



SARDAR VALLABHBHAI NATIONAL INSTITUTE OF TECHNOLOGY, SURAT

Minutes of the 44th meeting of the *Senate* of the Sardar Vallabhbhai National Institute of Technology, Surat which was held on *Friday, the 19th July 2019, at 03:00 p.m.* onward in the *Conference Room (EC004N) of the Electronics Engineering Department*

The following members were present in the meeting:

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| 1) Dr. S. R. Gandhi, Director, SVNIT, Surat | : Chairman |
| 2) Dr. Pranab Kumar Mohapatra, Professor, IIT Gandhinagar | : External Member |
| 3) Dr. Jyotirmay Banerjee, Dean (Academic) SVNIT, Surat | : Member |
| 4) Dr. V. H. Pradhan, Dean (Student Welfare), SVNIT, Surat | : Member |
| 5) Dr. R. Venkata Rao, Dean (Faculty Welfare), SVNIT, Surat | : Member |
| 6) Dr. A. A. Shaikh, Dean (R&C), SVNIT, Surat | : Member |
| 7) Dr. G. J. Joshi, Dean (P&D), SVNIT, Surat | : Member |
| 8) Dr. J. N. Patel, Dean (A&RG), SVNIT, Surat | : Member |
| 9) Dr. H. R. Jariwala, Asso. Dean (Academic) SVNIT, Surat | : Member |
| 10) Dr. H. G. Patel, Asso. Dean (Student Welfare) SVNIT, Surat | : Member |
| 11) Dr. Vipul Kheraj, Asso. Dean (Faculty Welfare) SVNIT, Surat | : Member |
| 12) Dr. G. R. Vesmawala, Asso. Dean (P&D) SVNIT, Surat | : Member |
| 13) Dr. Z. V. P. Murthy, Professor, CHED, SVNIT, Surat | : Member |
| 14) Dr. P. A. Parikh, Prof. & Head, CHED, SVNIT, Surat | : Member |
| 15) Dr. Shailendra Kumar, Prof. & Head, MED, SVNIT, Surat | : Member |
| 16) Dr. S. N. Sharma, Prof. & Head, EED, SVNIT, Surat | : Member |
| 17) Dr. S. M. Yadav, Prof. & Head, CED, SVNIT, Surat | : Member |
| 18) Dr. M. A. Zaveri, Prof. & Head, COED, SVNIT, Surat | : Member |
| 19) Dr. M. Mukhopadhyay, Prof. & Head, CHED, SVNIT, Surat | : Member |
| 20) Dr. A. D. Darji, Asso. Prof. & Head, ECED, SVNIT, Surat | : Member |
| 21) Dr. B. Z. Dholakiya, Asso. Prof. & Head, ACD, SVNIT, Surat | : Member |
| 22) Dr. A. K. Rai, Asso. Prof. & Head, APD, SVNIT, Surat | : Member |
| 23) Dr. H. P. Bulsara, Asso. Prof. & Head, AMHD, SVNIT, Surat | : Member |
| 24) Dr. Z. V. P. Murthy, Professor, CHED, SVNIT, Surat | : Member |
| 25) Dr. P. A. Parikh, Prof. & Head, CHED, SVNIT, Surat | : Member |
| 26) Dr. B. K. Samtani, Professor, CED, SVNIT, Surat | : Member |
| 27) Dr. P. L. Patel, Professor, CED, SVNIT, Surat | : Member |
| 28) Dr. J. E. M. Macwan, Professor, CED, SVNIT, Surat | : Member |
| 29) Dr. P. L. Patel, Professor, CED, SVNIT, Surat | : Member |
| 30) Dr. R. A. Christian, Professor, CED, SVNIT, Surat | : Member |
| 31) Dr. K. A. Chauhan, Professor, CED, SVNIT, Surat | : Member |
| 32) Dr. Rakesh Kumar, Professor, CED, SVNIT, Surat | : Member |
| 33) Dr. P. G. Agnihotri, Professor, CED, SVNIT, Surat | : Member |
| 34) Dr. A. K. Desai, Professor, AMD, SVNIT, Surat | : Member |
| 35) Dr. C. H. Solanki, Professor, AMD, SVNIT, Surat | : Member |
| 36) Dr. H. J. Nagarsheth, Professor, MED, SVNIT, Surat | : Member |
| 37) Dr. H. B. Naik, Professor, MED, SVNIT, Surat | : Member |
| 38) Dr. H. K. Raval, Professor, MED, SVNIT, Surat | : Member |

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| 39) | Dr. T. N. Desai, Professor, MED, SVNIT, Surat | : Member |
| 40) | Dr. Anandita Chowdhury, Professor, EED, SVNIT, Surat | : Member |
| 41) | Dr. R. Chudamani, Professor, EED, SVNIT, Surat | : Member |
| 42) | Dr. A. K. Panchal, Professor, EED, SVNIT, Surat | : Member |
| 43) | Dr. V. A. Shah, Professor, EED, SVNIT, Surat | : Member |
| 44) | Dr. M. Chakraborty, Professor, CHED, SVNIT, Surat | : Member |
| 45) | Dr. Smita Jauhari, Professor, ACD, SVNIT, Surat | : Member |
| 46) | Dr. K. N. Pathak, Professor, APD, SVNIT, Surat | : Member |
| 47) | Dr. A. K. Shukla, Professor, AMHD, SVNIT, Surat | : Member |
| 48) | Dr. Neeru Adlakha, Professor, AMHD, SVNIT, Surat | : Member |
| 49) | Shri Amit C. Patel, I/c. Dy. Registrar (Academic), SVNIT, Surat | : Member |
| 50) | Dr. K. D. Yadav, I/c Registrar, SVNIT, Surat | : Member Secretary |

Prof. S. A. Channiwala, Professor (MED), Dr. J. K. Parikh, Professor (CHED), Dr. Y. D. Patil, Asso. Professor, (AMD), Dr. M. Mansoor Ahammed, Professor, (CED), Dr. V. L. Manekar, Professor (CED), Dr. S. A. Vasanwala, Professor (AMD), Dr. K. P. Desai, Professor (MED), Dr. D. V. Bhatt, Professor (MED) and Dr. U. D. Dalal, Professor (ECED) could not attend the meeting.

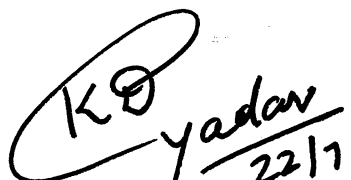
At the outset of the meeting, the Chairman of the Senate warmly welcomed all the members of the Senate. He specially welcomed Prof. Pranab Kumar Mohapatra of IIT Gandhinagar as new nominee to the Senate and placed on record the support by Prof. Amit Prashant over last three years.

The following business was transacted:

Item 1:	To confirm the minutes of 43rd meeting of the Senate held on 04/05/2019.
Res. 1	Resolved that the minutes of the 43rd meeting of the Senate held on 04/05/2019 be confirmed.
Item 2:	To note and approve the action taken on the resolution adopted at the 43rd meeting of Senate held on 04/05/2019 in the Conference Room (EC004N) of the Electronics Engineering Department.
Res. 2	The action taken report was presented by the Dean (Academic). The house noted and approved most of the actions taken. A. Regarding Res 5(A) of the action taken report on first year curriculum, minor modifications proposed by course coordinators for courses on “Fundamentals of Fluid and Thermal Sciences” and “Energy and Environment” by the department of Mechanical engineering are

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	approved by the house. The modified course content for these courses is attached in Appendix 2.1. B. Regarding Res. 5 (B) of the action taken report, the house recommended that the fee to be paid by an undergraduate student for carrying out internship at SVNIT for a period up to 2 months will be Rs. 10,000/-.
Item: 3	To note and approve recommendations made by the Standing Executive Committee (SEC) held on June 7th, 2019.
Res. 3	Recommendations made by the Standing Executive Committee (SEC) of Senate held on June 7th, 2019 are noted and approved.
Item: 4	To note and approve recommendations made by the Standing Executive Committee (SEC) held on July 1st, 2019.
Res. 4	Recommendations made by the Standing Executive Committee (SEC) of Senate held on July 1st, 2019 are noted and further discussion was not taken up as the matter is sub judice In The Honourable High Court Of Gujarat At Ahmedabad.
Item: 5	To note and approve recommendations made by the Institute Academic Advisory Committee (IAAC) at its 40th meeting held on July 05, 2019.
Res. 5	It is resolved that the action taken in 40 th meeting of Institute Academic Advisory Committee (IAAC), held on July 05, 2019 be noted and approved. Further, the new regulations for doctoral programme as proposed in Res. (4), of 40 th IAAC meeting held on July 05, 2019 is discussed at length. The final draft of "Academic Regulations for Doctoral Programme" as approved by 44 th Senate is attached in Appendix 5.1. The "Academic Regulations for Doctoral Programme" as approved by 44 th Senate will be implemented from 22 nd July 2019.


 (Dr. K. D. YADAV)
 MEMBER SECRETARY – SENATE


 (Dr. S. R. GANDHI)
 CHAIRMAN - SENATE

Appendix: 2.1

Branch Specific Courses for Mechanical Engineering Department

Fundamentals of Thermal and Fluid Engineering

MEME102S1

Scheme

L	T	P	Credit
3	0	2	04

- **INTRODUCTION TO THERMODYNAMICS** (12 Hours)
 - Classical thermodynamics & statistical thermodynamics, Thermodynamic system, properties, states, processes, cycle, equilibrium, Zeroth law of thermodynamics, Definition of work & heat and their evaluation for various thermodynamics processes, P-V-T behavior of a pure substance, Critical & triple point of a pure substance, Mollier diagram, Determination of dryness fraction of steam, Equation of state for ideal gas, Change in entropy, internal energy, enthalpy of gas in various thermodynamics processes. First law of thermodynamics for flow and non-flow processes, Application of first law of thermodynamics to boilers, engines, turbines, and compressors
- **INTRODUCTION TO FLUID MECHANICS** (08 Hours)
 - Classification of fluids, Properties of fluids, Types of fluid flow, Static forces on surfaces, buoyancy and metacenter, Motion of fluid particles and streams, Continuity equations for 2-D and 3-D flow in Cartesian coordinates.
- **FUELS AND LUBRICANTS** (04 Hours)
 - Classification of fuels, Calorific values of fuels, Dulong's formula, Proximate and ultimate analysis of fuel, Types of lubricants, Properties of lubricants, flash point, fire point, viscosity, vapor pressure, cloud point, pour point, etc.
- **STEAM GENERATORS** (06 Hours)
 - Steam generators, Definition, Classification, General study of Cochran, Babcock Wilcox, Lancashire and Benson boilers, boilers mountings and accessories, Types of draught, Calculation of chimney height, boiler efficiency and numericals, Layout of thermal power plant.
- **INTERNAL COMBUSTION ENGINES** (06 Hours)
 - Air standard cycles: Otto cycle, Diesel cycle, and Dual cycle with numericals, Classification of internal combustion engines, Spark ignition and compression ignition engines, two-stroke and four-stroke engines, various efficiencies.
- **REFRIGERATION AND AIR-CONDITIONING** (06 Hours)
 - Unit of refrigeration, Coefficient of performance, Refrigerants, Vapour Compression refrigeration system, Domestic refrigerator, Psychrometric terms, Window and split air conditioners, Central air conditioning systems, Ice plant.

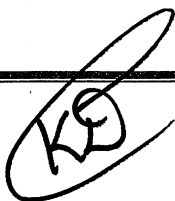
(Total Lecture Hours: 42)

PRACTICALS:

1. Determination of calorific value of solid fuels by Bomb Calorimeter
2. Determination of flash point and fire point of a given sample of oil.
3. Determination of viscosity of oil by viscometer (Redwood or Saybolt).
4. Study of working of 2-stroke and 4-stroke SI and CI engines
5. Study of different types of steam generators
6. Study of mountings and accessories of steam generators
7. Study of working of refrigerator and air conditioner
8. Study and determination of COP of ice plant
9. Determination of different types of flow patterns by Reynolds's experiment.
10. Determination of metacentric height of floating body.

BOOKS RECOMMENDED:

1. P. K. Nag. Engineering thermodynamics, 6th Edition, McGraw Hill, 2017.
2. R. K. Rajput. Thermal Engineering, 10th Edition, Laxmi Publications, 2018.
3. G. Rogers and Y. Mayhew. Engineering thermodynamics: work and heat transfer, 4th Edition, Pearson Education India, 2002.
4. S.K.Som, G.Biswas and S.Chakraborty. Introduction to fluid mechanics and fluidmachines, 3rd Edition, McGraw Hill, 2017.
5. D. S. Kumar. Fluid mechanics and fluid power engineering, S. K. Kataria and Sons, 2013.



Energy and Environmental Engineering

CEME 106 S1

CEME 106 S2

Scheme

L	T	P	Credit
3	0	2	04

- **ENVIRONMENT AND ECOSYSTEMS (12 hours)**
Introduction: Concept of an ecosystem- structure and functions of ecosystem. Components of ecosystem - producers, consumers, decomposers, Food chains, food webs, ecological pyramids, Energy flow in ecosystem. Bio-geo- chemical cycles, Hydrologic cycle
Components of Environment and their relationship, Impact of technology on environment, Environmental degradation. Environmental planning of urban network services such as water supply, sewerage, solid waste management.
- **ENVIRONMENTAL POLLUTION (10 hours)**
Water, air, soil, noise, thermal and radioactive, marine pollution: sources, effects and engineering control strategies. Drinking water quality and standards, Ambient air and noise quality standards
- **GLOBAL ENVIRONMENTAL ISSUES AND ITS MANAGEMENT (8 hours)**
Engineering aspects of climate change. Acid rain, depletion of ozone layer. Concept of carbon credit. Concepts of Environmental impact assessment and Environmental audit. Environmental life cycle assessment
- **GLOBAL AND NATIONAL ENERGY SCENARIO. (1 hours)**
- **INTRODUCTION TO ENERGY SOURCES (2 hours)**
Classification of Energy Sources in terms of Primary and Secondary Sources, Commercial and Non Commercial Sources of Energy; Renewable and Fossil based Sources of Energy;
- **INTRODUCTION TO FUELS AND ITS PROPERTIES (1 hours)**
- **INTRODUCTION TO VARIOUS ENERGY CONVERSION SYSTEMS (6 hours)**
like Power Plant, Pump, Refrigerator, Air Conditioner, Internal Combustion Engine, Solar PV Cell, Solar Water Heating System, Biogas Plant, Wind Turbine System general functioning including their normal rating specifications.
- **ASPECTS OF ENERGY CONSERVATION AND MANAGEMENT (4 hours)**
Energy Conservation Act, Energy Policy of Company; Need for Energy Standards and Labelling; Energy Building Codes.
- **ENERGY STORAGE IN BATTERIES (2 hours)**
Type of batteries; Electric Vehicles

(Total Lecture Hours: 42)

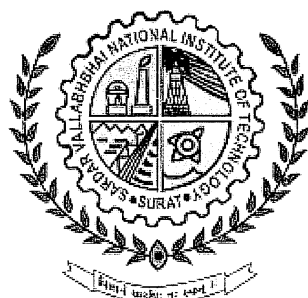
PRACTICALS

1. Study of different ecosystem and different Biochemical cycles.
2. Study of Water Treatment Plant.
3. Study of Water Distribution Network.
4. Study of Effluent Treatment Plant
5. Study of Solid Waste Management system for urban area.
6. Demonstration of air pollution and noise monitoring equipments
7. Exercise on life cycle Assessment
8. Exercise on EIA
9. Exercise on Quantifying energy and energy growth demand
10. Analysis of Carbon Credit
11. Tutorial on Energy in Built environment

REFERENCES

1. Daniel B Botkin & Edward A Keller, Environmental Sciences, John Wiley & Sons
2. R. Rajagopalan, Environmental Studies, Oxford University Press
3. Benny Joseph, Environmental Studies, TMH publishers
4. Dr. Suresh K Dhameja ,Environmental Studies, S K Kataria & Sons, 2007
5. U K Khare, Basics of Environmental Studies, Tata McGrawHill, 2011

ACADEMIC REGULATIONS FOR DOCTORAL PROGRAMMES



July 2019 (onwards)

SARDAR VALLABHBHAI NATIONAL INSTITUTE OF TECHNOLOGY
SURAT, GUJARAT, INDIA



S. V. NATIONAL INSTITUTE OF TECHNOLOGY SURAT

REGULATIONS FOR DOCTORAL PROGRAMMES

01 PREAMBLE

The Provisions in these regulations govern the conditions for admission, imparting courses of instructions, conduction of examinations and evaluation of performance of students leading to Ph. D. degrees.

These regulations are effective for all the batches of students (including admitted previously unless specified specifically for a particular clause) from the academic year 2019-2020 (Odd Semester) onwards. The regulations mentioned herein are subject to change after due approval of Institute Senate time to time.

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

- Department of Civil Engineering
- Department of Applied Mechanics
- Department of Mechanical Engineering
- Department of Electrical Engineering
- Department of Electronics Engineering
- Department of Computer Engineering
- Department of Chemical Engineering
- Department of Applied Mathematics & Humanities
(Mathematics, Management and English)
- Department of Applied Physics
- Department of Applied Chemistry

The provision of these Regulations shall be applicable to any new disciplines that are introduced from time to time.

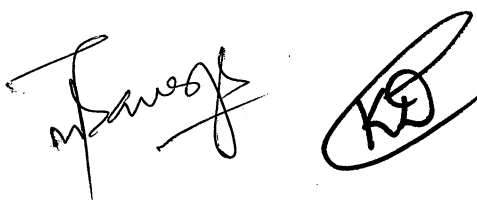
Notwithstanding any of the Clause(s) provided in the Regulations, the Senate shall exercise its powers to change/amend/interpret/implement decisions and actions concerned with academic matters.

The Board of Governors of the Institute may, on the recommendation of the Senate, change any or all parts of these Regulations as per the requirement of the Institute.

02 ADMISSION

2.1 Category of PhD students:

There shall be provision for two categories of registration to the candidates willing to register for Ph.D Programmmes.



I : Full time :

Students who are willing to pursue research on full time basis

II : Part-time:

- (a) Institute faculty, Staff and Project staff.
- (b) Faculty staff and Project staff working in any Technical Institute duly approved by competent authority namely AICTE/UGC/DST etc.
- (c) Candidate working in any Public/Private sector organization or Research Laboratory / Organizations who is willing to pursue Research on part-time basis.

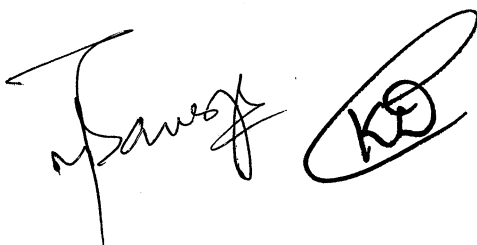
The status of the candidates admitted to the Ph.D. Programme shall be further classified under any one of the following sub-categories:

- Full-time Institute Research Scholars (FIR).
- Full-time Research Scholars paid by Government/Semi-Government organizations/QIP/DST etc. (FRS).
- Full-time sponsored candidates (FSC).
- Part-time Institute Faculty and Staff of SVNIT (PIS).
- Full-time Project Staff of SVNIT (FPS).
- Part-time External candidates (PEC).
- Full-time Self-financing candidates (FSF).
- Full-time Study leave candidates (FSL)

Note:

Full-time Institute Research Scholars are recipients of the Institute scholarships and are governed by the Scholarship rules.

- i. Full-time Research Scholars paid by Government/Semi-Government organizations such as CSIR, UGC, QIP, DAE, AICTE, etc. will receive their stipend and contingency grants from their respective supporting organizations.
- iii Full-time sponsored candidates are recipients of complete financial support including stipend, contingency grants and project expenses from the sponsoring organizations.
- iv. Part-time Institute Faculty/Staff, Project Staff are expected to work for their Ph.D Programs while fulfilling their normal duties.
- v. Part-time External candidates are allowed to carry out their Research work at the Institute or at their parent organization after fulfilling certain pre-requisites at the Institute. They are not entitled for Institute scholarship. The external candidate shall produce a



relevant sponsorship or no objection certificate from his employer and submit it along with the application for admission.

- vi Full-time Self-financing candidates and Full-time candidates on study leave are expected to work full-time and are subject to the rules of the Institute.

2.2 Eligibility for Admission:

The eligibility criteria for admission to Ph.D. in Engineering Faculty, Science Faculty, Humanities Faculty and Interdisciplinary areas are:

2.2.1 A candidate shall possess Master's Degree in relevant area of Research and should have passed with minimum 60% marks (CGPA 6.0) or equivalent in respective faculty for open / open-EW/OBC candidates whereas 55% marks (CGPA 5.5) in the case of SC/ ST/ PwD candidates. Full time Institute Research scholars (FIR) taking admission in PhD Programs in Engineering, Sciences, English and Management should have qualified GATE/NET/CAT Examinations, at least once, in his/her academic career.

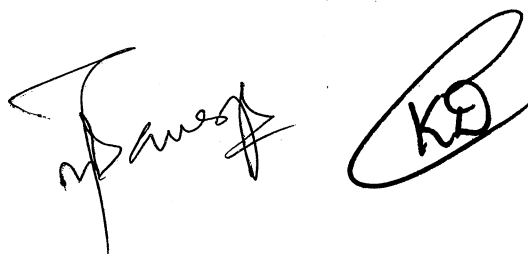
2.2.2 If a student of full-time M. Tech. program from SVNIT wants to change over to a Ph.D. programme of the Institute, he/she may be permitted to do so from the beginning of the second year provided:

He/She has obtained a CGPA of 8.0 or above after having registered for the full credits of course work in each of the first and second semester of M. Tech. Program.

- (a) The final selection of the candidate for the Doctoral programs under all categories, as cited at Para 2.2.1 and Para 2.2.2, will be strictly subjected to the performance of the candidate in the written test followed by presentation/interviews before respective selection committees of the department. The selection committee for the PhD admission process including interviews will comprise of all eligible PhD supervisors of the concern department.

The written examination will be taken by concerned department. It will be used for initial screening of the candidates. The question paper format and topics for the test will be decided by the concerned department. The candidates who do not obtain 35 percentile in the written test will not be allowed to appear in the Interviews/presentation.

- (b) Once a student changes to Ph.D. Programme, thereafter, he is governed by the Regulations of the Ph.D. Programme of the Institute.



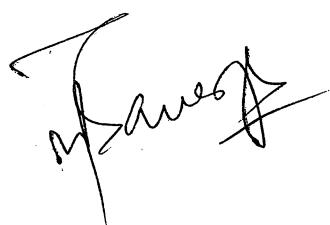
The candidate may be asked to earn 16 more credits through course work as per the requirement of the doctoral program and after successful completion of the requirement of Ph.D, he/she should be given dual M.Tech. and Ph.D. degree.

2.2.3 Candidate who has qualified for award of Bachelor's degree in Engineering / Technology from Institute of National Importance including Centrally funded technical Institutions of repute/ with exceptionally good academic record in prescribed discipline will also be considered for direct admission to Ph.D. Programme subject to the following conditions:

- (a) The candidate should have 8.00 CGPA on 10 point scale in his/her B.E./B.Tech. Programme. If the degree is based on percentage aggregates marks, it will be converted in to CGPA as per the rule of this institute.
- (b) The candidate should have valid GATE score and he/she should be top 15% scorer of his/her batch in relevant branch.
- (c) The final selection will be through written test/ presentation/interview in the department.
- (d) The candidate should earn 38 credits within first TWO semesters of his/her program through the theory/practical course work after joining the program. The departmental Research Progress Committee (DRPC) will constitute the Research Progress Committee (RPC) at the beginning of program of each student. The RPC Committee of student, in turn, will decide the relevant courses required to be studied by him/her for his/her programme. The requirements of the practical courses are required to be spelled out by RPC. However, if RPC feels, few self-studies theory courses can be designed / recommended by the committee for the respective students. However, these self-study theory courses and their contents should be approved by the SEC of Senate/ Senate of the Institute.

The Institute will invite applications from such candidates and regulate the admission as per the written test and Interviews cited in Para 2.2.2(a) above.

- (e) The candidate should score 7.50 CGPA through course work as enumerated at (c) above.
- (f) The candidate has to complete his Ph.D programmes within 3 -7 years.
- (g) The category of student will remain the same, i.e. Full time Institute Research Scholar (FIR) up to four years. Beyond four years, he/she may change the category, if required.



The Senate shall approve the schedule of academic activities for the Research Programme including the date of registration.

03 COURSE STRUCTURE:

- 3.1 The complete Research Programme will be of minimum 3 years duration for all full-time and part-time candidates. The maximum period allowed for full-time and for part-time candidates is 7 years. However, the fellowship/Assistantship will be offered for maximum five years in the case of full time institute research scholars (FIR). The duration/amount of fellowship is likely to change as per the directives of MHRD, GOI time to time.

Every stream of specialization in the program will have a curriculum and syllabi for the courses approved by the Senate. The curriculum should be so drawn up that the minimum number of credits on successful completion of the course work including seminar in any stream should be 16 within first two semesters. For completion of 16 Credits, the student has to register for at least THREE Theory courses from the existing theory courses being floated for PG Programs in the Institute/NPTEL/SWAYAM. The PhD supervisors will ensure that students, who have completed their PG Programs from this Institute, should not opt for the same course as opted by them in their PG studies. Further, out of THREE Theory courses, to be opted by the student, it is mandatory to opt at least one theory course on 'Research Methodology' which may enhance research capability of the student.

For directly admitted students after B.E./ B.Tech. or equivalent degree, the candidate should earn 38 credits within first TWO semesters of his/her programme through the theory/practical course work after joining the programme.

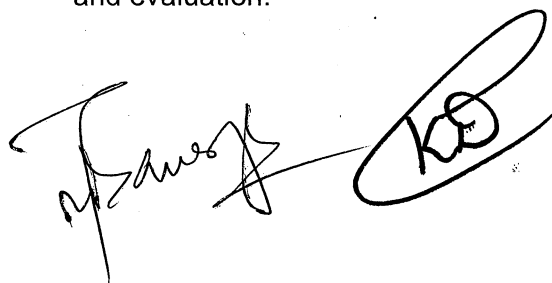
Credits will be assigned to the courses based on the following pattern:

- One credit for each lecture/tutorial period.
- One credit for two hours of practical.

The medium of instruction, examination, seminar and project reports will be English.

The credit Seminars shall satisfy the following conditions:

- Each seminar shall carry four credits. The student can register for maximum one credit seminar for meeting his/her course credit requirements.
- Seminar shall be treated as a Course for purpose of registration and evaluation.



- Seminar coordinators appointed by the Department shall organize the seminars and forward the grades awarded by the panels of examiners to the Academic Section by the end of the semester.

After completion of course credits, there will be comprehensive assessment, consisting of written test followed by viva-voce examination of the PhD students in presence of a committee, specialisation wise, with following constitution, to be appointed by the Chairman, DAAC.

- a) Chairman (HOD / Section Head)
- b) Member (Expert faculty in the relevant specialization from the department)
- c) Member (Expert faculty in the relevant specialization from the department)
- d) Concern supervisor(s) of PhD candidates

The comprehensive assessment of all the PhD scholars, who have completed their course credit requirements, in a particular semester will be held together to maintain the uniformity of assessment. The student should be able to score minimum 60% marks to be qualified in the comprehensive assessment and be eligible for registration for research progress seminar.

In case the candidate is unable to qualify in the first comprehensive assessment, he/she will be given one more chance in the next semester. The maximum number of attempts for passing the comprehensive assessment will be limited to two (2).

04 REGISTRATION:

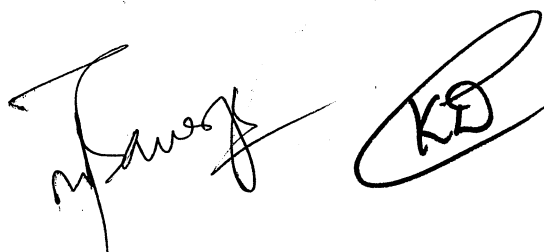
Every student after consulting his/her Supervisor is required to register mandatorily for the approved courses with the PhD Coordinator of respective Department at the commencement of each semester on the day fixed for such registration and notified in the Academic Calendar.

If a student fails to register in a given Semester, his/her name will be removed from the Institute roll.

The students who will be reporting further for late registration, their cases will be considered by the Institute director on case to case basis.

Only those students will be permitted to register in the next semester who have:

- (a) Cleared all Institute, Hostel and Library dues and fines (if any) of the previous semesters.



- (b) Paid all required advance payments of Institute and Hostel dues for the current semester and
- (c) Not been debarred from registering on any specific ground.

The procedure for registration for courses shall be as follows:

- The candidate shall obtain Course Registration Forms (CRF) and 'First Registration for Ph. D. Programme' form, from the Academic Section after payment of the prescribed fees.
- The Department shall finalize the entire course programme of the candidate in consultation with the Supervisor(s). The course programme will include the course(s) to be registered and credit seminar(s) to be delivered by the student.
- The Candidate shall fill in the CRF and 'First Registration for Ph. D. Programme' form, in consultation with the Supervisor(s) and submit them to the academic section and respective Department.
- The Dean (Academics) shall inform the IAAC of any discrepancy in the Registration. However, the candidates should ensure on their own that they comply with the credit requirements.
- The DAAC shall approve the course programmes of all candidates after due scrutiny.

A candidate can add to his academic load one or more courses not registered for earlier or substitute one or more courses by others within the first two weeks from the commencement of classes provided the course credit requirements remain unchanged.

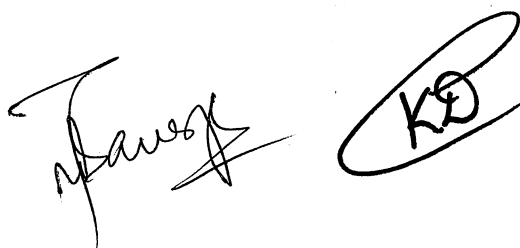
Every student, *after fulfilling of minimum credit requirements and passing the comprehensive*, has to do confirmation of registration for Ph.D. programme by filling the appropriate form.

05 COURSE CREDIT REQUIREMENTS:

All students, including those admitted after first year of their M Tech Programs from SVNIT, are required to earn 16 credits during the first two semesters. For students directly admitted after B.E./B.Tech. or equivalent degree, the candidate should earn 38 credits within first TWO semesters of his/her program through the theory/practical course work after joining the programme.

06 GRADING SYSTEM:

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



Grade	Grade Points	Description of Performance
AA	10	Outstanding
AB	9	Excellent
BB	8	Very Good
BC	7	Good
CC	6	Average
CD	5	Below Average
DD	4	Marginal
FF	0	Fail
II	-	Incomplete
NA	-	Not Appeared
WW	-	Withdrawal
XX	-	Unsatisfactory attendance in a course

(a) Description of Grades:

AA Grade

An 'AA' grade stands for outstanding achievement. The minimum marks for award of 'AA' grade are 80%. However, individual course coordinators may set a different requirement depending upon the class performance.

DD Grade

The 'DD' grade stands for marginal performance, i.e. it is the minimum passing grade in any course. The minimum % of marks for award of the 'DD' grade is 36%. However, the student must secure at least 30% marks in the end semester examination, otherwise he/she will be awarded the FF grade.

II and NA Grades

An 'II' grade denotes incomplete performance in any course (theory, lab) due to absence at the end of semester on medical grounds. In case of absence on medical grounds, before or during the end semester examinations, the student can apply for 'II' grade. An application requesting 'II' grade should be made at the earliest, but not later than the last day of the examination. This application should be

made to the Head of Department of the student's Programme who, depending on the merit of the case, will grant approval and inform all the concerned course coordinators and D.R. (Academic). The student should subsequently complete all course requirements within fifteen days from the date of the last end semester examination except in theory courses. The 'II' grade will then be converted to a proper grade (AA to FF). The students who remain absent in the end semester examination or supplementary examinations (not on medical grounds) will be awarded 'NA' grade instead of 'II' grade. II grade will be awarded only on medical grounds.

FF Grade

The 'FF' grade denotes poor performance, i.e. failing in a course. A student has to repeat all compulsory (core) courses in which he/she obtains 'FF' grade, until a passing grade is obtained. For the other (elective) courses in which 'FF' grade has been obtained, the student may take the same course or any other course from the same category.

WW Grade

A 'WW' grade is awarded in a course where the student has opted to withdraw from the course. Withdrawal from a course is permitted until one week before the mid-semester examination.

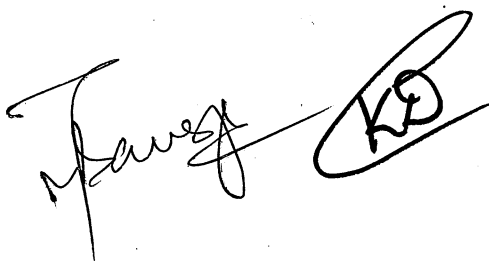
XX Grade

The 'XX' grade is awarded for unsatisfactory attendance and student has to repeat the course during the next year whenever it is offered.

- (b) A candidate is considered to have completed a subject successfully and earned the credits if he secures a letter grade other than 'XX' or 'FF' in that subject. A letter grade 'FF' in any subject implies a failure in that subject.

Communication of Grades:

- a) The course coordinator has to make MIS entries and submit the results of his/her course. However, the grade sheet generated by the MIS must be submitted by the course coordinator within 2 days of online submission to the Examination/Academic Section.
- b) End semester examination answer scripts and the sheet containing details of marks converted to grades, shall be preserved by the Course Instructor(s) concerned for a period of one year.
- c) For the benefit of and as a process of learning by the students, the answer books after corrections of mid semester and end



semester examinations should be shown to the students within 2 weeks from the date of examinations.

Any change of grade of a student in a subject, consequent upon detection of any genuine error or omission on part of the concerned Course Instructor, must be sent by the concerned Course Instructor through the concerned H.O.D. to the DAAC within 3 weeks of publication of end-semester results. If approved, the Chairman- DAAC should forward the same to the Academic Section for incorporating the necessary changes in the grade.

Appearing at the end-semester examination is compulsory for a student. If a student fails to appear at the end-semester examination he will be assigned 'NA' grade in the subject.

The Grade Report shall contain the Letter Grade for each course and CGPA information.

Credit Seminar:

The student will submit two copies of credit seminar report to his supervisor(s) at any time in the semester in which he has registered for the same. The student shall make oral presentation on his/her seminar topic as per time schedule decided by his supervisor(s). The seminar will be assessed during this presentation by a committee comprising of

- (i) Concerned supervisor(s).
- (ii) One faculty member as examiner conversant with the credit seminar topic to be nominated by the supervisor(s) in consultation with the HOD/Chairman of DAAC.
- (iii) A Chairman nominated by the HOD/Chairman of DAAC from other department.

The credit seminar assessment will be initially made in terms of marks with 40 % weight age on the credit seminar report evaluated by the supervisor. The oral presentation and the response of the student in the discussion will be given 60 % weight age which will be awarded by the committee of examiners and the chairman. On completion of assessment compilation of the marks given on the report and the presentation, the chairman will convert the marks into grades and forward the same to the Academic Section.

If a student does not submit the Seminar report and/or does not present the Seminar on the scheduled date, he will be awarded 'FF' grade unless the department extends the date in exceptional circumstances.

All the students who have got 'FF' grade in Seminar be allowed to present Seminar afresh during the period of re-examination. In such a

case the student should not be awarded a grade better than CC grade in the Seminar.

The performance of a student is evaluated in terms of two indices, viz. the Semester Grade Point Average (SGPA) which is the Grade Point Average for a semester and Cumulative Grade Point Average (CGPA) which is the Grade Point Average for all the completed semesters, at any point of time.

$$SGPA = \frac{\sum_{sem} (Earned Credit \times Grade point)}{\sum_{sem} (Course Credit in Semester)}$$

The **CGPA** is calculated on the basis of all pass grades obtained in all completed semesters.

$$CGPA = \frac{\sum_{All Sems. Completed} (Course Credit \times Grade Point) \text{ in passed courses}}{\sum_{All Sems. Completed} (Course Credit) \text{ in passed courses}}$$

Both SGPA and CGPA will be rounded off to second place of decimal and recorded as such.

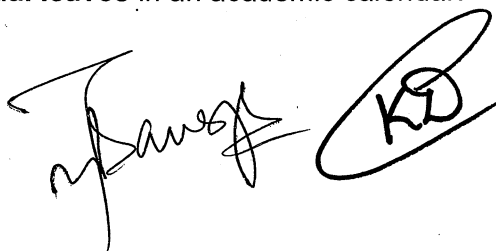
07 ATTENDANCE:

Attendance in all classes (Lectures, Tutorials etc.) must be at least 75 % of the total classes. A student will be debarred from appearing in an examination if his attendance falls below 75 % including all types of leave.

Leave or Absence:

Prior application for leave has to be submitted by the student to the Head of the Department concerned stating fully the reasons for the leave requested along with supporting document(s), wherever applicable. Such leave will be granted by the Head of the Department and the absence will not be counted for computation of attendance. The norms of granting the leaves to the PhD students are appended in following paragraphs:

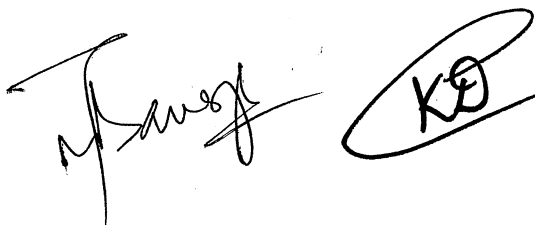
- A full-time / sponsored (full time) Ph.D. scholar, during his/her stay at the Institute will be entitled for **30 days** leave during each academic year, including leave on medical ground. These scholars are not entitled to have vacation. Even during mid- / end semester breaks and summer and winter vacations, he/she will have to explicitly apply for leave.
- A full-time / sponsored (full time) Ph.D. scholar is eligible for eight (8) **casual leaves** in an academic calendar.



- c) Duty leaves up to thirty **(30) days** in an academic year may be granted by HOD on recommendation of Ph.D. Supervisor for data collection, testing / measurements (if facility not available within the Institute), presenting research papers in conferences, attending workshops/conferences including training programmes / seminars required for his/her research work, etc. Additional period of duty leaves, if required, may be sanctioned by Dean (Academics) based on the recommendation of Ph.D. Supervisor and HOD.
- d) The Ph.D. student may be allowed to leave station for visiting other places (in addition to the collaborating Organizations / Institutes / Industries) preferably after completion of their course work or during vacations when there is no teaching work scheduled, if recommended by Supervisor and HOD, and approved by Dean Academic well in advance.
- e) Research scholar will be eligible for Maternity/Paternity Leaves with Assistantship as per Govt. of India notifications released from time to time for research scholars
- (i) In case the PhD student is on roll for part of the academic year, the proportionate leaves can be availed by him/her.
- (ii) Leaves of the student of any kind will not be carried forward to the next academic calendar.
- (iii) Calculations of Prefix and suffix for availing holidays with the leaves will be as per the norms of Earned leaves/casual leaves of the Institute faculty members.

Absence for a period not exceeding one week in a semester due to sickness or any other unavoidable reasons for which prior application could not be made may be condoned by the Head of the Department provided he is satisfied with the explanation. This leave is subject to certification by Competent Medical Authorities and attested by Institute Medical Officer. However, the total absence in a semester including all types of leave should not exceed 25% and compliance of attendance requirement under Clause 7 is met.

- f) If the period of absence is likely to exceed two weeks, a prior application for grant of leave will have to be submitted through the Head of the Department to the Dean (Academics) with supporting documents. In each case, the decision to grant leave shall be taken by the Dean (Academics) on the recommendation of the Head of the Department. However, stipend payment for the FIR/QIP students shall be governed as per the rules of the Institute.
- g) The Dean (Academics) may, on receipt of an application also decide whether the student be asked to withdraw from the course for that particular semester because of long absence.



- h) If a student is continuously absent from the Institute for more than six weeks without notifying the Dean (Academics) of the Institute his/her name will be removed from the Institute roll. However, such student may appeal to the Director to reconsider his/her case on merit. However, the decision of director will be final and binding to the student.
- i) It will be the responsibility of the student to intimate the Dean (Student Welfare), the Warden of the hostel in which he is residing and the concerned Course Instructor about his absence before availing the leave.

08 ASSESSMENT OF COURSE WORK PERFORMANCE:

The evaluation pattern for the theory courses shall be as under:

Mid Semester exam	: 30 marks
Assignment/Quizzes	: 20 marks
Tutorials (if applicable)	: 25 marks
End Semester Exam	: 50 marks

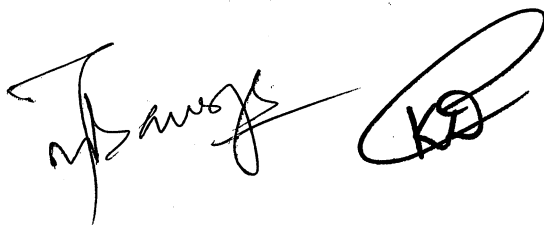
The mid and end semester examinations are of 1.5 hour and 3 hours respectively. The question paper for the end semester examination in a subject may be prepared for 100 marks and the performance assessment of the student may be carried out. However, subsequently, the marks obtained by the student in the end semester examination shall be scaled down to half and the marks shall be awarded out of 50. However, preparing the question paper for 100 marks is not compulsory and the individual course coordinator may decide whether to prepare it for 100 marks or 50 marks. If the question paper is prepared for 50 marks then the marks obtained by the student in the end semester examination shall not be scaled down to half. To maintain the examination schedules uniform, the duration of the end semester examination can be 3 hours irrespective of whether the question paper is set for 100 marks or 50marks.

The minimum CGPA for Course Work and Seminar is 6.0 to be eligible to continue the Research Programme and thereafter the confirmation of Registration shall be done.

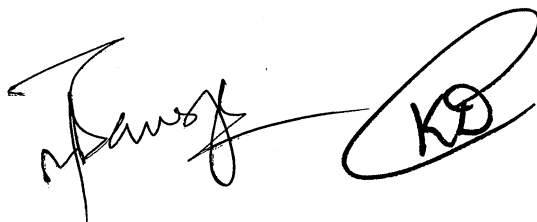
09 WITHHOLDING OF GRADES:

Grades shall be withheld when the student has not paid his dues or when there is a disciplinary action pending against him.

10 SUPERVISOR:



- 10.1 In each Department, applicants will be given at the time of selection the details of various research topics proposed by various faculty members for Ph.D. programmes so that they will have an opportunity to discuss those topics with the respective faculty members and thereafter, indicate their choice in order of preference. The applicants shall then be interviewed by a committee constituted by the DAAC.
- 10.2 All selected candidates shall be assigned to minimum one or two supervisor(s) from the Institute at the time of selection.
- (a) Each external candidate may have only one additional supervisor in the sponsoring / parent organization where he is employed.
 - (b) The Research programme and the title of the research topic of a selected candidate shall be finalized by his Supervisor(s) after mutual discussion.
 - (c) The External supervisor(s) of the PhD Program will not be paid TA/DA.
 - (d) A PhD supervisor can have maximum number of candidate as per the approved policy of the Institute Senate time to time.
- 10.3.1 (a) Change of Supervisor(s) under exceptional circumstances shall be permitted on recommendation of the DAAC after obtaining the consent of (i) the candidate (ii) the present Supervisor(s) and (iii) the proposed Supervisor(s).
- (b) If the Research programme and / or area of the work require modification due to this change, the candidates' entire course programme requirement shall be examined by the DAAC. If there is a change in the Research programme and / or title of the work, the registration date shall be revised, if found necessary.
- 10.4 (a) Whenever a Supervisor leaves the Institute permanently or temporarily for a period exceeding one year, the DAAC shall appoint new Supervisor(s) for the students before his departure. This is not applicable for candidate having more than one supervisor from the institute.
- (b) Whenever a Supervisor leaves the Institute temporarily for a period less than one year the DAAC shall make alternative arrangement, if necessary, for the guidance of his students.
 - (c) The DAAC may consider continuation of the original Supervisor on his return to the Institute, as Co-supervisor of his students

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depending on the period for which he has supervised their Ph.D. programmes.

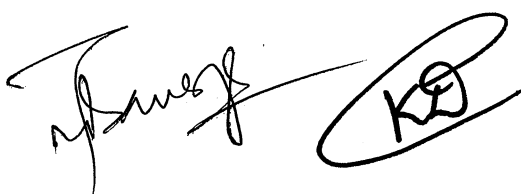
- (d) Any such arrangements made shall be forwarded to the IAAC for prior approval.

10.5 The number of PhD scholar working with a PhD supervisor, at a given point of time, would be as under:

- (i) Maximum Seven (07) number of PhD candidates (either singly or jointly), excluding FIRs and candidates under sponsored research projects can be taken by a PhD Supervisor at a given instant.
- (ii) The candidate(s) who have submitted synopsis is (are) excluded from the above number.
- (iii) The maximum number of FIRs with a PhD supervisor would be Four (04) (04 as single supervisor or 08 as co-supervisor) at a given instant in the Institute.

10.6 Eligibility for Supervisor/Co-Supervisor:

- (a) Any regular faculty member of the institute will be the approved Ph. D. supervisor as soon as he/she obtains his/her Ph. D. qualification or joins the institute with Ph. D. degree.
- (b) The existing eligible PhD supervisors, who are retiring within three years, can take the PhD students as Co-supervisor provided main supervisor is included from the department, having their service more than Seven years.
- (c) Regular faculty members (having Ph.D.) of all IITs, IIMs, IISc, NITs and all CFTIs (Centrally Funded Technical Institutes) are considered as recognized Supervisors by the Institute. However, they must be recognized as supervisors in their respective institutes as well. The Director of NITs/IITs, Head of the Dept./Section of National Laboratories like ISRO/CSIR/PRL, etc. will be considered as a supervisor subject to his/her consent (however, the condition of recognition as a supervisor in his/her own institution/organization is not compulsory).
- (d) The application for recognition as a co-supervisor is allowed only during the first three semesters of registration of the candidate.
- (e) In all cases for Ph.D. registration, one of the supervisors shall be compulsorily from the Institute except for the case as per clause 10.6.b.

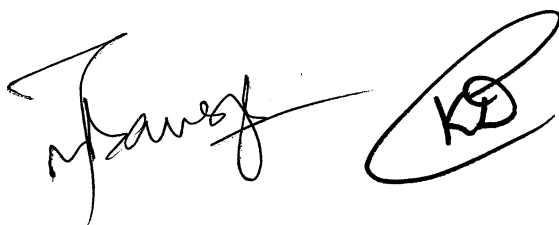


- (f) In case of Interdisciplinary areas, at least one supervisor(s) must belong to the discipline in which the student is registered for Research.
- (g) Any faculty member having Ph. D. degree and retired voluntarily or upon reaching superannuation from the institute (SVNIT) will be treated as approved External Ph. D. supervisor. He can only be the Co-supervisor. However, he/ she can continue to be the main supervisor for any candidate already registered with him / her for three years prior to his / her retirement.
- (h) If a qualified faculty member from a reputed institute, having consistently good ranking in NIRF (National Institutional Ranking Framework)(other than the IITs, IIMs, IISc, NITs and CFTIs) or a qualified person from a reputed industry/research organization applies for recognition as a co-Supervisor through proper channel of his/her institute/industry/research organization, then the case may be discussed in the respective DAAC meeting and the recommendation may be sent to IAAC for further consideration. However, they must be recognized as supervisors in their respective institutes/universities as well (except those from reputed industries). The recognition is only Ph.D. candidate-specific.

11 PLACE OF WORK, PROGRESS AND DURATION:

On the recommendations of the Supervisor(s) and DAAC the Institute may allow the Research work for the Ph.D. degree to be partially or wholly carried out at another organization duly approved for the purpose by the Institute for part-time Ph.D. students. The FIR category students may carry out part of their research work at organization(s) with whom the institute has entered into MoU. However, relaxation of MoU for sending PhD student will be considered by the Director on case to case basis. Their attendance will be calculated as official visit. The total duration of work at outside should not exceed more than 30% of total duration(maximum one year).

- 11.1 The external organization where a candidate wishes to carry out the Research work partially or wholly shall have to be recognized by the Institute before such work is undertaken.
- 11.2 a) The formation of RPC for each student shall be completed by the Chairman DAAC immediately after completion of minimum credit requirements and comprehensive assessment. The details of such committee formation will be intimated to the Dean(Academic) of the Institute.
- b) The RPC shall comprise of the following members.
 - (i) Concerned Supervisor(s)

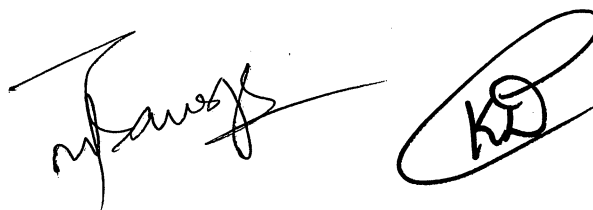


- (ii) One or two faculty member nominated by his supervisor(s) from the concerned department or other department or external expert who is / are familiar with the concerned area of research work.
 - (iii) One faculty member nominated by the Chairman DAAC who is familiar with the concerned area of research work.
 - (iv) One faculty member from the other department as the Chairman of RPC to be nominated by the Chairman DAAC.
 - (v) The TA/DA and honorarium to the External RPC members, if any, be permitted as per the Institute rule.
- c) Each candidate, after completion of credit requirements and comprehensive assessment, will deliver a research progress seminar (RPS) in each semester before his/her research progress committee (RPC). The late presentation of RPS beyond the duration of any term, but not later than the last date of registration of the next term as per the academic calendar of the institute, is allowed. Any further extension required in delivering the RPS beyond the admissible date, on exceptional circumstances, has to be approved by the Dean (Academic) of the Institute.
- d) The RPC shall evaluate the progress of research work of the student and upon their satisfaction shall recommend continuation of his/her work. The RPC shall submit their evaluation report in the prescribed format, to the Dean (Academic) through the Chairman DAAC.
- e) The registration of the PhD candidate will automatically be discontinued, if he/she is awarded unsatisfactory in two research progress seminars.
- f) The members of RPC will be changed under extraordinary circumstances in consultation with the Dean (Academic).
- g) In the case of institute scholarship holder, the continuance of scholarship beyond four years and upto maximum of five years will be subjected to satisfactory progress made by him/her and recommendation of RPC panel as well as MHRD directives.
- 11.3 a) Every external candidate shall carry out a part of his/her study of his/her Research work residing at the Institute for a period, which shall be in no case less than one semester.

- b) The sponsoring organization has to certify that the candidate has been fully relieved of normal duties/granted leave during the period of the residential requirement.
- c) External candidates will be provided with hostel accommodation, subject to availability, only during the semester(s) in which the residential requirement is to be fulfilled. However, his stay may be extended for a period of more than six months if recommended by his Supervisor in some specific cases.
- d) The PhD candidates should be very careful in exercising their categories during the PhD admission. The change of category will invariably be discouraged during the program, however, under genuine circumstances; they will be permitted to change the category only after completion of 3rd semester.
 - Maximum number of category conversions allowed is limited to **one**. However, the Maximum number of category conversions allowed is limited to **two** for FPS and FRS categories of the students.
 - For category conversion to PEC, No Objection Certificate (NOC) from the employer/necessary documents must be produced within a month.
- e) Change of status from part-time to full-time or vice-versa will be subject to the approval of IAAC and noting from the Senate.

11.4 All full-time and part-time candidates have to carry out Research for at least a period of three years from the date of registration before submission of thesis. The above duration is inclusive of the Course Work, seminar and comprehensive assessment.

- 11.5
- a) The period of validity of Ph.D. registration is seven years in case of full time and part time scholars. The candidates may submit their thesis before the end of this period subject to the provisions of 11.4. (Any candidate who concurrently registers for any other degree courses at another organization shall be automatically de-registered at the Institute).
 - b) Research Scholars/Staff who have delivered pre-synopsis seminar of the thesis may be permitted by IAAC on recommendations of the DAAC to leave the Institute and submit the thesis from outside within a period of six months provided they fulfill the provisions of all other rules.



12 THESIS EVALUATION:

Prior to the submission of the synopsis of the thesis, a comprehensive internal assessment of the Research work should be made by panel consisting of the RPC members and one or two faculty members, who are familiar with the concerned area of research work from the Institute, appointed by the Dean (Academic) in consultation with the supervisor(s).

12.1 This assessment will be through a pre-synopsis seminar. The candidate can submit the synopsis only if the panel is satisfied about the quality of the work for submission as a PhD. thesis. The permission for conduct of Pre-synopsis shall be given only as and when the student has acceptance of minimum TWO Technical papers in Journals enlisted in SCI/SCI(E) (Clarivate Analytics) /Scopus/web of Sciences (non-paid journals). Conditional Pre-synopsis will not be allowed. It is suggested that PhD supervisor should arrange the conduct of Pre-synopsis seminar of the student, if draft PhD thesis is ready for submission. The student will incorporate the corrections suggested by the Pre-synopsis seminar committee in the PhD Thesis.

- a) Details of the pre-synopsis seminar shall be adequately notified so as to enable interested staff members and students to attend the same.
- b) The Chairman of the 'panel' shall forward the panel's report to the Dean (Academic)'s office.

12.2 a) The synopsis is to be submitted within two months from the date of successful completion of pre-synopsis seminar. The candidate shall submit 2 hard copies and a soft copy (in CD) of the synopsis of his work at least one month before submitting the thesis to the Dean (Academic). The soft copy can be used for quick communications with the examiners. If the synopsis is not submitted within two months from the date of successful completion of the pre-synopsis seminar, then the candidate has to apply for extension (of a maximum period of one month) to the Dean (Academic) through the supervisor and the Chairman, DAAC. In case the student, is not able to submit the synopsis in the extended period, the pre-synopsis given by the candidate be treated as Research Progress seminar and he/she has to appear for Pre-synopsis Seminar in current/next semester. The candidate has to complete his all PhD requirement within the time limit defined in para 11.5 (a).

The candidate can submit synopsis and thesis on the same day. If a candidate does not submit his/her thesis within six months from the date of submission of synopsis, he has to apply for an extension (of a maximum period of TWO months) to the Dean (Academic) through the supervisor and the Chairman, DAAC.

The Dean (Academic) will present the same to the IAAC for approval. In such case, the student has to continue his registration during the extended period. If the candidate fails to submit the thesis within the extended period, then his/her registration will be deemed to be cancelled.

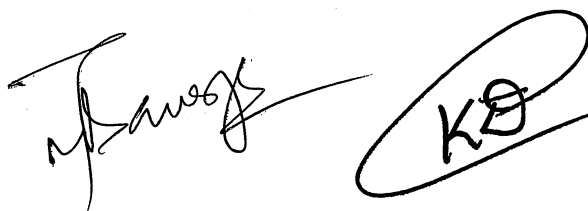
b) The copies of the synopsis will be forwarded by the Dean (Academic) to the Academic Section with the following certificates:

- I Certificate from the Chairman, DAAC that the prescribed course credits is completed.
- II Copy of report from the Chairman of the panel of examiners for pre-synopsis seminar.
- III Certificate that the pre-synopsis seminar has been completed satisfactorily.
- IV Certificate from the Research Supervisor(s) stating:
 - i. That there is a *prima facie* case for consideration of the thesis.
 - ii. That the thesis does not contain any work which has been previously submitted for the award or any degree, and
 - iii. The extent of collaboration, if any,
 - iv. "No dues Certificate" from all Sections, Hostel and Library that there are no arrears/dues up to the date of submission of the synopsis.

12.3 a) The thesis shall be written in English in the approved format (printed on both sides of the pages) and as per the broad guidelines.

b) The candidate shall submit two copies of the thesis and a soft copy (in CD) within six months after submission of synopsis to the Academic Section within the prescribed time limit, namely, not earlier than one month and not later than the limit specified in clause 12.2 (a). Depending upon the preference of the examiner, either hard copy or soft copy can be sent to him/her.

c) The PhD Thesis, at the end, should also consist of a declaration certificate as per the format approved in anti-plagiarism policy of the Institute.



- d) Along with the thesis, the candidate shall submit the requisite forms containing the authorization from the Research Supervisor(s) for submission of the thesis and a certificate from Accounts Section that there are no dues against the candidate.

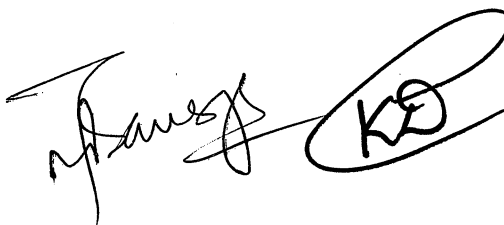
12.4.1a) After satisfactory completion of pre-synopsis seminar, supervisor(s) will submit the proposed list of external referees along with synopsis of PhD Thesis to the Dean (Academic) of the Institute through HOD/Chairman DAAC. The list should be consisting of complete addresses (including e-mail addresses and web links showing area of interest) of five members each from renowned universities/ research organizations in abroad and well reputed institutes (IITs, IISCs, NITs, CSIR laboratories and centrally funded universities of India). The enlisting of few reputed state Universities with high ranking in NIRF (MHRD) from India can be undertaken from whom the referees for PhD panel can be invited. The HOD/Chairman DAAC upon his satisfaction shall forward the same to the Dean (Academic). The Dean (Academic) upon his/her satisfaction shall forward it to the Director as the Senate Chairman for choosing two external referees consisting of one each from India and abroad.

- b) The referees shall independently report to the Dean (Academic), preferably within six weeks from the date of their receipt of the thesis (either hard copy or soft copy). The Deputy Registrar (Academic) while forwarding the PhD Thesis to the referees, should convey to them that their reports should include-

- a critical survey and evaluation of the quality and quantity of the work as embodied in the thesis.
- Questions, if any, to be asked or points to be clarified at the viva-voce examination, and
- A definite recommendation as to whether the thesis is acceptable for the award of the degree of Doctor of Philosophy.

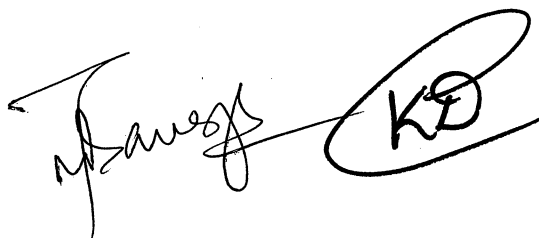
12.4.2 a) The copies of the referees' reports when received shall be confidentially made available in sealed envelope to the Research Supervisor(s). The Research Supervisor(s) shall send comments to Dean (Academic) on these reports.

- b) Dean (Academic) will submit the referee's reports and supervisor's comments to evaluation committee comprising of Dean (Academic) as Chairman, one recognized supervisor (other than the supervisor(s) of the concerned students) from the parent department and one recognized supervisor from other department. Such committee should be constituted by Dean (Academic) in each case. This committee will recommend to the Chairman Senate whether the thesis be accepted for the viva-

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voce examination or be rejected or be referred again to a new referee. If the thesis under evaluation is required to be sent back to the Indian / Foreigner referee (on his/her suggestion) for its perusal after due corrections by the candidate, the revised corrected and evaluated thesis need not be placed for further evaluation at the institute for ensuring incorporation of corrections by the candidate.

- c) A thesis may be considered acceptable for holding the viva-voce examination if both the referees give positive recommendations.
 - d) If one of them accepts and the other rejects the thesis, the thesis as it is (in original form), shall be referred to a third referee chosen from the panel of examiners by the Senate Chairman.
 - e) Whenever a thesis is referred to a third referee the comments of the Research Supervisor point by point for the queries by the first two referees should also be reported to the evaluation committee as specified in clause 12.4.2(b).
 - f) The Chairman Senate shall, however, be the final authority in deciding whether the thesis be accepted for the award of the degree.
- 12.5 a) If the referees(s) recommend acceptance of the thesis subject to major modifications, only the thesis can be resubmitted only once after incorporating the modifications, within a period of six months. The thesis so resubmitted shall be examined by the same referee(s).
- b) A thesis rejected by two referees may be re-submitted after revision, not earlier than one year and not later than two years from the date of such intimation to the candidate by the Dean (Academic). The thesis so resubmitted may be examined by the same referees or by new referees, as approved by the Chairman Senate.
- c) Rejection of the thesis so resubmitted as above (Para 12.5 b) will disqualify the candidate from further consideration for the award of the Ph. D. degree, in the topic of PhD chosen by him/her.
- 12.6 a) A candidate, whose thesis has been accepted for the award of the Ph.D. degree, shall be required to defend his/her work at an open viva-voce examination conducted by a Board of Examiners at the Institute. The permission for conducting the PhD examination on video conference or other online mode, on



exceptional cases be obtained from Chairman Senate on case to case basis.

- b) The Board of Examiners shall be appointed by the Senate Chairman and it shall consist of-
 - (I) A professor of the Institute, outside the department as Chairman,
 - (II) The Research Supervisor(s).
 - (III) One of the examiners from RPC or additional examiner of pre-synopsis to act as an internal examiner; and
 - (IV) One of the referees

In case the appointed referee is not available for Ph D viva voce examination, a referee from the approved panel can be requested for the examination after taking due approval of Senate Chairman.

- c) The Board of Examiners shall submit its report in the prescribed form to the Senate Chairman within 3 days after completion of viva-voce exam.
- 12.7
- a) After satisfactory completion of Viva voce exam, the degree may be conferred upon the candidate after approval by the Senate.
 - b) If a thesis has been accepted but the candidate fails at the viva-voce examination, he may be permitted by the Chairman Senate to re-appear for viva-voce examination again at a later date. The Recommendations of the Board of Examiners conducting the viva-voce examination shall be considered in taking a decision in this respect.
 - c) After successful completion of the viva-voce examination, the candidate shall submit to the Academic Section two copies of his approved thesis from the board of the examination along with the thesis submission application in the prescribed format.

13 SCHOLARSHIP:

13.1 The Institute Research Scholars (FIR) will be paid scholarship at a rate in accordance with the directives from the appropriate authorities as notified from time to time.

13.2 Institute Research Scholars are eligible to receive scholarship for a maximum period of Five years subjected to satisfaction of clause 11.2(g).

13.3 If in the opinion of the research progress committee the continuation of registration and scholarship cannot be recommended, the Committee may stipulate a period of time, not less than three months, for the candidate to re-appear before the research progress

committee for the consideration of continuation of research work and scholarship.

13 WITHDRAWAL FROM THE INSTITUTE:

- a) If a student withdraws from his/her Ph.D. Programme within the first two years after admission, his/her student status ceases and he/she would not be readmitted with any weight age for the credits acquired during the period of stay.
- b) In case a student wishes to temporarily withdraw from his/her Ph.D. Programme, for a maximum of period of one year, he/she may do so only after a period of two years, following his/her date of registration with prior permission of the Senate.
- c) If a student leaves the programme any time without prior permission of the Institute, he/she will lose his/her student status.

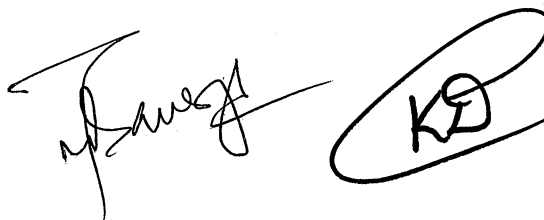
14 CONDUCT AND DISCIPLINE:

15.1 Students shall conduct themselves within and outside the premises of the Institute in a manner befitting the students of an Institution of National Importance.

15.2 As per the order of the Hon'ble Supreme Court of India, ragging in any form is banned; acts of ragging will be considered as gross indiscipline and will be severely dealt with.

15.3 The following acts of omission shall constitute gross violation of the code of conduct and are liable to invoke disciplinary measures:

- a) Ragging
- b) Lack of courtesy and decorum; indecent behavior anywhere within or outside the campus.
- c) Willful damage or stealthy removal of any property/belongings of the Institute/Hostel or of fellow students/citizens.
- d) Possession, consumption or distribution of alcoholic drinks or any kind of hallucinogenic drugs at the campus.
- e) Mutilation or unauthorized possession of library books.
- f) Noisy and unseemly behavior, disturbing studies of fellow students.
- g) Hacking in computer systems (such as entering other person's area without prior permission, manipulation and/or damage of computer hardware and software or any other cybercrime, etc.)



- h) The Sexual Harassment of women at workplace will be dealt by Institute Level Complaint committee (ICC), as per 'The sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act 2013 (No.14 of 2013) issued by Ministry of Law and Justice dated April 24, 2013 and as per the Supreme Court of India Judgment in case of Visakha.
- i) Any other act of gross indiscipline, commensurate with the gravity of the offence, the punishment may be: Reprimand, fine, expulsion from the hostel, debarment from an examination, rustication for a specified period or even outright expulsion from the Institute.

15.4 For an offence committed in (a) a hostel (b) a department or in a classroom and (c) elsewhere, the Chief Warden, the Head of the Department and the Dean (Student Welfare), respectively, shall have the authority to reprimand or impose fine.

All cases involving punishment other than reprimand shall be reported to the Chairman, Students Disciplinary Committee constituted by the Director.

15.5 Cases of adoption of unfair means in an examination/malpractice shall be reported to the Dean (Academics) for taking appropriate action.

15.6 All Research Scholars who reside in the hostels must abide by the rules and Regulations of the hostel as may be framed from time to time by the Council of Wardens and approved by the Senate.

16 DOCTORAL REQUIREMENTS & CONVOCATION:

A student shall be declared eligible for award of Ph.D. Degree if he/She has:

- a) Completed all the Course Work and Seminar requirement for the degree with grade CC or higher in each of the theoretical subjects and seminar.
- b) Obtained the minimum CGPA requirement of 6.0 at the end of Course Work and Seminar.
- c) Research work has been carried out within the Institute under the guidance of Supervisor(s) for the duration as mentioned in 11.4 after their date of registration. The above period includes Course work and Seminar also.

- d) The thesis submitted by the candidate has been recommended for the award of the Ph.D. degree by two external referees and by the Board of Examiners (BOE) constituted for the viva-voce examination.
- e) Defended the Research work at an open viva-voce examination conducted by the BOE.

The award of Ph.D. degree must be recommended by the Senate.

Only those candidates will be considered for awarding the degrees whose results are declared one month prior to date of convocation.

CONVOCATION:

The Degrees will be awarded in person to the students who have graduated during the current academic year. Degrees will be awarded in absentia to such students who are unable to attend the Convocation.

Students are required to apply separately for the Convocation along with the prescribed fee.

17 Departmental Academic Advisory Committee (DAAC) /Institute Academic Advisory Committee(IAAC)

The Senate of the Institute has approved constitution of Departmental Academic Advisory Committee (DAAC) and Institute Academic Advisory Committee (IAAC) for UG/PG & Ph.D programmes as per Clause 8 (iv), (v) & (vi) of the First Statutes under NIT Act, 2007 (29 of 2007).