



**Minutes of the 46th Meeting of the Senate of
National Institute of Technology, Tiruchirappalli held on
15th October 2019 at 10.30 AM in A13 Hall, NIT, Tiruchirappalli**

The following members were present in the meeting:

1.	Dr. Mini Shaji Thomas, Chairperson	Chairperson
2.	Dr. S. Shanmugam, Dean (Academic)	Member
3.	Dr. N. Ammasai Gounden	Member
4.	Dr. P. J. A. Alphonse	Member
5.	Dr. R. B. Anand	Member
6.	Dr. N. Anantharaman	Member
7.	Dr. M. Arivazhagan	Member
8.	Dr. S. Arul Daniel	Member
9.	Dr. G. Arthanareeswaran	Member
10.	Dr. M. Ashok	Member
11.	Dr. P. Asokan	Member
12.	Dr. A. K. Bakthavatsalam	Member
13.	Dr. S. R. Balasundaram	Member
14.	Dr. K. Baskar	Member
15.	Dr. N. Baskar	Member
16.	Dr. M. Bhaskar	Member
17.	Dr. A. Chandra Bose	Member
18.	Dr. L. Cindrella	Member
19.	Dr. D. Deivamoney Selvam	Member
20.	Dr. K. Dhanalakshmi	Member
21.	Dr. M. Duraiselvam	Member
22.	Dr. N. Gopalakrishnan	Member
23.	Dr. N. P. Gopalan	Member
24.	Dr. J. Hemalatha	Member
25.	Dr. T. N. Janakiraman	Member
26.	Dr. P. Jayabalan	Member
27.	Dr. S. Jayalekshmi	Member
28.	Dr. R. Jeyapaul	Member
29.	Dr. R. Joseph Ponniah	Member
30.	Dr. P. Kalaichelvi	Member

31.	Dr. R. Karvembu	Member
32.	Dr. P. A. Krishnan	Member
33.	Dr. S. Kumanan	Member
34.	Dr. S. Kumaran	Member
35.	Dr. V. Kumaran	Member
36.	Dr. N. Kumaresan	Member
37.	Dr. S. P. Kumaresh Babu	Member
38.	Dr. G. Lakshmi Narayanan	Member
39.	Dr. R. Leela Velusamy	Member
40.	Dr. Mary Saira Bhanu	Member
41.	Dr. K. M. Meera S. Begum	Member
42.	Dr. S. Moses Santhakumar	Member
43.	Dr. K. Murugesan	Member
44.	Dr. R. Murugesan	Member
45.	Dr. P. Muthuchidambaranathan	Member
46.	Dr. K. Muthukkumaran	Member
47.	Dr. S. Muthukumaran	Member
48.	Dr. K. Muthukumar	Member
49.	Dr. C. Nagamani	Member
50.	Dr. S. Natarajan	Member
51.	Dr. S. Nickolas	Member
52.	Dr. R. Ponalagusamy	Member
53.	Dr. M. Premalatha	Member
54.	Dr. M. Punniyamoorthy	Member
55.	Dr. T. K. Radhakrishnan	Member
56.	Dr. B. Ramadoss	Member
57.	Dr. Ramakalyan Ayyagari	Member
58.	Dr. S. Raman Sankaranarayanan	Member
59.	Dr. N. Ramasubramanian	Member
60.	Dr. S. T. Ramesh	Member
61.	Dr. V. Ravi Chandran	Member
62.	Dr. B. Ravisankar	Member
63.	Dr. P. Saikrishnan	Member
64.	Dr. Samson Mathew	Member

65.	Dr. V. Sankaranarayanan	Member
66.	Dr. J. Sarat Chandra Babu	Member
67.	Dr. D. Sastikumar	Member
68.	Dr. P. Sathiya	Member
69.	Dr. B. Senthil Arasu	Member
70.	Dr. V. J. Sivakumar	Member
71.	Dr. N. Sivakumaran	Member
72.	Dr. S. P. Sivapirakasam	Member
73.	Dr. P. Sivashanmugam	Member
74.	Dr. T. Srinivas	Member
75.	Dr. T. Srinivasa Rao	Member
76.	Dr. D. Sriram Kumar	Member
77.	Dr. G. Subbaiyan	Member
78.	Dr. K. Sundareswaran	Member
79.	Dr. S. Sudha	Member
80.	Dr. G. Swaminathan	Member
81.	Dr. N. Thamaraiselvan	Member
82.	Dr. M. Udayakumar	Member
83.	Dr. G. Uma	Member
84.	Dr. M. Umapathy	Member
85.	Dr. B. Vasuki	Member
86.	Dr. Ar. Veerappan	Member
87.	Dr. S. Velmathi	Member
88.	Dr. S. Venkatachalapathy	Member
89.	Dr. V. Vinod Balakrishnan	Member
90.	Shri. A. Palanivel	Secretary
91.	Dr. Rajeswari Sridhar	Special Invitee
92.	Dr. P. Sridevi	Special Invitee
93.	Dr. V. Arul Mozhi Selvan	Special Invitee
94.	Dr. R. Gandhimathi	Special Invitee
95.	Dr. T. Ramesh	Special Invitee

The following members expressed their inability to attend the meeting:

96.	Dr. K. Ramamurthy	External Member
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97.	Dr. Gurumurthy Neelakandan	External Member
98.	Dr. G. C. Anupama	External Member
99.	Dr. S. Anandan	Member
100.	Dr. M. Jaya Bharata Reddy	Member
101.	Dr. V. Muthupandi	Member
102.	Dr. P. Palanisamy	Member
103.	Dr. K. Viswanathan Iyer	Member

The following members did not attend the meeting:

104.	Dr. C. Mala	Member
105.	Dr. Michael Arock	Member
106.	Dr. C. Natarajan (on Medical Ground)	Member
107.	Dr. B. Venkataramani	Member

The Chairperson, Senate welcomed the members to the 46th Meeting of Senate and having ensured a quorum, continued with the Senate proceedings. She congratulated all the new members of the Senate who have been recently promoted as professors.

The Chairperson informed the Senate about her recent visit to all academic departments and appreciated the progress of the Departments. She highlighted the recent outbound workshop organized by the institute for all the faculty members and Group A officers. She congratulated the co-ordinator Dr. A. K. Bakthavathsalam and his team for their effort and mentioned about the positive feedback about the course. She appreciated the efforts of office bearers of the Officer's club for reactivating the initiatives and thanked all the members for their participation during the inaugural function.

The Chairperson apprised the Senate that the data uploading for NIRF 2020 is in progress and requested all HoDs and faculty members to support and provide the necessary data to the NIRF team.

The Chairperson informed the Senate resolution on revising UG / PG / Ph.D. regulations, and highlighted the recent change of curriculum and credit requirements to the current 1st Year B.Tech. students.

Following the welcome address, the Registrar started the deliberations on the agenda items.

1. Confirmation of the Minutes of 45th Meeting of the Senate held on 26th June 2019

The Senate resolved to confirm the minutes of the 45th Meeting of the Senate.

Resolution 45/SENATE/2019/2: The action taken on the decisions of 44th Meeting of the Senate

HoDs were informed about Senate's decision (44/SENATE/2019/5/ Item (a)) regarding the directed study courses for Ph.D. programmes. The research scholars who have completed their masters in NITs especially in Architecture stream are facing lot of issues in selecting regular courses along with PG students. As such, the Senate directed the research guide(s) from Department of Architecture to get prior approval from Dean (Academic) to prescribe the DC recommended directed study courses.

RESOLUTION 46/SENATE/2019/1 RESOLVED THAT the Minutes of 45th Meeting of Senate held on 26th June 2019 be confirmed with above mentioned observations.

2. Action Taken Report on the decisions of the 45th Meeting of the Senate

The Action Taken Report on the 45th Meeting of the Senate was discussed and the Senate observed the following.

a. 45/SENATE/2019/2

(Reference:40/SENATE/2018/7)

(iii). *The title of the course for the subjects "MAIR11 Mathematics - I" and "MAIR21 Mathematics II" shall be modified based on course contents.*

(iv). *Learning objectives of course titled MAIR21 Mathematics - II shall be reviewed and modified by considering all the branches of Engineering.*

The Senate was informed that these changes were considered by BoS of GIR courses and incorporated in the GIR courses. This is applicable from B. Tech. 2019-20 batch onwards.

b. 45/SENATE/2019/2

(Reference: 40/SENATE/2018/11)

M.S. (by Research) scholars (sponsored by BHEL) seeking resumption of the M.S.(by Research) programme

The Senate noted that the GTC has been conducted for all 21 scholars to recommend the resumption of M.S. (by Research) programme.

c. 45/SENATE/2019/2

(Reference: 43/SENATE/2019/3)

PG expert committee to review the existing PG programmes that requires revision and re-orientation before the implementation of EWS for PG programmes. Besides, the proposal of

The PG expert committee has initiated the process to review the existing PG programmes that requires revision and re-orientation. The details shall be discussed in the next Senate meeting.

new PG programmes that have undergone the selection process during the IoE proposal can also be reviewed with appropriate subject experts.

- d. **45/SENATE/2019/2**
(Reference: 43/SENATE/2019/5)
Modified seat matrix for M. Tech. (Energy Engineering)
- The HoD of Energy and Environment has submitted the reasons for not considering all branches of Engineering by proper mapping of the existing subjects, which is being reviewed by the PG Expert committee.
- e. **45/SENATE/2019/2**
(Reference: 43/SENATE/2019/6/ Item (ii))
Revised eligibility criteria need to be considered for admission into Ph.D. programme in Department of Management Studies
- An institute level committee has been constituted by Dean (Academic) to review the existing guidelines for admission into all Ph. D. programmes in the institute.
The revised regulations incorporating the Senate's suggestions are attached in the Annexure – C.
- f. **45/SENATE/2019/2**
(Reference: 44/SENATE/2019/3)
The Senate directed the Dean (Academic) to refine the rules and regulations for UG, PG and Ph.D. programmes.
- The Senate was informed that the rules and regulations were refined by Ordinance committee.
The revised regulations for B. Tech., PG and Ph. D. are respectively given in Annexure – A, B and C.
- g. **45/SENATE/2019/2**
(Reference: 44/SENATE/2019/4/ item (a))
The Senate suggested the Dean (Academic) to constitute an institute level committee to decide the equivalent credits for curriculum related projects in the national / international level.
- The details are covered in the revised B.Tech. regulations.
- h. **45/SENATE/2019/2**
(Reference: 44/SENATE/2019/6)
The cancellation of Ph.D. registration of Ms. Amutharasi G.T. shall be kept in abeyance until a decision is taken in this regard by the Board of Governors.
- Refer Item No.:4.
- i. **45/SENATE/2019/3**
Award of UG / PG / M. S. (by Research) and Ph. D. degrees in the 15th Convocation.
Graduands awarded with Minor Degree should not claim any
- The Senate authorized the Chairperson, Senate to approve the award of degrees for the students who will complete the degree requirements on or before 19th July 2019 in the 15th Convocation. The degrees were

- equivalence of Degree from the Institute for the branch of Engineering in which they have qualified for Minor option.*
- awarded on Convocation day (27th July 2019) for those graduates.
The consent form has been collected from the graduates.
- j. **45/SENATE/2019/6**
The Senate directed the Dean (Academic) to review and revise the grading policy for PG projects.
- The grading policy for PG projects has been included under the revised PG regulations.
- k. **45/SENATE/2019/8/ Item (a)**
Implementation of National policy on 'Academic Ethics'
three-member committee consisting of Dr. J. Sarat Chandra Babu, Dr. C. Nagamani and Dr. S. Kumanan to review the policy and submit the recommendations within four weeks' time.
- The Senate was informed that the recommendations shall be placed in the next Senate meeting.
- l. **45/SENATE/2019/9/ Item (c)**
Propose a clear policy regarding the number of Ph.D. scholars at a given point of time per Faculty and bring to the Senate meeting.
- As per the resolution, the policy has been proposed regarding the number of Ph.D. scholars at a given point of time per Faculty.
The Senate discussed the matter at length and approved the following:
A research supervisor will be allotted a maximum of four full-time Ph.D. Scholars. At any instance a research supervisor shall have a maximum of 10 Ph.D. scholars only. However, any specific request for additional Ph.D. scholar under Sponsored Research Projects will be considered by a duly appointed committee.

RESOLUTION **RESOLVED THAT** the action taken on the decisions of 46/SENATE/2019/2 45th Meeting of the Senate be noted and approved with the above mentioned observations.

FURTHER RESOLVED THAT the research supervisor will be allotted a maximum of four full-time Ph.D. Scholars. At any instance a research supervisor shall have a maximum of 10 Ph. D. scholars only. However, any specific request for additional Ph. D. scholar under

Sponsored Research Projects will be considered by a duly appointed committee.

Approval Items

3. Revision of UG, PG and Ph. D. Regulations

In the 44th Meeting of the Senate (Resolution: 44/SENATE/2019/3), the Senate directed the Dean (Academic) to refine the rules and regulations for UG, PG and Ph.D. programmes. As per this resolution, an institute level committee was constituted to refine the rules and regulations for UG, PG and Ph.D. programmes. Based on the inputs from academic office and from the Faculty members through the Heads of the Departments, the committee revised the rules and regulations for B. Tech., PG and Ph.D. programmes.

The Senate discussed the matter at length and approved the regulations for B. Tech., PG and Ph.D. with few observations.

- 1. The supplementary examinations shall be conducted by the Academic Office in the prescribed time schedule.*
- 2. The grading policy for Formative assessment shall be formulated by Ordinance committee.*
- 3. Revise the curriculum structure for PG programmes.*

The revised regulations for B. Tech., PG and Ph. D. are respectively given in Annexure – A, B and C.

**RESOLUTION RESOLVED THAT the revised regulations for B. Tech.,
46/SENATE/2019/3 PG and Ph.D. be approved with above mentioned
observations.**

4. Requests from students

Registration of two research scholars was cancelled as per Ph.D. regulations as they failed twice in the comprehensive viva voce examination. The research scholars had made complaints to the National Commission for Scheduled Castes (NCSC), Government of India. The Vice Chairman made a visit to the Institute in September 2019, and requested to give another chance to the women students to continue the research.

The Senate approved the students request as per the request of the vice chairman, NCSC to give them one more chance to continue their research. The Senate directed the HoD,

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Civil Engineering to allot female supervisors to the students. The new supervisor will constitute new doctoral committees.

RESOLUTION **RESOLVED THAT** the students request be approved
46/SENATE/2019/4 **with above mentioned observations.**

Ratification Items

- 5. Award of provisional degree to M. S. (by Research) and Ph. D. scholars who have successfully completed the requirements for the award of the degree**

The Senate ratified the award of provisional degree to M. S. (by Research) and Ph. D. scholars as per the list presented in Annexure - D.

RESOLUTION **RESOLVED THAT** the award of provisional degree to
46/SENATE/2019/5 **M. S. (by Research) and Ph.D. scholars be ratified.**

- 6. Modified curriculum and syllabi for GIR courses**

A meeting of Board of Studies (BoS) for General Institute Requirement (GIR) courses for B. Tech. programmes was conducted on 20-07-2019.

The Senate ratified the modified curriculum and syllabi and suggested to have maximum of four course outcomes of General Institute Requirement (GIR) courses for B. Tech. programmes. This is effective from academic year 2019-20 onwards.

RESOLUTION **RESOLVED THAT** the modified curriculum and
46/SENATE/2019/6 **syllabi of GIR courses be ratified with above mentioned observations.**

- 7. Any other item with permission of the Chairperson, Senate**

There are no requests from members.

The Meeting concluded with thanks to the Chair.


Secretary, Senate


Chairperson, Senate

Annexure – A
B. Tech. Regulations 2019

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B. Tech. REGULATIONS

B.1.0 Admission

Qualification for admission will be as per the criteria specified by the admission authority of the Government of India.

B.2.0 Structure of B.Tech. Program

The following are the B.Tech. programs of study offered:

- Chemical Engineering
- Civil Engineering
- Computer Science and Engineering
- Electrical and Electronics Engineering
- Electronics and Communication Engineering
- Instrumentation and Control Engineering
- Mechanical Engineering
- Metallurgical and Materials Engineering
- Production Engineering

B.2.1 Every B.Tech program will have a curriculum with a syllabi consisting of General Institute Courses, respective programme theory of core, elective and laboratory as given below:

List of General Institute Courses:

Mathematics

Physics

Physics laboratory

Chemistry

Chemistry laboratory

Industrial Economics and Foreign Trade

English for Communication

Language laboratory

Energy and Environmental Engineering

Professional Ethics

Engineering Graphics

Engineering Practice

Basic Engineering

Introduction to computer

Programming

Branch Specific Course

Summer Internship

Comprehensive viva

Industrial Lecture

NSS/NCC/NSO

B.2.2 Weightage distribution of Course category

Course Category	Courses	No. of Credits	Weightage (%)
General Institute Courses (IR)	22	50	31.25
Program Core (PC)	15*	49 – 55	32.50
Electives (PE&OE)	14**	42	26.25
Program Laboratory (PL)	2 per semester (3 rd to 6 th semester)	16	10.00
Total		160 ±3	100

*Out of 15 PC, four courses should be of 4 credits each.

**Out of 14 elective courses, eight should be Program Elective courses (PE). Out of the remaining six electives, a student can opt for Project Work instead of two electives equivalent to 6 credits

B.2.3 A student should satisfactorily complete the prescribed NCC/NSO/NSS Program.

B.2.4 The curriculum of any branch of B.Tech. Program is designed to have a requirement of 160±3 credits.

B.2.5 Normally a semester shall have six theory courses and two laboratory courses. From the fourth semester onwards, students can register one additional theory course excluding minor/honours course.

B.2.6 The department Board of Studies (BoS) shall approve the list of online courses (OC) offered by reputed external agencies. While listing the on-line courses, the BoS shall consider the following points:

- The course evaluation is carried out by the same external agency.
- Equivalent grading mechanism to be arrived at by the department.

A student can register a maximum of 12 credits as online courses during the entire program of study. These shall be treated as Open Elective courses. Students are allowed to register online courses starting from 3rd semester onwards.

B.2.7 B.Tech. (Honours) students must earn 15 credits in addition to the credits specified by the department for B.Tech. degree. They can register an additional course from the 5th semester from the basket of honours courses offered by the department concerned.

B.2.8 A student can earn 15 credits, in addition to the credits specified by the department for B.Tech. degree, as optional courses from the basket of minor electives offered by single department from the 3rd semester.

B.2.9 The medium of instruction, examination, and project reports shall be English.

B.2.10 One credit indicates an effort of 50 minutes (1 credit-hour) per working week.

- A one credit-hour supervised session with no effort required outside should count for one credit.
- An afternoon (2 hours 30 minutes) laboratory session, where the student runs an experiment, collects data, interprets it and writes a report should be awarded 2 credits.

B.3.0 Board of Studies (BoS)

The curriculum content for each programme is finalized by the Board of Studies (BoS) constituted as per B.3.1. BOS functions will include framing the content of various courses, reviewing and updating the content and introducing new courses of study.

B.3.1 The composition of the Board of Studies is as below:

- i. The Head of the Department/ /senior Professor as Chairperson.
- ii. All Professors / Associate Professors / Assistant Professors of the Department.

The following members nominated by the Dean (Academic)/ Director on the recommendation of the Head of department concerned.

- iii. One senior faculty from physics, chemistry, mathematics, humanities and allied department nominated by respective Head of the Department.
- iv. One subject expert from IISc/IITs/NITs.
- v. One subject expert with at least 5 years of experience in the relevant field from Central/ State Organization/ R&D labs or from the reputed Industry
- vi. One Alumni with at least 5 years of experience in the relevant field from reputed R&D / INDUSTRY.

B.3.2 The BoS shall be constituted by the department for a period of two years. The meetings of the BoS shall be arranged at least once a year.

The Board of Studies shall have a power to prepare, revise or update content of courses as per the guidelines stipulated by the senate.

B.3.3 It is recommended that the percentage of syllabus covered by the industrial experts shall be limited to 25% for a given course. Prior approval must be obtained from the designated committee.

B.3.4 In case of exigency, the Chairman (BoS) / Head of the department may obtain the opinion of the members of BoS by circulation of any proposal. Such opinion together with the action taken thereon shall be communicated to all the members of BoS and to the Senate.

B.4.0 Academic Mentor

To help the students in planning their courses of study and to render general advice regarding the academic program, the Head of the Department concerned, will assign every batch of students, a faculty member who will be called as Academic Mentor. The set of students thus assigned will continue to be under the guidance of the Mentor till they complete the program until otherwise changed.

B.5.0 Class Committee

For every class, a class committee shall be constituted by the Head of department, as given below:

- Chairperson - A senior faculty member generally not teaching that particular class.
- Members- Faculty of all the courses of study and the mentor
- A minimum of six student members from both genders.

B.5.1 The class committee shall meet thrice during the semester. The first meeting will be held within two weeks from the date of commencement of the semester and the course plan will be finalized in which the nature of the broad assessment procedure for the different courses will be discussed. The course plan in the specified format will be uploaded in the website: courseplan.nitt.edu. The second and third meetings will be held six weeks and ten weeks respectively from the commencement of a semester to meaningfully interact and express opinions and suggestions to improve the effectiveness of teaching - learning process and analyze the performance of the students in the assessments. The Chairperson of the class committee, immediately after the class committee meetings, should send the minutes of the class committee meetings to the students, the Dean (Academic) through the Head of the Department.

B.6.0 Enrolment and Registration

From the second semester onwards, all students have to enroll in the first week of a semester. A student will be eligible for enrolment only if he / she satisfies B.6.2 and will be permitted to enroll only if he/she has cleared all dues to the Institute, Hostel, Library and the NCC Unit up to the end of the previous semester, provided he / she is not debarred from enrolment, on disciplinary grounds.

B.6.1 Late registration/enrolment will be permitted with a fine as decided from time to time up to two weeks from the last date specified for registration.

B.6.2 The student makes the choice of courses subject to having fulfilled the 'prerequisite' conditions in consultation with Academic Mentor. A student is considered to have completed a 'prerequisite' subject if he or she has fulfilled the attendance requirement.

B.6.3 The B.Tech. students are also eligible to take additional regular courses apart from the courses prescribed in the curriculum, viz, one course in 5th, 6th, 7th semesters and not

more than two courses in the 8th semester, provided a student has a CGPA of 7.0 & above, at the end of the previous semester. Students taking extra courses should obtain the prior approval of the Dean (Academic) with the consent of Head of the department.

B.6.4 Students should not have more than 22 credits in backlog courses to register for courses from the 5th semester onwards. They should complete the required number of backlog courses before proceeding further.

B.7.0 Registration Requirement

The number of credits that a student can register in a semester is 28 credits, excluding Honours, Minor and Online Courses.

B.7.1 If a student finds his/her academic/course load heavy in any semester, or for any other valid reason, he/she may drop courses if the student maintains a minimum attendance in that case till the date of application, within three weeks from the commencement of the semester through workflow with the approval of mentor and Course Faculty.

B.8.0 Attendance

All courses shall have a common attendance policy.

- At least 75% attendance in each course is mandatory. A maximum of 10% shall be allowed under On Duty (OD) / Medical Grounds.

B.9.0 Internship/Industrial Training

Students should undergo industrial training/internship for a minimum period of six weeks during the summer vacations. Registration for this course shall be along with the courses for the 7th semester. A report is to be submitted to the Head of the Department and evaluation (2 credit) will be based on the report and viva-voce examination. The examiners for the viva-voce examination shall be the Head of the Department and the program coordinator or their nominees.

B.9.1 Students are permitted to visit other higher ranking Universities with English as medium of instruction during 7th or 8th semester. The student should not repeat the courses that they have studied in NIT Tiruchirappalli.

B.9.2 A course based on industrial lectures shall be offered for 1 credit. A minimum of five lectures of two hours' duration by industry experts will be arranged by the Department. The evaluation methodology, will in general, be based on quizzes at the end of each lecture. Due weightage shall be given to attendance also. However, the HoD or her/his nominee may devise a suitable methodology for evaluation and the same should be informed to the students before the commencement of the semester.

B.10.0 System of Tests

Each course will have tailor-made assessment models viz. group tasks, assignments, report on field visit, quizzes, open book tests, laboratory exercises, mini-project and end of semester summative assessment etc. The number of assessments for a theory course shall range from 4 to 6. The number of assessments for a laboratory course shall range from 2 to 6.

B.10.1 Only one instance of absence in continuous assessment is permitted. Only one compensation assessment for absentees in continuous assessments will be conducted.

B.10.2 The details of weightage of marks for these assessments have to be announced to the students in consultation with the Class Committee in the beginning of semester along with the course plan. The office of the Dean (Academic) should be informed of the scheme of evaluation at the beginning of the semester.

B.10.3 The comprehensive examination in the final year of study shall have two objective tests of 25 marks each. The final examination shall have 50 marks. The examination will be of objective type similar to the GATE examination. A department committee comprising the Head of the Department or his/her nominee and two faculty members of the department shall conduct the examinations.

B.11.0 Weightages

The following will be the weightages for different subjects:

a)	Assessments during the semester	50 - 70%
b)	Final assessment (Entire Syllabus)	30 - 50%
	Total	100%

The Class Committee will finalize the weightages in any course and announce the students within 2 weeks from the commencement of semester. The Class Committee can approve specific requirement for a course appropriately.

B.11.1 The markings for all tests, tutorial assignments (if any), laboratory work and examinations will be on an absolute basis. The final percentages of marks are calculated in each subject as per the weightages given in B.11.0.

B.12.0 Final Assessment

Every theory/laboratory course should have a final assessment on the entire syllabus with at least 30% weightage conducted for duration of three hours. A student must score a minimum of 20% in the final assessment (for all courses) to complete the course.

B.12.1 Students should submit feedback on the course twice in a semester through online.

B.13.0 Project Evaluation

The project evaluation shall be carried out by a Project evaluation committee comprising the Head of the Department or his/her nominee (Chairperson), Project coordinator (Professor / Associate Professor) and the project guide(s).

B.13.1 The continuous assessment of the project work is as follows:

Assessment	% weightage	Semester Schedule
Preliminary Review	10	End of 2 nd week
Review I	20	End of 3 rd Week
Review II	20	End of 10 th Week
Final assessment	50	End of semester

B.13.2 At the completion of a project, the student will submit a project report which will be evaluated by duly appointed internal examiner(s). The evaluation will be based on the report and a Viva-voce examination on the project.

B.14.0 Grading of courses

All assessment of a course will be done on the basis of marks. The Performance Analysis Committee shall finalise the grades for all courses as per the guidelines (B.29.0).

B.14.1 Based on the performance, each student is awarded a final letter grade at the end of the semester, in each subject. The letter grades and the corresponding grade points are as follows:

Grade	S	A	B	C	D	E	F	X	V
Grade Point	10	9	8	7	6	5	0	0	0
Remarks							Fail	Absent in Final Assessment	Prevented for insufficient Attendance

B.15.0 Method of Awarding Letter Grades

The class committee along with HOD excluding the student members will be constituted as Performance Analysis Committee (PAC). The meeting of the PAC is to be held within seven days from the last day of the Final Assessment to analyse the performance of the students in all courses of study and finalize the grade ranges for each course. The PAC, by collective wisdom, should ensure that the clustering / grading / pass-fail decisions are reasonable.

B.15.1 Awarding of grades is carried out using relative grading system (B.29.0).

B.15.2 The passing minimum for all the courses shall be 35% or Class Average/2, whichever is maximum.

B.16.0 Declaration of Results

The statement of grades along with duly filled attendance registers of all the courses shall be forwarded to the office of Dean (Academic) after the PAC meeting by the Head of the Department. The results will be placed in the senate and will be declared. In case of discrepancy the Chairperson (Senate) is authorized to take appropriate action.

B.17.0 Grade Cards

The grade cards issued at the end of the semester to each student will contain the following:

The course number, name of the course and the credits for each course registered in that semester.

- The letter grade obtained in each course
- The total number of credits earned by the student up to the end of that semester in each of the course categories
- The Cumulative Grade Point Average (CGPA) of all the courses taken from the first semester.

B.17.1 GPA is the ratio of the sum of the products of the number of credits of a course (C_i) and the grade points scored in that course (GP_i), taken for all the courses, to the sum of the number of credits of all the courses (n) in the semester; On successful completion of the program, the CGPA will be calculated taking into consideration of total number of courses (N) as follows

$$GPA = \frac{\sum_{i=1}^n C_i \cdot GP_i}{\sum_{i=1}^n C_i} \qquad CGPA = \frac{\sum_{i=1}^N C_i \cdot GP_i}{\sum_{i=1}^N C_i}$$

B.17.2 The classification of award of degree based on the CGPA and fulfilment of B.26.0:

- Students who complete the Program within eight consecutive semesters getting a CGPA of 8.5 and above, passing all the courses in the first appearance will be

declared to have passed in first class with distinction. For this purpose, an authorized break of study (B.23.0) shall not be counted.

- Students who get a CGPA of 6.5 and above, but below 8.5 and complete the course within 9 semesters plus authorized break will be declared to have passed in first class.
- Students who get a CGPA of below 6.5 and who complete the course within the maximum prescribed period after joining the Institute will be declared to have passed in second class.
- Students who complete the Program with the requirements as per B 27.0 shall be awarded B.Tech. (Honors) degree.

B.18.0 Supplementary Examination

Students who get “F” or “X” grade and satisfactory attendance in core courses are eligible for Supplementary Examination.

B.18.1 The Supplementary Examination will normally be held during a specific week of the subsequent semesters. The supplementary examination shall be scheduled by the Office of the Dean Academic.

B.18.2 The Supplementary Examination will be conducted by the course teacher who offered the course or a faculty member nominated by the HoD.

B.18.3 For taking Supplementary Examinations, the students have to register all the failed courses with prescribed examination fee.

B.18.4 The weightage for the supplementary examination shall be 100%. Absolute grading system with a passing minimum of 35% shall be followed.

B.18.5 In case a student fails in the Supplementary Examination he/she has to reappear till the student passes the course.

B.19.0 Contact Courses and Formative Assessment

A Contact course may be offered during the regular semester or during summer by a Department, after 7th semester for those students who have not completed the core courses. The course will be offered only on the recommendation of the department, with the mutual agreement of the student and the teacher.

B.19.1 No student should register for more than two contact courses during the semester or winter/summer period.

B.19.2 The contact course cannot be offered if the same subject is offered as a regular course during that period.

B.19.3 Such students, who wish to take contact course(s), should apply to the Dean, (Academic) before the commencement of the semester or summer as the case may be, in which the contact course is to be taken.

B.19.4 The assessment procedure for a contact course will be similar to that of the regular semester course.

B.19.5 Withdrawal from a contact course is not permitted.

B.19.6 Formative assessment is applicable to those students who could not complete the core courses by regular or supplementary examinations or contact courses within 7 semesters.

B.19.7 The formative assessment will be administered by the respective Head of the Department to the students in rare cases as per the prevailing Senate guidelines with consent of office of Dean (Academic).

B.20.0 Course Repetition

A student who earns a V grade in a core course has to repeat it compulsorily when the course is offered subsequently. A student securing a V grade in an elective course may repeat it or may opt other elective course to complete the requirements.

B.21.0 Revaluation and retention of Answer Papers

Students can review all his/her the valued answer scripts of the assessments (excluding laboratory examinations, comprehensive examination, internship, industrial lecture and project work), and can get them retotaled / revalued by the faculty member concerned. This may or may not change the grades. The teacher shall forward a revised grade, to the Dean (Academic) through the Head of the Department and the Chairperson, Performance Analysis Committee, if such a necessity arises.

However, if there is any grievance in the valuation of an assessment task, which is not settled by the Faculty in charge of the course / Head of the Department, the Dean (Academic) after verifying whether the grievance is genuine can recommend to the Chairperson of the Senate for appropriate remedial measures.

The entire revaluation process has to be completed within 2 weeks after reopening of the institution for the next semester. Any request by the students after this period will not be considered.

B.21.1 The answer scripts (final assessment) shall be retained with the faculty members at least for two academic years to facilitate academic audit. Afterwards the material will be disposed-off/destroyed permanently by the faculty member.

B.22.0 Maximum Duration of the Program

A student is expected to complete the B.Tech. Program in eight semesters. In any case a student shall not be permitted more than 12 semesters. This excludes the authorized break of study.

B.23.0 Temporary Withdrawal from the Program

A student may be permitted by the Dean (Academic) to withdraw courses from the Program for maximum of two semesters from second year onwards for reasons of ill health or other valid reasons duly recommended by the Head of the Department.

B.24.0 NCC / NSO / NSS Requirements

All students admitted to the B.Tech. Program will have to take either NCC or NSO or NSS as a non-credit extra-curricular Program.

B.24.1 NCC Program is not available for foreign nationals.

B.24.2 The NCC / NSO / NSS requirement should be completed within the four two semesters.

B.24.3 NSS/ NCC/ NSO will include:

- i. Practical / Field activities / Extension lectures. The activities shall be beyond class hours.
- ii. The student participation shall be for a minimum period of 45 hours per semester during the first year.
- iii. The activities will be monitored by the respective faculty in charge and the First Year Coordinator.

B.24.4 If a student falls short of the attendance requirements she/he should make up the deficiency as noted below:

- If the absence is on valid grounds, the deficiency will be made up through extra classes.

- If the absence is unauthorized, the deficiency will have to be made up during the following year. The deficiency in NCC will have to be made up in NSO / NSS Programs at the rate of four times the deficiency, i.e., each NCC class missed will be made up by four NSS/NSO classes.
- The deficiency in NSO / NSS classes will have to be made up at the rate of two classes for each class missed.

B.25.0 Scholarships and Tuition Fee Exemption

The tuition fee revision/exemption will be based on the recommendation of NIT Council and directions of Ministry of HRD. The award of scholarships and other benefits will be in accordance with the rules framed by the Government of India.

B.25.1 The criteria for the institute medal winner is based on the student who obtain highest CGPA in the class graduating with the regular period. Students having highest CGPA with authorized break shall not be considered for the purpose of award of the institute Medal.

B.26.0 Eligibility for Award of B.Tech. Degree

A student shall be declared to be eligible for award of the B.Tech. degree if he/she has

- a) successfully completed all the required courses.
- b) successfully acquired the minimum required credits as specified in the curriculum corresponding to the branch of his/ her study within the stipulated time.
- c) earned the specified credits in all the categories of courses.
- d) completed the NCC / NSO / NSS requirements.
- e) secured a CGPA of 5.0 and above.
- f) no dues to the Institute, Hostels, Libraries, NCC / NSS / NSO etc. and
- g) no disciplinary action is pending against him / her.

B.27.0 Eligibility for Award of B.Tech. (Honours) Degree

- Fulfilled the conditions as specified in B.26.0.
- Students should not have obtained “V” or “X” grade in any course.
- Continued to maintain the CGPA of 8.5 in all semesters excluding honours courses.
- Completed additional theory courses for 15 credits from the basket of honors generally in the level of P.G. courses offered by the department, maintaining an aggregate of at least B grade in Honours courses.

B.28.0 Discipline

Every student is required to observe discipline and decorous behavior both inside and outside the campus and not to indulge in any activity which will tend to bring down the prestige of the Institute.

B.28.1 General conduct of students in the examination halls / laboratories

Students should abide by the restrictions imposed by the institute.

- Possessing a mobile phone, carrying bits of paper, talking to other students, copying from others during an assessment will be treated as punishable dishonesty.

- Zero mark to be awarded for the offenders. For copying from another student, both students get the same penalty of zero mark.
 - The malpractice and the award of the punishment shall be reported through the Head of the Department to the Office of the Dean Academic.
- B.28.2** Any act of indiscipline of a student will be referred to a Discipline and Welfare Committee constituted by the Senate. The Committee will enquire into the charges and recommend suitable punishment as per the student code of conduct approved the senate if the charges are substantiated. The Senate will consider the recommendation of the Discipline and Welfare Committee for appropriate action. The committee will report the action taken at the next meeting of the Senate.
- B.28.3** The student may appeal to the Chairperson, Senate.
- B.28.4** Ragging of any dimension is a criminal and non-bailable offence in India. The current State and Central legislations provide for stringent punishment, including Imprisonment. Once the involvement of a student is established in ragging, the offending student will be dismissed from the Institution and will not be admitted into any other Institution. Avenues also exist for collective punishment, if individuals cannot be identified in this inhuman act. Every senior student of the Institute, along with the parent, shall give an undertaking every year in this regard and this should be submitted at the time of enrolment.
- B.29.0 Guidelines for Grading**
- The institute follows the relative grading system for all courses including Project Work.
- B.29.1** The passing minimum for all the courses may generally be the Class Average/2 or 35% whichever is maximum.
- B.29.2** Absolute grading policy shall be incorporated if the number of students is less than 10 in theory courses.
- B.29.3** In general, the 'S' grade is restricted to a maximum of 10% of the total number of students appeared for the theory courses.
- B.29.4** The award of 'S' grade for laboratory courses and Project work for UG programs is restricted to 20% of the total number of students appeared for the course. This is applicable for all batches.
- B.30.0 Power to Modify**
- Notwithstanding all that has been stated above, the Senate has the right to modify any of the above regulations from time to time.

Annexure – B
PG Regulations 2019

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M.1.0. Admission

Qualification for admission will be as per the criteria specified by the admission authority of Government of India.

M.1.1 A maximum of two QIP scholars (teacher candidates recommended by National QIP coordinator) per programme may be admitted to selected M.Tech. and M.Arch. programs on full time basis. These QIP scholars should satisfy the conditions regarding admissions that may be prescribed by the Institute.

M.1.2. The criteria for admission of foreign students to PG programs shall be as follows:

- i. Students should have earned their qualifying degree from a University /Institute recognized by the Association of Indian Universities / similar Indian body.
- ii. Students nominated by foreign Governments may be accepted to PG programs, without any further test/interview, if their request for admission is routed through MHRD / any agency of the Government of India.
- iii. Students of Indian origin seeking admission to PG programs under NRI quota should have a valid GATE score, if they have obtained their qualifying degree in India.
- iv. Students of Indian origin seeking admission to PG programs under NRI quota should have a valid GRE/GMAT/TOEFL score, if they have obtained their qualifying degree outside India.
- v. The tuition fee for NRI students and foreign nationals may be fixed at rates similar to those for UG programs under DASA/NRI categories, whichever is higher.
- vi. The tuition fee, for nominees of foreign Governments, may be fixed at about five times the rate paid by Indian students.
- vii. A maximum of three seats (additional) may be set aside in each PG programme, for the foreign students.

M.2.0. Structure of Postgraduate Programs

Every Post-Graduate programme will have a curriculum with syllabi consisting of (i) Core courses, (ii) Elective Courses, (iii) Open Elective courses (iv) Project work (v) Laboratory / Studio and the flexible curriculum system is applicable as prescribed by the respective Boards of Studies in the curriculum and syllabi and approved by the Senate.

M.2.1. The Institute presently offers the following postgraduate programs:

Master of Technology (M. Tech.)

1. Chemical Engineering
2. Communication Systems
3. Computer Science and Engineering
4. Construction Technology and Management
5. Data Analytics
6. Energy Engineering
7. Environmental Engineering

Master of Architecture (M. Arch.)

Energy Efficient & Sustainable Architecture

Master of Business Administration (MBA)

Master of Computer Applications (MCA)

Master of Science (M. Sc.)

1. Chemistry
2. Computer Science
3. Mathematics

8. Industrial Engineering and Management
9. Industrial metallurgy
10. Industrial Safety Engineering
11. Manufacturing Technology
12. Material science and Engineering
13. Non-Destructive Testing
14. Power Electronics
15. Power Systems
16. Process Control and Instrumentation
17. Structural Engineering
18. Thermal Power Engineering
19. Transportation Engineering and Management
20. VLSI System
21. Welding Engineering

4. Physics

M.2.2. The curriculum for all the Post-Graduate programs shall be drawn such that the minimum total number of credits for the successful completion of the programme will be as in the following table:

Programme	Minimum Credit for the courses	Credit for Project Work	Minimum Total Credits required
M.Tech.	40	24	64
M.Arch.	36	24	60
M.Sc.	57	8	65
MCA	93	12	105
MBA	78	2	80

M.2.3. One credit each for one lecture hour and one tutorial hour per week. A “three-credit lecture based course”, for instance, will involve about 40 lecture hours spread through the semester, with three lecture hours per week.

M.2.4. For the elective courses, a student may be permitted by the Head of the Department (subject to the consent of the Teacher offering the said course concerned) to take a maximum of 2 elective courses from among the elective courses of other Post-Graduate programs. Further, the teacher shall not offer the elective course if five or less than five students have opted for the course.

M 2.5. Course Plan

- i. Every theory/laboratory course shall have a course plan prepared by the course teacher well before the start of the semester. The course plans for core, elective, open elective courses will have details of the overview of the course, course objectives, course outcome, course teaching and learning activities and course assessment methods and reassessment policy.

- ii. Each course will have tailor-made assessment models viz. group tasks, assignments, report on field visit, quizzes, open book tests, laboratory exercises, mini-project and end of semester summative assessment etc. The course plan will also have details of attendance requirements, academic integrity and plagiarism and information on study materials.
- iii. The course plan, after due approval by the class committee chairperson (CC) and the Head of the Department offering the course, shall be uploaded in the intranet by the teacher.
- iv. The Course plans for all courses offered by the Institute will be available in the intranet site for reference by the faculty and students

M.3.0. Faculty Advisor

The Head of the Department shall assign a faculty every year for each PG programme who will be called as Faculty Adviser. The Faculty Adviser will help the students in planning their courses of study and for getting general advice regarding either the academic programme or any other activity.

M.4.0. Class Committee

Every class of the Post-Graduate programme will have a class committee constituted by the respective Head of the Department, for improving the teaching - learning process. The activities of the Class Committee should be taken in earnest and the minutes of the Class Committee meetings should be promptly recorded.

M.4.1. The composition of the class committee will be as follows:

- i. A senior faculty of the department, preferably not offering a course for that class, nominated by the Head of the Department as Chairperson.
- ii. All teachers handling courses including project guides, if any, for that shall become members.
- iii. Two students of the class nominated by the Head of the Department - Members.
- iv. In case the students for a particular course are drawn from different programs (as may be in electives), due care should be taken to ensure that the membership of the Class Committee is representative of the class population.

M.4.2. The functions of the class committee will be as follows:

- i. The class committee shall meet thrice during the semester. The first meeting will be held within two weeks from the date of commencement of the semester in which the nature of the broad assessment procedure for the different courses will be discussed. The second and third meetings will be held six weeks and ten weeks respectively from the commencement of a semester to meaningfully interact and express opinions and suggestions to improve the effectiveness of teaching - learning process and analyze the performance of the students in the assessments. The Chairperson of the class committee should send the minutes of the class committee meetings to the Dean (Academic) through the Head of the Department, immediately after the class committee meetings.

- ii. During the first meeting of the class committee, faculty members shall submit their respective course plans to the class committee Chairperson and head of the department for approval and uploading the intranet site.
- iii. Any innovation in any course plan not agreed by the class committee or the HoD will be referred to the Chairperson of the Senate for approval.

M.4.3 Summer Internship/Industrial Training

The students are encouraged to undergo internship in industry for a minimum period of four weeks during summer. Attachment with an academic institution within the country (IISc/IITs/NITs/IIITs and CFTIs) or University abroad is also permitted. A report is to be submitted to the HoD through the program coordinator at the end of summer Internship.

M.5.0. Enrolment and Registration

Except for the first semester, registration for a semester will be done during a specified week before the end semester examination of the previous semester. Late registration/enrolment will be permitted with a fine up to two weeks from the last date specified for registration.

M.5.1. A student will be eligible for enrolment only if he/she has cleared all the dues to the Institute, Hostel, Library up to the end of the previous semester, provided he/she is not debarred for enrolment by a disciplinary action of the Institute.

M.5.2. The student makes the choice of courses in consultation with his/her Faculty Adviser.

M.5.3. A student is considered to have completed a pre-requisite course if he/she has fulfilled the attendance requirements and also attended all the assessments in that course.

M.6.0. Attendance

At least 75% attendance in each course is mandatory. A maximum of 10% shall be allowed under On Duty (OD) category. Students with less than 65% of attendance shall be prevented from writing the final assessment and shall be awarded 'V' grade. Students awarded 'V' grade must compulsorily redo the course.

M.7.0. Assessment Procedure – Tests and Examinations

M.7.1. M.Tech./M.Arch./M.Sc./MCA/MBA – Theory/Laboratory/Studio courses

Each course shall have assessments carried out according to the Course Plan (M 2.5) drawn by the faculty who handles the course. The assessments of a course are in alignment with the course learning outcomes. Normally, both question paper setting and valuation of answer papers for all the examinations shall be carried out by the teacher who had handles the course. However, the Chairperson of the Senate will have the discretion to appoint any other teacher or external examiner for setting question paper and valuing the answer scripts of the students in any course.

The following will be the weightages for different courses:

Assessment	%Weightage
Assessments during the session	50-70
Final assessment	30-50
Total	100

M.7.2: M.Tech./M.Arch./M.Sc./MCA – Project Work

Project work will be carried out in the III and IV semesters for M.Tech. and M.Arch. programs. For M.Sc. and MCA, the project work would be carried out in IV semester and VI semester respectively.

M.7.3. The continuous evaluation of the project work shall be carried out by the Department Project Evaluation Committee (DPEC) the constitution of which is as follows. All the members should hold PhD degree.

Chairperson	Professor
One Member	Professor or Associate Professor
One Member	Associate Professor or Assistant Professor

M.7.4. The DPEC shall be constituted by the Head of the Department at the beginning of every academic year. Each PG programme shall have a separate DPEC. The DPEC constituted shall be for the entire academic year.

M.7.5. The Chairperson/member shall be substituted in the DPEC by another senior faculty member (nominated by the Head of the Department) for the continuous evaluation of a student guided by him/her.

M.7.6. The last date for submission of thesis of the M.Tech. and M.Arch. first phase project work is 31st December (or last working day of December) and the last date for submission of thesis of the second phase M.Tech. and M.Arch./ IV semester M.Sc./ VI semester MCA project work is 31st May (or last working day of May).

M.7.7. Panel of external examiners shall be drawn by the Head of the Department, from the list of examiners suggested by all the guides. The panel has to be approved by the Dean (Academic) or his/her nominee. External examiners may be identified for groups of minimum five students each, depending on the area of project.

M.7.8. The examiners should be a faculty of IITs/ IISc/NITs/ reputed engineering institutions (government/government aided)/ scientists from central labs. Retired faculty/ scientists from these institutions serving in other organizations shall also be in the panel of examiners.

M.7.9. M. Tech. Students who want to do their project work as intern in industries/research institutions within India or abroad are permitted with the prior approval from Project Supervisor, HoD, and Dean (Academic). Such students can present their progress reviews and Phase - I Viva-Voce examination through Video Conferencing. They shall have to submit soft copy of the progress report before each review and the phase – I project thesis duly certified by the external supervisor. However, it is mandatory to

submit a hard copy of Phase – II project thesis on or before the last date of submission and physically present during the Phase – II Viva-Voce Examination as per the PG regulations.

M.7.10. No Stipend will be paid during the period of attachment with the industry.

M.7.11: M.Tech. (Project work evaluation)

A preliminary review of the topics chosen by the students is to be conducted during the end of July every year. All the faculty of the department shall be present for the preliminary review. There is no evaluation for this review. The respective guides may apprise the DPEC about the scope of the work and the expectation of the outcome.

M.7.12. The end semester project phase I viva-voce shall be examined by an examiner from the same / allied department and the guide together. The external examiner for phase I is optional.

M.7.13. The end semester project phase II viva-voce shall be examined by the external examiner and the guide together.

M.7.14. The break-up of project evaluation in phase I and phase II of the project work is as follows:

Continuous evaluation			End semester final evaluation		
Phase	%weightage	Schedule*	Phase	%weightage	Schedule
I & II			I		
Review I	10	5 th Week	Viva Voce	50	1 st /2 nd week of January
Review II	20	10 th Week	II		
Review III	20	15 th Week	Viva Voce	50	1 st /2 nd week of June

*From the date of Institute reopening

The weightage for phase I & II of the project

Phase I	
Review I	%Weightage
Identification of title	5
Literature survey/scope	5
Review II:	
Methodology adopted	5
PPT presentation	10
Answers to queries	5
Review III:	
Results obtained	10
PPT presentation	5
Answers to queries	5
Project Viva Voce	

Phase II	
Review I	%Weightage
Time schedule/plan	5
Innovation in work	5
Review II:	
Intermediate results	10
PPT presentation	5
Answers to queries	5
Review III:	
Further results/work	10
PPT presentation	5
Answers to queries	5
Project Viva Voce	
Project report	15

Project report	15
PPT presentation	5
Presentation skills	5
Viva-Voce	25

Project outcome (conclusions)	5
Presentation	5
Viva-Voce	25

M.7.15. M.Sc./MCA (Project work evaluation)

The end semester project viva-voce shall be examined by a panel consisting of the DPEC and an external examiner. The assessment pattern will be as follows:

Assessment	%Weightage
a) Continuous Assessment	
i. Based on two presentations/one presentations and one report, by the student before the DPEC	25
ii. Based on evaluation of final project report by the internal guide	25
b) End semester Viva-voce examination	50

M.7.16. MBA (Project work evaluation)

Assessment	%Weightage
Assessments during the session	50-70
Final assessment	30-50
Total	100

Summer Project: The assessment of summer project will be based on a viva-voce examination by a Project Evaluation Committee consisting of the Head of the Department or his nominee and the Project Guide.

Assessment	% Weightage
Reporting & Follow up during internship period	25
Final Project report evaluation by internal guide	25
Project presentation & Viva-voce	50

M.8.0. Reassessments

The course plan shall outline the policy and eligibility criteria for compensation assessment for the students who fail to attend the regular assessment process during the course due to genuine reasons or reassessment for those failing the course due to poor performance.

M.9.0. Performance Analysis Committee

Performance Analysis Committee will consist of the same members as the class committee - but including the Head of the Department and excluding the student members. The meeting of the Performance Analysis Committee is to be held in one week from the last day of the final assessment, to analyze the performance of the students in all courses of study and finalize the grade ranges for each course and forward the statement of grades along with the attendance register to the Office of the Dean (Academic) immediately through the Head of the department. The PAC, by

collective wisdom, should ensure that the clustering/grading/pass - fail decisions have been reasonably balanced. The Dean (Academic) (or duly authorized Associate Dean) shall go through the statement of grades (and the duly filled attendance register). In case of any problem that cannot be set right by the Dean (Academic) then the Chairperson, Senate is authorized to take appropriate action in his regard.

M.10.0. Passing and Declaration of Examination Results

The Institute follows relative grading to decide the mark ranges for grades. All assessments of a course will be carried out on the basis of marks. Absolute Grading policy shall be incorporated if the number of students per theory course is less than 10.

M.10.1. Publication in one reputed journal / reputed conference is desirable before completion of Phase – II project work.

M.10.2. A minimum of 30% should be scored in the final assessment (for all courses) for a pass. The passing minimum for all the courses shall be the maximum of 35% or Class Average/2.

M.10.3. The award of “S” grade in theory courses for PG programs is restricted to a maximum of 10% of the total number of students appeared for the theory courses. The award of “S” grade for laboratory courses and Project work for the PG programs is restricted to 20% of the total number of students appeared for the course. The grading structure adopted by the faculty for the course handled by him/her, is subject to the scrutiny of the PAC and subsequently the Senate.

M.10.4. Any issues related to Grading will be decided by the Dean (Academic), in consultation with the Chairperson of the Senate.

M.10.5. The letter grades and the corresponding grade points are as follows:

Letter Grade	S	A	B	C	D	E	F	X	V
Grade Point	10	9	8	7	6	5	0	-	-

Students scoring less than the passing minimum shall be deemed to have failed and be given ‘F’ grade. ‘V’ indicates lack of required attendance. ‘X’ indicates the student has not attended the final assessment.

M.10.6. A student who earns a minimum of 5 grade points in a course is declared to have successfully completed the course.

M.11.0. Revaluation of Answer Papers

The answer scripts shall, here after, be retained in the custody of the teacher (examiner) after the process of valuation. The teacher shall, in the first week of the subsequent semester, make available (in his/her presence) the answer scripts to the students who had appeared in the said examination. In case of any student feeling aggrieved over the valuation, he/she can contact the concerned teacher within three weeks from the commencement of the semester immediately following the announcement of the results. The student shall have access to his/her answer paper(s) in the end semester examination which may be shown to him/her by the teacher(s) concerned. If the teacher feels that the case is genuine, the teacher may re-examine the case and forward a revised

grade, if any, to the Dean (Academic) courses through the Head of the Department and the performance analysis committee.

M.12.0. Movement to Higher Semester

A student will be permitted to proceed to the next higher semester of a programme only if the student has satisfied M.6.0.

M.12.1. Any student appearing for reassessments in any course, two years after the first appearance in that course, will be governed by the syllabus in force.

M.13.0. Programme Duration

The minimum duration required for the completion of the various Post-Graduate programs is listed in the following Table. A student may complete the programme at a slower pace by taking more time, but in any case not exceeding the maximum duration.

Programme	Minimum period	Maximum period
M.Tech.	4 Semesters	8 Semesters
M.Arch.	4 Semesters	8 Semesters
M.Sc.	4 Semesters	8 Semesters
MCA	6 Semesters	10 Semesters
MBA	6 Trimesters	10 Trimesters

M.13.1. The duration of each semester will normally be 90 working days (18 calendar weeks), inclusive of examination days.

M.14.0. Temporary Break of Study from the Programme

A student may be permitted by the Dean (Academic) to withdraw from the programme for a year, for reasons of ill-health or other valid reasons on the recommendation of the Head of the Department.

M.14.1. Such students who have availed temporary break and re-join shall be governed by the rules, regulations, and syllabus in force, at the time of his/her re-joining the programme subject to conditions stated in M.13.0

M.15.0 Grade Cards

After the results are declared, Grade Cards will be issued to each student and will contain the list of courses (with L T P C details) for that semester and the grades obtained by the student.

M.15.1. Grade Point Average (GPA) for each semester will be calculated only for those students who have passed all the subjects of that semester. Similarly, Cumulative Grade Point Average (CGPA) up to any semester will be calculated only for those students who have passed all the subjects up to that semester. GPA is the ratio of the sum of products of the number of credits of a course (C_i) with grade points scored in that course (G_{P_i}), taken for all the courses in that semester, to the sum of the number of credits of all the courses (n) in the semester, N the total number of courses for the entire programme.

$$GPA = \frac{\sum_{i=1}^n C_i^* GP_i}{\sum_{i=1}^n C_i}$$

$$CGPA = \frac{\sum_{i=1}^n C_i^* GP_i}{\sum_{i=1}^n C_i}$$

M.16.0. Consolidated Statement of Grades

A student should have appeared for the semester examination in any particular course (mere appearance for the continuous assessment tests is not sufficient) to be eligible for the award of the grade in the course. At the end of the programme, all successful students will be furnished with a consolidated statement of grades which will contain the following particulars:

- i. Grades in the courses of the semesters (inclusive of LTPC details).
- ii. CGPA, and
- iii. Classification (First class with Distinction/First class/Second class)

M.17.0. Eligibility for the Degree

A student shall be eligible for the award of the Master's degree in the appropriate programme if the student has:

- i. Undergone the prescribed programme of study by earning the minimum total number of credits specified in the programme within the maximum duration as specified in M.13.0.
- ii. No dues to the institution, Library, Hostels, etc.
- iii. No disciplinary action pending against him/her.

M.18.0. Award of Degree

The students have to complete the prescribed courses of study and satisfy other related norms. The Senate shall, before the annual convocation, recommend the award of degree to each eligible student by name.

M.19.0. Eligibility for the Award of Institute Medal

The criteria for the institute medal winner is based on the student who obtains highest CGPA in the class graduating with the regular period. Students having highest CGPA with break shall not be considered for the purpose of award of the institute Medal.

M.20.0. Classification

After successful completion of the programme, the P.G. degree will be awarded as per the following classifications based on CGPA.

- i. Students who get a CGPA of 8.5 and above and who complete the programme in the minimum period, passing all the courses in the first appearance itself, will be declared to have passed in first class with distinction. For this purpose, withdrawal from examination and authorized break of study (M.14) will not be counted.
- ii. Students who get a CGPA of 6.5 and above but below 8.5 and who complete the programme in the minimum period plus authorized break (M.14.0) will be declared to have passed in first class.
- iii. Students who get a CGPA of below 6.5 and who complete the programme within the maximum prescribed period after joining the institute, will be declared to have passed in second class.

M.21.0. Discipline

Every student is required to observe discipline and decorous behavior both inside and outside the campus and not to indulge in any activity which will tend to bring down the prestige of the Institute.

M.21.1 General conduct of students in the examination halls / laboratories

Students should abide by the restrictions imposed by the institute from time to time.

- Possessing a mobile phone, carrying bits of paper, talking to other students, copying from others during an assessment will be treated as punishable dishonesty.
- Zero mark to be awarded for the offenders. For copying from another student, both students get the same penalty of zero mark.
- The malpractice and the award of the punishment shall be reported through the Head of the Department to the Office of the Dean Academic.

M.21.2 Any act of indiscipline of a student will be referred to a Discipline and Welfare Committee constituted by the Senate. The Committee will enquire into the charges and recommend suitable punishment as per the student code of conduct approved the senate if the charges are substantiated. The Senate will consider the recommendation of the Discipline and Welfare Committee for appropriate action. The committee will report the action taken at the next meeting of the Senate.

M.21.3 The student may appeal to the Chairperson, Senate.

M.22.0. Academic Dishonesty & Plagiarism

- i. Possessing a mobile phone, carrying bits of paper, talking to other students, copying from others during an assessment will be treated as punishable dishonesty.
- ii. Zero mark to be awarded for the offenders. For copying from another student, both students get the same penalty of zero mark.
- iii. The departmental disciplinary committee including the course faculty member, PAC chairperson and the HoD, as members shall verify the facts of the malpractice and award the punishment if the student is found guilty. The report shall be submitted to the Academic office.

M.23.0. Ragging

Ragging of any dimension is a criminal and non-bailable offence in India. The current State and Central legislations provide for stringent punishment, including Imprisonment. Once the involvement of a student is established in ragging, the offending student will be dismissed from the Institution and will not be admitted into any other Institution. Avenues also exist for collective punishment, if individuals cannot be identified in this inhuman act. Every senior student of the Institute, along with the parent, shall give an undertaking every year in this regard and this should be submitted at the time of enrolment.

M.24.0. Power to Modify

The Senate - as the Supreme academic body of the Institute - may, from time to time, revise, amend or alter the regulations, courses of study and syllabus as and when found necessary. Any other relevant rules needing urgent revisions can be framed and implemented by the Chairperson of the Senate and ratified in the subsequent Senate meeting. In case of difference of opinion regarding the interpretation of any of the regulations, the decision of the Chairperson of the Senate shall be final.

M.24.1. Notwithstanding all that has been stated earlier/elsewhere, the Senate of the Institute has the right to modify any of the above rules and regulations from time to time.

Annexure – C
Ph. D. Regulations 2019

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P.1.0 Introduction

P.1.1 The Regulations govern the conditions for imparting courses of instruction, conduct of the examinations and evaluation to research scholar's performance leading to a Ph.D. Degree.

P.1.2 Doctoral Programme leading to Ph.D. is offered in the following Departments of the Institute:

S. No.	Department	S. No.	Department
1	Architecture	10	Humanities and Social Science
2	Chemical Engineering	11	Instrumentation and Control Engineering
3	Chemistry	12	Management Studies
4	Civil Engineering	13	Mathematics
5	Computer Applications	14	Mechanical Engineering
6	Computer Science and Engineering	15	Metallurgical and Materials Engineering
7	Electrical and Electronics Engineering	16	Physics
8	Electronics and Communication Engineering	17	Production Engineering
9	Energy and Environment		

P.1.3 The provisions of these Regulations shall be applicable to any new disciplines that are introduced from time to time and added to the above list.

P.1.4 These regulations will include the left out batches of scholars admitted in 2012-2013 and onwards.

P.2.0. Student Status

There are two categories of Ph.D. registration.

P.2.1 Full Time

Candidates with qualified GATE score (obtained in the last five years from the closing date of application form)/ UGC/ CSIR/ NBHM/ NET/ CAT/ ATMA/ XAT/ MAT score will be considered for admission under this category.

- i. Candidates who are willing to pursue Research Studies with HTRA.
- ii. Research scholars sponsored under the Quality Improvement Programme (QIP).
- iii. Limited number of candidates can be admitted under self-supportive basis in the faculty of science and Humanities with prior approval from competent authority.

P.2.2 Part Time

- i. Faculty, Staff of NIT Tiruchirappalli, Staff of Sponsored Projects.

Limited number of candidates can be admitted under this category approved by the competent authority. Candidates with qualified GATE score (obtained in the last five years from the closing date of application form)/ UGC/ CSIR/ NBHM/ NET/ CAT/ ATMA/ XAT/ MAT score will be considered for admission.

- ii. Faculty working in Govt./Govt. aided/ Private Engineering/Technology colleges or Science and Arts Colleges/ Universities/ Industry/ Public sector organization with qualified GATE score (obtained in the last five years from

the closing date of application form)/ UGC/ CSIR/ NBHM/ NET/ CAT/ ATMA/ XAT/ MAT score will be considered for admission under this category. The candidate should have at least three years' experience in a regular/ permanent position. The college/ organization must have at least 5 years of its existence for patronizing candidates to part-time Ph.D. program.

- iii. Working professionals from Govt. R&D Organizations/ Public sector/ Industries/ National Research laboratories approved by the Institute. The candidates must be officially sponsored by their employing organization. At the time of application, the employer must expressly undertake to pay full salary to the candidate and relieve him/her to complete his/her residential requirement.

P.3.0 Educational Qualifications

The minimum educational qualifications for admission to the Ph.D programme of the Institute are as follows:

P.3.1 Faculty of Engineering

Bachelor's and Master's Degree in Engineering/ Technology in the appropriate branch of study with a qualified GATE score obtained in the last five years from the closing date of application form and with a minimum 60% aggregate marks or equivalent CGPA of 6.5/10 in UG and PG for admission under OC/ OC-EWS/ OBC category or a minimum 55% aggregate marks or equivalent CGPA of 6.0/10 in UG and PG for admission under SC/ ST/PwD category.

P.3.2 Department of Metallurgical and Materials Engineering

Candidates with PG degree in Science (Physics/ Chemistry/ Material Science/ Applied Science/ Applied Physics/ Applied Chemistry) followed by M.Tech. Degree in Material Science and Engineering/ equivalent PG degree in related discipline with a qualified GATE score obtained in the last five years from the closing date of application form are eligible to apply.

P.3.3 Department of Architecture

Bachelor's degree in Architecture/ Planning and Master's degree in Architecture/Design/Planning/Building Engineering and Management/ Building technology or its equivalent with a qualified GATE score obtained in the last five years from the closing date of application form and with a minimum of 60% aggregate marks or equivalent CGPA of 6.5/10 in UG and PG for admission under OC/ OC-EWS/ OBC-NCL category or a minimum of 55% aggregate marks or equivalent CGPA of 6.0/10 in UG and PG for admission under SC/ST/PwD category.

P.3.4 Department of Management Studies

Two-year full time Master's degree in Business Administration/ 2 years Post Graduate Diploma in Management/ Master's Degree in Industrial Engineering/ Management or Industrial Engineering/ Management with Operations research/ Systems/ other relevant discipline with a minimum of 60% aggregate marks or equivalent CGPA of 6.5/10 in UG and PG for admission under OC/ OC-EWS/ OBC- NCL category or a minimum of 55% aggregate marks or equivalent CGPA of 6.0/10 in UG and PG for admission under SC/ ST/PwD category with a CAT/ XAT/ MAT/ GMAT/GATE score obtained in the last five years from the closing date of application form OR UGC-NET qualified score

or doctoral research fellowships like JRF/ RGNF/ other equivalent research fellowships for management may apply.

P.3.5 Department of Computer Applications

Master's degree in Computer Applications or M.Sc. (Computer Science/ OR&CA) with a qualified GATE score (obtained in the last five years from the closing date of application form)/ UGC/ CSIR/ NBHM/ NET score and a minimum of 60% aggregate marks or equivalent CGPA of 6.5/10 in UG and PG for admission under OC/ OC-EWS/ OBC- NCL category or a minimum of 55% aggregate marks or equivalent CGPA of 6.0/10 in UG and PG for admission under SC/ST/PwD category (or)

Master's degree (M.E./M.Tech.) in Computer Science and Engineering with a qualified GATE score obtained in the last five years from the closing date of application form and with a minimum of 60% aggregate marks or equivalent CGPA of 6.5/10 in UG and PG for admission under OC/ OC-EWS/ OBC-NCL category or a minimum of 55% aggregate marks or equivalent CGPA of 6.0/10 in UG and PG for admission under SC/ ST/ PwD category.

P.3.6 Department of Mathematics and Chemistry

Master's degree in Science in the relevant discipline with a qualified GATE score (obtained in the last five years from the closing date of application form)/ NET/ UGC/ CSIR/ NBHM score and a minimum of 60% aggregate marks or equivalent CGPA of 6.5/10 in UG and PG for admission under OC/ OC-EWS/ OBC-NCL category or a minimum of 55% aggregate marks or equivalent CGPA of 6.0/10 in UG and PG for admission under SC/ ST/ PwD category.

P.3.7 Department of Physics

Master's degree in Physics/ Applied Physics/ Material Science/ Applied Electronics with a qualified GATE score (obtained in the last five years from the closing date of application form)/ UGC/ CSIR/ NET score and a minimum of 60% aggregate marks or equivalent CGPA of 6.5/10 in UG and PG for admission under OC/ OC-EWS/ OBC-NCL category or a minimum of 55% aggregate marks or equivalent CGPA of 6.0/10 in UG and PG for admission under SC/ ST/ PwD category.

(or)

M.Tech. in Non-Destructive Testing with a qualified GATE score obtained in the last five years from the closing date of application form and with a minimum of 60% aggregate marks or equivalent CGPA of 6.5/10 for OC/ OC-EWS/ OBC-NCL category and 55% aggregate marks or equivalent CGPA of 6.0/10 for SC/ ST/ PwD Candidates.

P.3.8 Humanities and Social Sciences

Master's degree in the relevant discipline of Humanities/ Social Science/ Economics/ Business Administration/ Statistics/ Commerce with a qualified UGC/ NET/ CAT/ AIMA/ XAT/ MAT score and a minimum of 60% aggregate marks or equivalent CGPA of 6.5/10 in UG and PG for admission under OC/ OC-EWS/ OBC-NCL category or a minimum of 55% aggregate marks or equivalent CGPA of 6.0/10 in UG and PG for admission under SC/ ST/ PwD category.

(or)

Master's degree (M.E./M.Tech.) in Engineering with a qualified GATE score obtained in the last five years from the closing date of application form and with a minimum of 60% aggregate marks or equivalent CGPA of 6.5/10 in UG and PG for admission under

OC/ OC-EWS/ OBC-NCL category or a minimum of 55% aggregate marks or equivalent CGPA of 6.0/10 in UG and PG for admission under SC/ ST/PwD category.

P.4.0 Selection Procedure

P.4.1 Candidates recommended by the Departmental Scrutiny Committee will be called by HOD to appear for an entrance test.

P.4.2 Candidates short listed based on the performance of written test need to appear for a personal interview by the Departmental Selection Committee comprising HOD and eligible guides in the department and a Senate nominee (observer). The merit list for all the candidates in each category is based on the cumulative score in the written test, interview, marks in UG/ PG, experience, and publications.

P.5.0 Admission

P.5.1 Institute PhD admission committee constituted by the Chairperson, Senate will recommend Candidates for the admission.

P.5.2 The research scholar should also pay fees every semester until the submission of thesis as prescribed by the Institute to keep the registration active.

P.5.3 A research scholar is not eligible for re-registration for Ph.D. after cancellation of his/her earlier registration.

P.6.0 Duration of Programme

P.6.1 A full-time research scholar can submit the synopsis (after satisfying P.17.0) only after a minimum period of study of 24 months from the date of registration.

P.6.2 Full-time research scholars are allowed to convert to part time mode for taking up jobs, only after the successful completion of

- a) Course work
- b) Comprehensive examination and
- c) Minimum residential period of two years

If the research scholar leaves the institute without satisfying any one of the above conditions, the registration shall be cancelled.

No objection certificate from the employer should be submitted along with DC recommendation with proper justification, within six months from the date of request for the conversion of registration from Full Time to Part Time. Else the registration shall be cancelled.

P.6.3 A part-time research scholar can submit the synopsis (after satisfying P.17.0) only after a minimum period of study of 36 months from the date of registration.

P.6.4 The maximum period to complete the programme is 6 years for Full-time research scholars and 7 years for Part-time. However, HTRA will be given up to 5 years or date of submission of thesis whichever is earlier for Full-time research scholars.

P.7.0 Choice of Guide

P.7.1 Allotment of research scholars to guides will be made by the Head of the Department taking into consideration the areas of research of the eligible guides in the department and the preferences of the research scholars.

P.7.2 The research scholars admitted under Part-time category (P.2.2 iii) will normally carry out part or all of his/her research work in their respective industry/ organization/ national laboratories/ employing the scholar. For these scholars, there will be one internal guide

from NIT Tiruchirappalli and one external guide/ research coordinator from their organization.

P.7.3 For the research scholars admitted under Part-time (P.2.2 ii) category, place of work is NIT-Tiruchirappalli even though they may be carrying out a part of work in their College/ Institution. For these scholars, NIT-Tiruchirappalli faculty shall be the internal (principal) guide.

P.7.4 There shall not be more than two guides for a research scholar.

P.8.0 Guideship

P.8.1 All faculty members of the Institute holding doctorate degree and having a minimum of 2 papers published/ accepted in peer refereed journals are eligible to guide Ph.D. scholars. For Part-time category (P.2.2 iii), the external guide should have a Ph.D. degree and a minimum of 2 papers published/ accepted in peer refereed journals or the research coordinator should have a PG degree and ten years of experience. The internal guide shall be from among the faculty of NIT Tiruchirappalli from the department of the research scholar.

P.8.2 A research supervisor will be allotted a maximum of four full-time Ph.D. Scholars. At any instance a research supervisor shall have a maximum of 10 Ph.D. scholars only. However, any specific request for additional Ph.D. scholar under Sponsored Research Projects will be considered by a duly appointed committee.

P.8.3 In a given academic year, a research supervisor shall not be assigned more than two research scholars.

P.8.4 Eminent professionals working in reputed research Organizations/ Industrial units/ R&D Departments/ National laboratories/ Units of Government/ Quasi Government may be recognized as eligible guides and those external guides should be in service throughout the period of Ph.D. guidance period.

P.8.5 The Emeritus Fellow/ Professor Emeritus will be allowed to continue their guidance of Ph.D. scholars till their tenure.

P.8.6 Continuance of retired faculty members as guide

When a faculty member, who has guided a research scholar for 3 years, retires, he will be permitted to continue as guide on his written request, and will be invited for the DC meetings without any commitment to the Institute. But TA and DA limited to II class AC train fare, will be paid within India to attend the synopsis meeting and the Viva-voce examination. However, there will be a co-guide for taking care of administrative, and to some extent, the research responsibilities, of the scholar.

P.8.7 The CSIR and other Emeritus Fellows/ Scientists who hold office at this Institute for a period of 3 years and more can take fresh students during their period of appointment as Emeritus Scientists only with financial support for the research scholar from other sources along with another Guide who has at least 3 years' service still left at the Institute.

P.8.8 Any Guide-in-charge, who has acted for more than one year during the absence of the guide allotted to the research scholar, will be a special invitee/ co-opted member of the Doctoral Committee when the original Guide takes over.

P.8.9 External guides will be invited to attend Doctoral Committee meetings, Synopsis meeting, and Viva- Voce examination, TA/ DA will be provided as per institute norms.

P.9.0 Change of Guide/ Addition of Co-Guide

Research scholars may request the Chairperson, Senate, for a change of guide or add a Co-Guide for valid reasons. The Chairperson of the Doctoral Committee (DC) or his nominee shall convene the Doctoral Committee and based on its recommendations, the request shall be considered by the Chairperson, Senate.

P.10.0 Doctoral Committee

P.10.1 The HOD will intimate to the Dean (Academic) the area of research, name(s) of the Guide and a panel of names suggested by the guide for the DC for each research scholar, within one week of the date of joining of the research scholar.

P.10.2 The following is the composition of the Doctoral Committee

1.	Chairperson	One Professor from the institute to be nominated by the Research Guide
2.	Member	Research Guide
3.	Member	Co-Guide (if any)
4.	Member	One faculty member from the same department nominated by the Chairperson Senate or his/her nominee from the panel of names suggested by guide
5.	Member	One faculty member from an allied department nominated by the Chairperson senate or his/ her nominee from the panel of names suggested by guide
6.	Member	One external member from Industry/ Research establishment/ Academic institution (or) One faculty member from the same department to be nominated by the Chairperson senate or his/ her nominee from the panel of names suggested by guide

P.10.3 In case the Chairperson, DC or any member goes on long leave, resigns or retires from the Institute, the Chairperson, Senate or Dean (Academic) will nominate another member on the suggestion of the guide.

P.10.4 In exigency, an external member may be permitted to participate in DC meeting
Conduct of DC meetings through video conferencing.

P.11.0 Registration

The DC will meet normally within a week of its being constituted, consider the proposed research topic and prescribe the courses of study. The external member need not be present for the first DC meeting.

P.12.0 Course Works

P.12.1 The full time research scholars should successfully complete four courses as prescribed by the Doctoral Committee within one year, preferably in one semester, from the date of admission into the programme.

P.12.2 Ph.D. scholars will attend classes along with PG students and will be evaluated in the same relative grading scale.

P.12.3 PG level theory courses are prescribed to Ph.D. scholars irrespective of the Department they belong to and credit may be given as per usual evaluation procedure. But such courses should not have been taken by the research scholar in their Post Graduate programme.

P.12.4 Courses may also be prescribed from those offered by Departments other than that in which the research scholar is registered. No change in courses prescribed shall be made without the approval of the DC. It shall, however, be open to the DC to prescribe additional courses whenever found necessary.

P.12.5 Courses completed after the date of registration will only count towards the requirements of award of Ph.D. degree.

P.12.6 Research scholars admitted to the programme shall obtain at least an overall average B grade in their course work with a minimum of C grade in any individual course for successful completion of the courses prescribed.

P.12.7 Research scholars, who fail to satisfy the grade requirement, may attempt other prescribed courses or rewrite (once) the examination in the course(s) where they had scored less than C. If they still fail, their registration will be cancelled.

P.13.0 Progress Report

P.13.1 The attendance of Research scholars shall be maintained by the department. The scholars can avail leave as per MHRD/ GOI guidelines with the consent of guide and HoD.

P.13.2 Progress assessment of Ph.D. scholar is mandatory every semester up to sixth semester and once in three months thereafter. HoD shall forward the progress report of the scholars to the academic office in time.

P.14.0 Comprehensive Examination

P.14.1 On the successful completion of the prescribed course works, the research scholar shall undergo a qualifying Comprehensive Examination within two years from the date of registration.

P.14.2 The composition of the Comprehensive Viva-Voce Board shall be as follows:

- i. HoD/ HoD's nominee
- ii. One External member - Professor/ Associate Professor from IIT/ IISc/ IIM/ NIT/ Anna University/ SPAs/ JNAFAU/ Central Universities or Scientists/ Scientific Officers holding Ph.D. degree and drawing the scale of Professor and above, working in National and Regional laboratories, Defense Research Organizations, Atomic and Space Research Organizations.
- iii. One senior faculty from the same Department
- iv. One senior faculty from the allied Department
- v. Guides of all the research scholars appearing for comprehensive viva-voce.

P.14.3 The External Member for comprehensive Viva-Voce Board shall be nominated by the Chairperson, Senate or Dean (Academic) from a panel suggested by the Head of Department in consultation with the Guides.

P.14.4 The Comprehensive Examination shall have a written examination (of at least one-hour duration) followed by an oral examination. The Comprehensive Examination for all eligible research scholars registered during a particular session will be held at a particular period. The HOD of the department is expected to give an indicative syllabus for the written test about one month prior to the Comprehensive Examination.

P.14.5 Based on the result of the Comprehensive Examination, the comprehensive Viva-Voce Board shall report to the Dean (Academic) about the fitness of the research scholar to

proceed further with his/ her Ph.D. work within two weeks from the date of the examination.

P.14.6 If, based on the results of the Comprehensive Examination, a research scholar is not approved by the Comprehensive Viva-Voce Board, then a grace period of up to a maximum of six months shall be given for re-examination. If found fit, the research scholar shall be permitted to proceed with doctoral work. Otherwise, the research scholar's provisional registration will be cancelled.

P.15.0 HTRA Enhancement

The research scholar is eligible for stipend enhancement only after fulfilling the following conditions:

- i. The successful completion of Comprehensive examination.
- ii. After fourth semester on recommendation of DC in terms of candidate's Publication.

P.16.0 Temporary Break from Ph.D. Programme

Full time Ph.D. scholars who completed their course work can be permitted to take a temporary break from the programme for up to one year for personal calamities and medical reasons, with the recommendation of the DC and the approval of the Dean (Academic).

P.17.0 Synopsis of Thesis

P.17.1 On satisfactory completion of the prescribed courses, the Comprehensive Examination, and the required publications in his/ her research area, the research scholar shall be permitted to submit the synopsis of his/her research work. The Scholar should have completed two seminar presentations on his research field and published two paper journals (SCI, SCIE, ESCI, SSCI or Scopus). Publications in paid journals and conference proceedings shall not be considered.

P.17.2 A DC meeting will be held in the office of the Dean (Academic) for Synopsis presentation. A panel of Indian and foreign examiners for thesis evaluation will be recommended.

P.18.0 Submission of Thesis

The research scholar shall submit two hard copies and one soft copy of thesis within three months of acceptance of the synopsis. The Research Scholar should submit Plagiarism Report attested by the Research Supervisor that the plagiarism is less than 20% excluding scholar's publication while submitting his thesis. The Doctoral Committee may grant additional time beyond three months on request from the scholar for valid reasons.

P.19.0 Panel of Examiners

P.19.1 The thesis shall be referred to two examiners with five years of postdoctoral experience (one from overseas) chosen by the Chairperson, Senate or Dean (Academic) from among the panel of examiners submitted by the Guide and recommended by the DC at its synopsis meeting.

P.19.2 Each panel (one for Indian examiner and another for overseas examiner) should have at least three experts each in the area of research. The following guidelines should be followed while recommending the panel of examiners.

- i. Indian Examiner: At least two examiners from IIT/ IISc/ IISER/ IIM/ NIT.

Others may be from State & Central Government funded Universities/ Institutions and centrally funded research institutes. The examiner(s) should have at least 5 years of Post-Ph.D. experience.

- ii. Foreign Examiner: Should be from research institute/Universities. At least one should be from Universities in USA/ UK/ Canada/ Australia/ Germany/ Japan/ Singapore. The examiner(s) should have at least 5 years of Post-Ph.D. experience.

P.19.3 The panel should not enlist examiner who had evaluated a thesis within six months in the same Department and Co-authors of the paper for the particular research scholar.

P.20.0 Thesis Evaluation

P.20.1 In case of undue delay i.e., beyond 45 days for receiving the evaluation report, after a reminding the examiner the Chairperson, Senate/Dean (Academic) shall appoint another examiner from the panel, for evaluating the thesis.

P.20.2 If an examiner suggests resubmission of the thesis, the research scholar will be allowed to submit the revised thesis within the time stipulated by the DC failing which lead to cancellation of his/her Ph.D registration.

P.20.3 If one of the two thesis examiners declares the thesis as not acceptable, the thesis shall be referred to a third examiner from the panel for evaluation. After referral to a third examiner, declaring the thesis as 'accepted', the DC will consider the reports and recommend for conduct of oral examination which will be conducted normally not earlier than two weeks from the date of the constitution of the Oral Examination Board. If the third examiner reports the thesis as not acceptable, the registration of the scholar shall stand cancelled.

P.21.0 Viva-Voce Examination

A Viva Voce Examination Board will examine the scholar on oral presentation of his/ her thesis work and will ensure that the scholar answers satisfactorily the clarifications and questions raised by the thesis examiner(s).

P.21.1 The following is the composition of the Viva-Voce Examination Board:

- i. Chairperson - Chairperson of Doctoral Committee
- ii. Member - Research Guide
- iii. The Indian examiner of the thesis/ a specialist in the subject nominated by the Chairperson, Senate or Dean (Academic) from the panel of examiners approved by the DC.

P.21.2 If the Viva-Voce Examination Board declares that the questions raised by the examiners are not clarified by the research scholar, he/ she may be asked to reappear for Viva-Voce examination at a later date, not earlier than a month and not later than six months from the date of the first oral examination. For the reappearance, the Viva-Voce Examination Board will include the members of the DC.

P.21.3 The Chairperson shall forward the report of the Viva-Voce Examination Board along with the thesis incorporating the suggested corrections from examiners to the Dean (Academic).

P.21.4 In Exigency, an examiner may be permitted by the Chairperson, Senate to participate in Viva Voce proceedings through video conferencing mode.

P.22.0 Award of Ph.D. Degree

On recommendation of the Viva-Voce Examination board the research scholar will be awarded Ph.D. degree in the ensuing convocation.

P.23.0 Power to Modify

Notwithstanding all that has been stated above, the Senate has the right to modify any of the above Regulations from time to time.

Annexure - D

List of M. S. (by Research) and Ph. D. scholars to be awarded provisional certificate

Sl. No.	Roll No.	Name	Viva / GTC Date
M. S. (by Research)			
1.	303116002	Abhilash M	07-08-2019
2.	311116052	D Venkata Krishnan	23-08-2019
3.	312915056	Dilip Kumar Singh	09-09-2019
4.	311116051	Yagnem Anilreddy	16-09-2019
5.	303116003	Sherin Parwin P M	20-09-2019
Ph. D.			
1.	407114051	Balimidi Mallikarjuna	16-08-2019
2.	405114053	T Satyanarayana Murthy	09-09-2019
3.	407914002	Meena Lochani M	11-09-2019
4.	411115001	Sunil Kumar H S	13-09-2019
5.	410114001	Sankaranarayanan S	13-09-2019
6.	412114004	Arun S	18-09-2019
7.	405115002	Praveen Kumar J	26-09-2019
8.	405912057	J Naveen	30-09-2019
9.	402114004	S Karthika	10-10-2019

