act No. 5 of 2015 notified through Punjab Government Gazette-Extraordinary (Regd. No. CHD/0092/2015-2017) notification No. 5-Leg./2015 dated 12th February, 2015.

Current evaluation system based on percentage of marks secured in the examinations in MRSPTU, Bathinda will be replaced with grading system called '**CHOICE BASED CREDIT SYSTEM' (CBCS)** w.e.f. academic session 2016-17. This credit system of continuous evaluation is as per guidelines of UGC and pertains to relative evaluation of the student's performance instead of absolute evaluation. The student will have the flexibility to pick up open elective Courses out of a pool of Courses available across different departments, suitable to his/her taste, requirement and capability. He/she will have the option to drop a Course after registering for it at a later stage, if permitted under the rules. The performance of a student in a Course is measured in terms of Credit Points earned by him/her in that course. It is proposed to implement this CBCS for various Programmes – B.Tech., B.Arch., M.Tech., M.Sc., MBA, etc., being offered by MRSPTU in its Constituent/Affiliated Colleges. This Credit System, after necessary amendments, if any, and there after the approval of the competent authority, will be known as **MRSPTU CHOICE BASED CREDIT SYSTEM-2016.** The CBCS facilitates transfer of credits earned by a student across different Departments/Centres of other recognized/accredited universities or institutions of higher education in India and abroad. In Relative Grading System, the following two acute circumstances normally bothering the students are nullified.

a) When majority of students score very high marks because, either the question paper is easy or the evaluator is very lenient.
b) When majority of students score very low marks because, either the question paper is tough or the evaluator is very strict.

This Credit System will be implemented for students of 2016 batch and onwards. If the total number of students are equal to or less than 30 in a Course in MRSPTU, then Absolute Grading System will be followed. On the other hand, if total number of students are more than 30 in a Course in MRSPTU, then Relative Grading System will be followed. In Relative Grading System, grades will be awarded according to performance of students relative to their top peers in the same Course.

2. DEFINITIONS OF KEY TERMS:

a) MRSPTU: Maharaja Ranjit Singh Punjab Technical University, Bathinda-151001.
b) VICE CHANCELLOR: Vice Chancellor of MRSPTU.
c) DEAN ACADEMIC AFFAIRS: Dean Academic Affairs of MRSPTU.
d) PROGRAMME: Two/Three/Four/Five Year UG/PG Degree as applicable. It also includes Ph.D. Degree.

e) **BRANCH OF A PROGRAMME:** For example: Mechanical Engineering, Civil Engineering are the branches of B. Tech. Programme.

f) **PROGRAMME CURRICULUM:** Each Programme Curriculum contains, prescribed Course Structure known as Study Scheme. The Study Scheme consists of Courses grouped into various types, viz. Foundation Courses, Core Courses, Departmental Electives, Open Electives and Professional Skills.

g) **COURSE:** Any subject (Theory/Practical) or a Project/Training/Field Work/Thesis/Seminars of the Curriculum of a Programme. Different Courses may have different credits allotted to them.

h) **COURSE SYLLABUS:** A Course Syllabus contains,
- Contents of study
- Course Code
- Course Nomenclature
- L-T-P-C (Number of Hours/Week for: Lectures, Tutorials, Practicals, Credits)
- Course Prerequisites (if any)
- Course Objectives
- Expected Outcomes
- Four Units in a Theory Course and the number of Lectures allotted to each unit
- Suggested Text and Reference Books
- Date of approval of Study Scheme by the Academic Council.

i) **BOARD OF STUDIES (BOS) OF A PROGRAMME:** The BOS shall prepare and recommend the Curriculum of the Programme and submit it to Academic Council for approval. The term of BOS shall be for 2 years.

j) **PROGRAMME COORDINATOR:** Chairperson BOS will be Programme Coordinator. He/she is deemed to own the Curriculum of the Programme Branch.

i) **COURSE COORDINATOR:** The Dean Academic Affairs, MRSPTU shall nominate a faculty member as Course Coordinator for each Course of the Programmes being taught in the University/affiliated/constituent colleges. Course Coordinator should be teaching/have taught that Course. Course Coordinator will be heading a team of five faculty members across all Affiliated/Constituent colleges. The Committee is deemed to own that Course of the Programme. Its Chairperson will be Course Coordinator.

This team will decide, the contents of syllabus for 1st and 2nd midterm semester tests. It will ensure that the same quantum of Course Content is covered in each College before each midterm test. He/she will also prepare Assignment/Tutorial Sheets and provide a copy of it to every faculty member teaching that Course. This Committee will have its term for 2 years.

j) **END SEMESTER UNIVERSITY EXAMINATIONS:** External examinations conducted by MRSPTU at the end of a semester.

k) **COURSE PLAN:** Each faculty member will prepare a plan sheet in which he/she will record the topics to be covered/experiments to be performed in each lecture /tutorial/ lab, mode of delivery of lectures/tutorials and reference material to be used.

l) **LETTER GRADES:** Performance of a student in a Course is measured in terms of Letter Grades**.** Every Letter Grade has been given a numerical weight called Grade Point on a scale of 10 points.

m) **COURSE CREDITS:** A class room Lecture/Tutorial of 60-minute duration per week is equivalent to one credit. A laboratory session/Practical or Field work/ Project or a combination of these of two hours per week is equivalent to one credit. Number of credits allotted to a Training/Project/Field Work/Thesis/Seminar Course will be decided by the concerned BOS.

n) **CREDIT POINTS:** Performance of a student in a Course is measured in terms of Credit Points earned by the student in that Course.

Credit Point earned in a Course = Grade Point earned in that Course x Credits allotted to that Course.

o) **SEMESTER GRADE POINT AVERAGE (SGPA):** Performance of a student in a Semester is measured in terms of Semester Grade Point Average (SGPA), rounded up to two decimal places**.**

$$\text{SGPA} = \frac{\text{Total Credit Points earned by a student in a Semester}}{\text{Total Credits for the Courses registered by the student in that Semester}}$$

p) **CUMULATIVE GRADE POINT AVERAGE (CGPA):** Overall cumulative performance of a student over all Semesters is measured in terms of 'Cumulative Grade Point Average' (CGPA), rounded up to two decimal places**.**

$$\text{CGPA} = \frac{\text{Total Credit Points earned by a student in all Semesters in a Programme}}{\text{Total Credits for the Courses registered by the student in that Programme}}$$

q) **GRADE CARD:** After the end of every Semester, a student is issued a Grade Card depicting details of the Courses registered by him/her, which includes Course Titles, Course Codes, number of Credits allotted to that Course, Grades, SGPA and CGPA earned by the student up to end of that Semester.

r) **INTERNAL ASSESSMENT:** It is continuous evaluation of the performance a student in a Course during a Semester in 2 midterm sessional tests, quizzes, assignments, projects, attendance, seminars and discussions, etc.

s) **L-T-P-C OF A COURSE**: 2-1-2-4 means that Course consists of two Lecture Hours, one Tutorial Hour, two Laboratory Hours per week and the Course has been allotted 4 Credits. Number of Laboratory Hours per week to be allotted to any Laboratory Course will be decided by the concerned BOS.

t) **COURSE FLOWCHART:** Pictorial representation to show how various Courses (Fundamental, Core, Departmental Elective, Open Elective) are connected through pre-requisites.

u) **INTERPRETATION COMMITTEE:** If any doubt/conflict arises in the interpretation of any of the Academic Regulations, the matter will be referred by the Vice Chancellor to the Interpretation Committee for its interpretation. Final decision lies with the Vice Chancellor.

v) **AWARD OF DEGREE:** A student will be awarded Degree after the end of the Programme when he/she fulfils the requirements to earn that Degree.

3. DURATION OF A PROGRAMME:

A Programme of N academic year duration is divided into 2N semesters. Each semester consists of 15-18 weeks of academic work equivalent to 90 actual teaching days. Odd semester is scheduled from July to December and Even semester from January to June. Maximum duration allowed for a student to complete his/her Degree is N+2 academic years, where N stands for the minimum academic years required to earn the Degree.

4. END SEMESTER UNIVERSITY EXAMINATIONS:

a) **GENERAL:**

(i) End Semester University examinations shall be held by MRSPTU as per Date Sheet announced on its website and the Study Scheme of the Programme.

(ii) The College/Institute office shall display on its Notice Board, the schedule of examination/date sheet etc. as soon as it is received from the University. The University will notify the date sheet of the End Semester examinations, preferably fifteen days before the start of the examinations.

(iii) The medium of instruction and examination shall be English.

b) **ELIGIBILITY CRITERIA TO APPEAR IN END SEMESTER UNIVERSITY EXAMINATION OF A COURSE:** The student must have registered for that Course and has attended at least 75% of contact hours in that Course for becoming eligible to appear in the End Semester University Examination. He/she should not have any dues pending towards him/her.

5. EVALUATION SYSTEM - CHOICE BASED CREDIT SYSTEM:

a) **UG DEGREE PROGRAMME STRUCTURE:** Each UG Degree Programme consists of Fundamental (F), Core (C), Departmental Electives (E), Open Elective (O), Professional Skills (S) and Training/Project Work Courses.

b) **PG DEGREE PROGRAMME STRUCTURE:** Each PG Degree Programme consists of Core (C), Departmental Electives (E), Open Elective (O), Project Work/Thesis and Professional Skills (S) Courses.

c) **CORE COURSES (C):** Core Courses comprise of Theory/Practical subjects, projects/thesis, seminars, visits, discussions, studio and Field work, etc. These Courses include Courses of basic sciences and humanities. Around 65% Credits of the Programme are assigned to Department Specific Courses and about 15% Credits of the Programme are allotted to Courses from the arena of basic sciences and humanities, wherever applicable. These are compulsory Courses.

d) **DEPARTMENTAL ELECTIVES (E):** These Courses are offered to a student by his/her own department. He/she has to choose any of these Courses out of the basket

of Courses offered by his/her department. Around 20% of the total Credits of the Programme are earmarked for these Courses.

e) **OPEN ELECTIVES (O):** These Courses are offered by a department to students of other departments. This provides resilience to the technical education system and generates interest for learning among the students. He/she has to choose any of these Courses out of the pool of Courses offered by the other departments. Around 8% of the total Credits of the Programme are earmarked for these Courses.

f) **PROFESSIONAL SKILLS COURSES (S):**

One Credit Course of Professional Skills at UG level may be offered in various semesters to build up the aptitude of the students progressively, which includes,

(i) Human Values,

(ii) Written and Oral Communication Skills,

(iii) Personality Development.

Contents for the above will be different for different semesters.

One Credit Course for technical writing, presentation and personality development in various semesters and evaluation based on midterm papers and presentation of 10 minutes may be added at PG level.

g) Each Semester consists of Theory Courses and Lab/Seminar/Project/Training/Thesis Courses as given in illustration in Table-I.

h) 1st academic year of Four Year Degree Programme will have 50 Credits.

i) Total Credits in a Programme will be N x 45, where N stands for the minimum of academic years required to earn the Degree.

j) F, C, E Courses are of 3L+1T type and are of 4 Credits each. O Courses are of 3L type and are of 3 Credits each. S Courses are of 1P type and are of 1 Credit each.

k) Credits for Lab/Seminar/Project/Training/Thesis Courses etc. are to be decided by concerned BOS. BOS may deviate from the distribution shown in Table-I for fine tuning/special reasons.

l) A Lab/Workshop/Drawing/Studio Course may be of more than two hrs. duration.

m) In PG Degree Programmes where thesis work is not feasible, BOS of that Programme may add more Core Courses in the Curriculum.

6. GENERAL GUIDELINES FOR CURRICULUM OF A FOUR YEAR BACHELOR DEGREE PROGRAMME: An illustration is given below in Table-I for distribution of various Courses of a Four Year Bachelor Degree Programme. BOS may redistribute these subjects.

a) Training-I: In house 4-week training during summer vacation after 2nd sem.

b) Training-II: In house/Ind. 6-week training during summer vacation after 4th sem.

c) Training-III: In house/Ind. 8-week training during summer vacation after 6th sem.

TABLE-I										
Sem.	**Fundamental (F)**		**Core (C)**		**Deptt. Elective (E)**	**Open Elective (O)**	**Profess. Skills (S)**	**Training/ Project/ Thesis**	**Total Contact Hrs.**	**Total Credits**
	Th.	**Lab.**	**Th.**	**Lab.**						
I	5 (20)	4 (5)	---	---	---	---	---	---	30	25
II	5 (20)	3 (5)	---	---	---	---	---	---	30	25
III	---	---	4 (16)	2 (2)	1 (2)	---	1 (1)	Training-I (2)	25	23
IV	---	---	4 (16)	2 (2)	1 (3)	---	1 (1)	---	24	22
V	---	---	3 (12)	2 (2)	1 (2)	1 (3)	1 (1)	Training-II (3)	25	23
VI	---	---	2 (8)	2 (2)	2 (8)	1 (3)	1 (1)	---	24	22
VII	---	---	2 (8)	2 (2)	1 (4)	1 (3)	---	Training-III (4) + Project-I (4)	19	25
VIII	---	---	1 (4)	1 (1)	1 (4)	---	---	Project-II (6)	10	15
Total Credits										**180**

7. **GENERAL GUIDELINES FOR CURRICULUM OF A THREE/FIVE YEAR BACHELOR DEGREE PROGRAMME:** For Three Year Bachelor Degree Programmes: BBA, B.Com., BCA, etc. and for Five Year Bachelor Degree Programme: B.Arch., the concerned BOS may decide Courses of its own by following the concept of Fundamental (F), Core (C), Departmental Electives (E), Open Elective (O), Professional skills (S) and Training/Project Work/Seminar Courses, as illustrated in the Table-I.
8. **GENERAL GUIDELINES FOR CURRICULUM OF M.TECH. & OTHER TWO YEAR PG DEGREE PROGRAMMES WITH THESIS:** An illustration is given below in Table-II for distribution of various Courses of M.Tech. & other Two Year Degree Programmes with Thesis. BOS may redistribute these subjects.

TABLE-II										
Sem.	**Fundamental (F)**		**Core (C)**		**Deptt. Elective (E)**	**Open Elective (O)**	**Professional Skills (S)**	**Training/ Project/ Thesis**	**Total Contact Hrs.**	**Total Credits**
	Th.	**Lab.**	**Th.**	**Lab.**						
I	---	---	3 (12)	1 (2)	2 (8)	---	---	---	26	22
II	---	---	2 (8)	1 (2)	2 (8)	1 (4)	---	---	26	22
III	---	---	---	---	1 (4)	1 (4)	1 (4)	Project + seminar (10+4)	12	26
IV	---	---	---	----	---	---	---	Thesis (20)	---	20
Total Credits										**90**

9. A) GENERAL GUIDELINES FOR CURRICULUM OF A TWO YEAR M.Sc. DEGREE PROGRAMME: An illustration is given below in Table-III for distribution of various Courses of a Two Year M.Sc. Degree Programme. BOS may redistribute these subjects.

a) One Course of One-Credit will be offered during each of 2nd and 3rd semesters. In this Course, the student will write a term paper in a topic from the subjects being taught in that semester and give a 10-minute presentation through power point slides in the class.

b) For Six-Credit Project Work, the student is to carry out literature survey on the topic assigned by his/her Project Supervisor. The student has to carry out survey of 15-20 research papers, out of which at least 10 should be of international repute. The student is to write a review paper and present it to his/her Project Supervisor in the form of soft and hard copy. He/she will also give a 15-minute presentation through power point slides to the committee of 3 teachers as decided by the Head of the Department including his/her Project Supervisor. Evaluation is to be done as per the criteria to be decided later on.

c) There will be Open Elective-I & Open Elective-II of three Credits each.

B) GENERAL GUIDELINES FOR CURRICULUM OF A TWO YEAR M.TECH. DEGREE PROGRAMME: An illustration is given below in Table-III for distribution of various Courses of a Two Year M.Tech. Degree Programme. BOS may redistribute these subjects.

a) One Course of One-Credit will be offered during each of 2nd and 3rd semesters. In this Course, the student will write a term paper in a topic from the subjects being taught in that semester and give a 10-minute presentation through power point slides in the class.

b) One research paper is to written on the thesis work carried out and presented to his supervisor and the Departmental Research Committee (DRC). The paper, if approved shall be communicated for publication in the journal recommended by DRC.

c) On completion of the thesis, the candidate shall present his/her work and defend it before the DRC. If approved, the thesis shall be accepted for external evaluation.

d) There will be Open Elective-I & Open Elective-II of three Credits each.

TABLE-III										
Sem.	**Fundamental (F)**		**Core (C)**		**Deptt. Elective (E)**	**Open Elective (O)**	**Soft Skills (S)**	**Training/ Project/ Thesis**	**Total Contact Hrs.**	**Total Credits**
	Th.	**Lab.**	**Th.**	**Lab.**						
I	---	---	3 (12)	2 (4)	1 (4)	1 (3)	---	---	27	23
II	---	---	3 (12)	1 (2)	2 (8)	---	1 (1)	---	25	23
III	---	---	3 (12)	2 (4)	1 (4)	1 (3)	1 (1)	---	28	24
IV	---	---	2 (8)	1 (2)	---	---	---	Project + Seminar (10)	22	20
Total Credits										**90**

10. REGISTRATION FOR COURSES:

a) Before the start of registration for Courses by students for a semester, every department of each college will announce its Departmental and Open Electives being offered, on its website.

b) Registration dates will be announced by University on its website.

c) Before a student can register for a particular Course, he/she should have fulfilled conditions of pre-requisite (if applicable) attached to that Course.

d) If more than 80 students register for a Course, then class will be split into two sections.

e) Online registration procedure will be adopted.

f) Departmental/Open Elective Course will be run in a college, only if minimum 15 students have registered for this Course.

g) Every student has to register for minimum 15 Credits and maximum 38 Credits in a semester.

h) If a student wants to drop any Course registered by him/her for a semester, he/she may do so before the start of first sessional test in that semester provided he/she fulfills the condition specified in subsection 10 (f).

i) Lab Courses, seminars, projects etc. may be added in a semester by BOS as per need of the Courses being taught in that semester.

j) Each midterm internal assessment test will be of 1.5 hrs duration.

k) Each End Term University Examination will be of three hrs or as specified.

l) A student is eligible to register for reappear examination of a Course only in that semester in which that Course is being offered.

m) The student should obtain at least 25% marks in external University examination in a course to qualify it.

n) The average internal assessment marks submitted by a teacher of his/her class in a particular Course (subject) must not be greater than 75%. If The average internal assessment marks submitted by a teacher of his/her class in a particular Course (subject) is greater than 75%, then the teacher will have to submit the complete

academic record (attendance register, MST answer sheets and assignments etc.) of that class to the University.

11. ELIGIBILITY CRITERIA FOR PROMOTION TO NEXT ACADEMIC YEAR:

a) A student is required to maintain at least 4.0 CGPA at the end of each academic year, failing which he/she will be declared failed in that academic year. He/she will have to seek readmission to the odd semester of that academic year.

b) A student has to earn ≥ 30% marks in a Course to qualify it, failing which he/she will be declared failed in that Course. A failed student has to repeat the Course by appearing in continuous evaluation tests, quizzes etc. during the semester and End Semester University Examination.

c) If a student fails in Departmental Elective/Open Elective Course, he/she has the option to repeat the same Course by appearing in continuous evaluation tests, quizzes etc. during the semester and End Semester University Examination or choose another Departmental Elective/Open Elective Course.

d) In a Programme of more than 2 years, a student can register for Courses of 5th semester only after clearing his/her all Courses of 1st semester, even if he/she maintains at least CGPA of 4.0 at end of 2nd academic year. A student can register for Courses of 6th semester only after clearing his/her all Courses of 2nd semester.

e) Minimum 4.5 CGPA will be required to qualify the Programme.

12. RELATIVE GRADING SYSTEM:

At the end of the semester, for every Course registered by a student, he/she is assigned a Letter Grade (Table-IV) based on his/her overall performance based on his/her continuous evaluation during the semester and End Semester University Examinations. over the semester in all the assessments carried out in that Course.

a) Relative grading system for a Course will be followed, when the total number of students in all colleges registering for a that Course are more than 30. Otherwise, Absolute Grading System shall be followed.

b) In relative grading system CGPA x 10.0 = % age marks.

c) For every Course, a student is required to have at least 75% attendance to appear in the End Semester University Examination.

d) If the value of $\overline{X}$-1.5SD comes out to be less than 30, then the student will have to secure minimum 30 marks to qualify the course (pass grade E).

e) If the value of $\overline{X}$-1.5SD comes out to be more than 40, then the student will have to secure minimum 40 marks to qualify the course (pass grade E).

f) If the value of $\overline{X}$-1.5SD comes out to be greater than 30 but less than 40, then the student will have to secure minimum $\overline{X}$-1.5SD marks (MIN) to qualify the course (pass grade E).

g) Any student who has obtained F grade in any of the Courses, he/she will have to repeat that Course by appearing in both internal and external examinations during the maximum tenure of the Programme (N+2 years, where N is the no. of years of Programme. For example, N = 4 for 4-year B. Tech. Programme). His/her grade in that Course shall be calculated based on the performance of the regular students

along which he/she is appearing for improvement. However, he/she will not have to attend classes again. The new grade of the student shall be calculated on the basis of the group of students appearing that particular Course, in that particular Semester in that academic session.

h) Average $\overline{X}$ will be calculated up to second decimal.

i) A student who wants to reappear in a particular Course, will be given the grade by considering him/her in the group of students who are appearing in that examination at that time. Such a student wanting to reappear will have to appear both in internal tests, submit assignments etc. for continuous evaluation and in end semester examination.

TABLE-IV

Letter Grade/ Performance Grade given in a Course	**Grade Point earned**	**Academic Performance in a Course**	**Relative Grading Formula** X_i **=Marks obtained by a candidate in a Course in the University,** $\overline{X}$ **=Average marks in a Course in the University N=Total students in a Course in the University, MIN=** $\overline{X}$ **-1.5SD =Minimum marks required to pass a Course**	**Added Constraint for award of the Grade**
A^+	10	Outstanding	$X_i > \overline{X} + 1.5SD$	Marks $X_i > 85\%$
A	9	Excellent	$\overline{X} + 1.5SD \geq X_i > \overline{X} + 1.0SD$	In order to obtain grade E or higher grade in a Course, the student must obtain at least 25% marks in End Semester external University examination in it, otherwise he/she would get grade F.
B^+	8	Very Good	$\overline{X} + 1.0SD \geq X_i > \overline{X} + 0.5SD$	
B	7	Good	$\overline{X} + 0.5SD \geq X_i > \overline{X}$	
C	6	Average	$\overline{X} \geq X_i > \overline{X} - 0.5SD$	
D	5	Below Average	$\overline{X} - 0.5SD \geq X_i > \overline{X} - 1.0S D$	
E	4	Pass	$\overline{X} - 1.0SD \geq X_i > MIN$	
F	0	Fail	$MIN > X_i$, (If MIN≥40 then MIN=40, If MIN<30 then MIN=30)	11 (d), (e), (f), (g).
R	0	Detained on attendance basis	---	Detained on attendance basis & is required to repeat Course by attending classes when the Course is offered.

j) After completing the requisite number of credits to obtain a Degree/Diploma, if a student wishes to improve his/her CGPA, he/she will be allowed to do so in maximum five theory subjects already studied by him earlier. This permission to

improve is subject to the condition that he/she has cleared all his/her subjects and during the maximum tenure of the Programme (N+2 years, where N is the no. of years of Programme. For example, N = 4 for 4-year B. Tech. Programme). His/her grade in that Course shall be calculated based on the performance of the regular students along which he/she is appearing for improvement.

Standard Deviation SD = $\sqrt{\frac{\sum_{i=1}^{i=N}(X_i - \overline{X})^2}{N}}$

13. MARKS DISTRIBUTION FOR THEORY COURSE:

a) Internal Assessment: Maximum Marks: 40

Distribution of Internal Assessment will be as follow:

Mid Term Sessional Tests	60%
Assignments & Tutorial Sheets (Minimum 5)	25%
Written Quizzes	15%

b) End Semester External University Examination: Maximum Marks: 60

MARKS DISTRIBUTION FOR LAB COURSE:

Internal Assessment: Maximum Marks: 60

End Semester Lab. Course External Examination: Maximum Marks: 40

14. All study schemes should allot 100 marks for each Course.

15. EVALUATION FOR LAB COURSES: Evaluation of performance of a student in a semester is as given below in Table-V,

TABLE-V			
Internal Assessment (internal)		**End Semester Univ. Examination**	
Component	**Marks**	**Component**	**Marks**
Record Marks based on continuous assessment of Lab/practical work, considering regularity and timely submission of lab record (i.e. practical note book)	30	Written Quiz of 10 questions set by MRSPTU	20
Viva Voce/Quiz/Assignments/Mini Project	30	Practical performed by the student and recorded on the answer sheet.	20

16. ABSOLUTE GRADING SYSTEM:

In absolute grading system CGPA x 10.0 = % Marks

TABLE-VI				
Letter Grade/ Performance Grade given in a Course	**Grade Point earned**	**Academic Performance in a Course**	**M = %Marks obtained**	**Added constraint for award of the Grade**
A^+	10	Outstanding	$X_i > 90$	In order to obtain grade E or higher grade in a Course, the student must obtain at least 25% marks in End semester external examination, otherwise he/she would get grade F
A	9	Excellent	$80 < X_i \leq 90$	
B^+	8	Very Good	$70 < X_i \leq 80$	
B	7	Good	$60 < X_i \leq 70$	
C	6	Average	$50 < X_i \leq 60$	
D	5	Below Average	$45 < X_i \leq 50$	
E	4	Pass	$40 \leq X_i \leq 45$	
F	0	Fail	$40 > X_i$	Student will get F in a Course when he/she earns <40 Marks
R	0	Detained on attendance basis	---	Detained on attendance basis & is required to repeat Course by attending classes when the Course is offered