

ANNEXURE TO ITEM 6.15

**NATIONAL INSTITUTE OF TECHNOLOGY
(DEEMED UNIVERSITY)
KURUKSHETRA**

**AGENDA
OF
SENATE**



**3rd MEETING
TO BE HELD ON MAY 26.05.2004**

**NATIONAL INSTITUTE OF TECHNOLOGY
(DEEMED UNIVERSITY)
KURUKSHETRA-136119**

Agenda : For the 3rd Meeting of Senate

Place : Board Room,
National Institute of Technology,
Kurukshetra.

Date & Time : **26.05.2004 at 11.00 A.M.**

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3.1	To confirm the minutes of the 2 nd meeting of the Senate of the Institute held on 29.11.2003.	1-18
3.2	To note the action taken on the minutes of the 1 st meeting of the Senate of National Institute of Technology, Kurukshetra held on 16.04.2003.	19-53
3.3	To note the action taken on the minutes of the 2 nd meeting of the Senate of National Institute of Technology, Kurukshetra held on 29.11.2003.	54-55
3.4	To consider fixing the criteria for admissions to the M.Tech. Programmes.	56
3.5	To consider prescribing cut-off date for receiving applications for Ph.D. registration.	57
3.6	To consider permitting change of Branch to B.Tech. students in 3 rd Semester.	58
3.7	To consider fees and amounts payable by the Ph.D. Scholars.	59-60
3.8	To note the award of Shyam Sunder Dhingra Medal alongwith cash prize of Rs. 5000 w.e.f. the year 2003 onwards to the overall topper of the batch.	61-62
3.9	To note the registration of Ph.D. Scholars.	63-65
3.10	To note the Academic Regulations regarding convocation and use of costumes/robes.	66-68

**NATIONAL INSTITUTE OF TECHNOLOGY,
(DEEMED UNIVERSITY)
KURUKSHETRA-136119**

Supplementary Agenda : For the 3rd meeting of the Senate.

Place : Board Room,
National Institute of Technology,
Kurukshetra.

Date & Time : 26.05.2004 at 11.00 A.M.

Supplementary Item	Subject	Page No.
3.11 (deferred item 2.6)	To consider the Syllabi of B.Tech. 1 st and 2 nd Semester (common to all branches) from the Academic Session 2004-05 onwards.	69-75
3.12	To consider panel of Examiners for evaluation of Ph.D. Thesis.	76-77
3.13	To note the observation of the Board made in its 4 th meeting held on 8.12.2003 on the minutes of the 2 nd meeting of the Senate held on 29.11.2003.	78

Item 3.1 To confirm the minutes of the 2nd meeting of the Senate of the Institute held on 29.11.2003.

The minutes of the 2nd meeting of the Senate of the Institute held on 29.11.2003 were circulated to all the members of the Senate vide letter No. NITK/Senate/2nd/8712-35 dated 17.12.2003 and Endst. No. NITK/Senate/2nd/8736-44 dated 17.12.2003 duly considered by the BOG in its 4th meeting held on 8.2.2003. The minutes are enclosed as Appendix I pages 2 to 18.

No comments have been received.

The Senate may approve the minutes as already circulated to the members.

APPENDIX-I

**NATIONAL INSTITUTE OF TECHNOLOGY,
(DEEMED UNIVERSITY)
KURUKSHETRA-136119**

**Minutes of 2nd meeting of Senate of the National Institute of
Technology, Kurukshetra held on 29.11.2003 at 11.30 A.M.
in the Board Room of the Institute.**

The following were present:-

- | | | |
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| 1. | Dr. S N Mahendra,
Director,
NIT, Kurukshetra. | In Chair |
| 2. | Prof. C.V. Ramakrishnan,
Professor,
Department of Applied Mechanics,
Indian Institute of Technology,
New Delhi-110016. | Member |
| 3. | Er. V K Sachdeva,
Executive Director,
The Saraswati Sugar Mills,
Yamuna Nagar-135001. (Haryana). | Member |
| 4. | Dr. Krishna Gopal,
Professor, EED & Dean (P&D), NITK. | Member |
| 5. | Dr. D V S Verma,
Professor, CED, NITK. | Member |
| 6. | Dr. R K Arora,
Professor, EED, NITK. | Member |
| 7. | Dr. R K Bansal,
Professor, CED, NITK. | Member |
| 8. | Dr. T K Garg,
Professor, MED & PTSW, NITK. | Member |
| 9. | Dr. M K Soni,
Professor & Chairman, EED, NITK. | Member |
| 10. | Dr. S P Jain,
Professor, EED, NITK. | Member |
| 11. | Dr. V.K. Arora,
Professor & Chairman, CED
& Chief Warden, NITK. | Member |

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| 12. | Dr. V K Sehgal,
Professor
Civil Engineering Department, NITK. | Member |
| 13. | Dr. S K Sharma,
Professor & Chairman, MED, NITK. | Member |
| 14. | Dr. K C Goyal,
Professor, MED, NITK. | Member |
| 15. | Dr. A K Gupta,
Professor, ECED, NITK. | Member |
| 16. | Dr. K S Kasana,
Professor, MED, NITK. | Member |
| 17. | Dr. K B Singh,
Professor & Chairman, Hum. Deptt., NITK. | Member |
| 18. | Dr. A Swarup,
Prof., Elect. Engg. Deptt., NITK. | Member |
| 19. | Dr. S K Chakarvarti,
Professor & Chairman, Physics Department
and Dean (Academic), NITK. | Member |
| 20. | Dr. D V Singh,
Professor, Mathematics Department, NITK. | Member |
| 21. | Dr. V K Aggarwal,
Asstt. Prof. & Chairman,
Mathematics Department, NITK. | Member |
| 22. | Prof. Umesh Ghanekar,
Asstt. Professor & Chairman,
ECE Department, NITK. | Member |
| 23. | Prof. Brahamjit Singh
Asstt. Professor & Chairman,
Computer Engineering Deptt., NITK. | Member |
| 24. | Dr. V P Singh,
Assistant Professor,
Mech.Engg. Deptt., NITK. | Special Invitee |
| 25. | Shri R P S Lohchab,
Registrar, NITK. | Member-Secretary |

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The Following members could not attend the meeting:-

1. Prof. S. Gupta,
Principal,
Nemi Chand College of Engineering,
Israna,
Distt. Panipat (Haryana).
2. Dr. M P Kapoor,
Director,
Thapar Centre for Industrial Research & Development,
Thapar Technology Campus, Post Box No. 68,
Patiala-147001 (Punjab).
3. Prof. Sameresh Kar,
(Retired Professor, IIT Kanpur),
House No. 501,
IIT Campus,
Kanpur-208016 (UP).
4. Er. Surya Kant,
Vice-President,
Tata Consultancy Services,
PTI Building, 5th Floor, Parliament Street,
New Delhi-I.
5. Prof. K R Sharma,
(Former Prof. & Head, EE, IIT Kanpur),
Vice-President, Samtel Colour Ltd.,
Ghaziabad (UP).
6. Shri V K Raizada,
(Former Member Rly. Board),
Managing Director, IRWO,
58, Rail Vihar, Sector 33, NOIDA (UP).
7. Dr. A K Bhatnagar,
Petrotech Chair Professor,
Department of Chemical Engineering,
Indian Institute of Technology, Hauz Khas,
New Delhi-110016.
8. Dr. N P Mehta
Professor, MED, NITK.
9. Dr. O P Vermani,
Assistant Professor & Chairman,
Chemistry Department, NITK.

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Before the agenda items were taken up for detailed discussion, Shri R P S Lohchab, Registrar & Member-Secretary on behalf of the Institute, members of the Senate and on his own behalf extended hearty and warm welcome to Dr. S N Mahendra, the Director and Chairman of the Senate. Then Dr. S N Mahendra, the Director & Chairman of the Senate addressed the House.

The following decisions were taken:-

Item 2.1 **To confirm the minutes of the 1st meeting of the Senate of the Institute held on 16.4.2003.**

While considering confirmation of minutes of the 1st meeting of the Senate held on 16.4.2003, the Senate also considered comments sent by Dr. Krishan Gopal, Dean (P&D) and Professor of the Electrical Engineering Department and Dr. R K Arora, Professor of the Electrical Engineering Department vide their letters dated 27.5.2003 and 23.5.2003 on the agenda item 1.2 and 1.5 respectively. The Senate took the following decisions:-

Agenda Item	Decisions already taken by the Senate in its 1st meeting held on 16.4.2003.	Decision taken by the Senate in its 2nd meeting held on 29.11.2003.
1.2	<p>The Senate considered and noted the constitution as approved by Board of Governors in its 1st meeting held on 19.10.2002. The Director informed that all Deans are ex-officio members of the Senate as per MOA/Rules approved for the Institute.</p> <p>The Senate decided that Professor-in-Charge (Senate), if any will be a special invitee on the Senate.</p>	<p>No change.</p> <p>The Senate decided that Professor-in-Charge Senate, if required, may be from amongst the internal members of the Senate.</p>
1.5	<p><u>R 3.5</u></p> <p><u>{Ordinances & Regulations for degree of Doctor of Philosophy.</u></p> <p>Relevant documents in support of eligibility for the concerned categories.</p>	<p>The clause mentioned against Rule 3.5 may be treated as redundant as it is implied that all relevant documents in support of eligibility for the concerned categories are invariably required.</p>

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The Senate confirmed other minutes of 1st meeting of the Senate held on 16.4.2003 as per details furnished in the agenda item 2.1.

Item 2.2 **To note the action taken on the minutes of the 1st meeting of the Senate of National Institute of Technology, Kurukshetra held on 16.4.2003.**

The Senate noted that follow-up action on the minutes of 1st meeting of the Senate held on 16.4.2003 will be reported to the Senate in its next meeting.

Item 2.3 **To note the decision of Board of Governors of the Institute taken in its 3rd meeting held on 6.10.2003.**

The Senate noted decisions/observations of the Board of Governors of the Institute taken in its 3rd meeting held on 6.10.2003 as per details furnished in the Senate agenda item 2.3.

The Senate decided to constitute a Committee under Chairmanship of Dr. C V Ramakrishnan, Professor of Applied Mechanics, IIT, New Delhi to consider the issues mentioned from Sr. No. (a) to (c) of the Senate agenda item 2.3. The Senate authorized the Director of the Institute and Chairman of the Senate to nominate internal members (faculty) on the said Committee. The Senate requested the Committee to finalize its report at the earliest possible.

Item 2.4 **To consider the Regulations regarding Convocation, award of degrees, medals, certificates and prizes, programme of presentation and citation, academic procession and use of academic costumes / robes.**

The Senate approved the proposed regulations regarding Convocation, award of degrees, medals, certificates & prizes, programme of presentation and citation, academic procession and use of academic costumes/robes as per details furnished in Annexure - I enclosed herewith.

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Item 2.5 **To note the name of all students who have become qualified for the award of degrees of the Institute.**

The Senate considered details of the students who fulfil the requirement prescribed for various degrees of the Institute and have become qualified under the regulations for admission to such degrees as per details furnished in Appendix-IV of the agenda item 2.5.

The Senate decided that all B.Tech./B.E./M.Tech. students as per details furnished in Appendix-IV of the agenda item 2.5 be awarded degrees of the Institute.

The Senate further decided that in addition to those students who qualify for the award of degrees before the Convocation may also be included in the list of students for the award of degrees.

Item 2.6 **To consider the syllabi of B.Tech. 1st semester and 2nd semester (common to all branches) - from the academic session 2004-05 onwards.**

This item was deferred.

Tabled
Item 2.7 **To consider a proposal to award a medal along with cash prize of Rs. 5,000/- w.e.f. the year 2003 onwards to the topper of B.Tech., Electrical Engg. branch in the memory of Late Shri Shyam Sunder Dhingra, a student of this Institute, 1981-86 batch.**

The Senate noted with regret that Shri Shyam Sunder Dhingra (Roll No. 112/81), a brilliant alumni of the Institute who passed his B.Sc. Engg. in Electrical in the year 1986 has passed away. The Senate placed its sorrow on record.

The Senate agreed to introduce Shyam Sunder Dhingra Medal with cash prize out of interest to be earned from the funds to be received from the batch mates of Shri Shyam Sunder Dhingra as mentioned by Shri Ankur Gupta, IAS, batch mate of Shri Shyam Sunder Dhingra, now Managing Director of Haryana Agro Industries Limited, in his letter enclosed with the agenda item 2.7 subject to availability of funds from this year i.e.

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2003. The Senate accordingly desired that the issue of funds for the purpose be taken up with Shri Ankur Gupta, IAS.

**Tabled
Item 2.8**

**To consider Degree Formats to be awarded
to the students of the Institute.**

The Senate noted that consequent upon the up-gradation of Regional Engineering College, Kurukshetra to National Institute of Technology, Kurukshetra with Deemed University status, the Institute has to print its own degree formats for award of various degrees to the students such as B.Tech., M.Tech. and Ph.D etc.

The Senate considered two formats of the degrees as placed with the tabled agenda item 2.8 and decided that the single page format having both Hindi and English script (language) on the same page indicating Institute's Logo in the middle of the page be adopted as per Annexures-II, III, IV and V enclosed herewith.

Keeping in view urgent/time bound action required to be taken on some issues, the Senate confirmed decisions taken on the agenda items 2.4, 2.5, 2.7 and 2.8 in the meeting itself.

The meeting ended with a vote of thanks to the Chair.


(R P S LOHCHAB)
REGISTRAR & MEMBER SECRETARY

REGULATIONS REGARDING CONVOCATION, AWARD OF DEGREES, MEDALS, CERTIFICATES AND PRIZES, PROGRAMME OF PRESENTATION AND CITATION, ACADEMIC PROCESSION AND USE OF ACADEMIC COSTUMES/ROBES

1. CONVOCATION AND AWARD OF DEGREES

- (i) The Convocation of the Institute will be held on a date fixed by the Chairman, BOG.
- (ii) The Dean (Academic) shall, from time to time, report to the Senate the names of all such persons who fulfill the requirements prescribed for various degrees of the Institute and have become qualified under the Regulations for admission to such degrees.
- (iii) A Candidate who has failed to attend the Convocation held may obtain his/her degree in absentia by submitting an application to the Dean (Academic). Such application shall be accompanied by a fee of Rs. 500/- in the form of the crossed Indian Postal Order/Draft in the name of the Director, National Institute of Technology, Kurukshetra-136119. On receipt of such application, the Dean (Academic), shall after satisfying himself that it is in order, issue the degree to the applicant.
- (iv) If the Convocation is not held due to unavoidable circumstances within one year from the passing of examination, the degrees may be awarded after completing necessary formalities.
- (v) Provisional Certificate may be issued by the Dean (Academic) to a candidate, who has fulfilled all the requirements for the award of degree, after obtaining the approval from the Chairman, Senate.
- (vi) Semester examination results may be declared by the Controller's Office after obtaining approval from the Director of the Institute.

2. ACADEMIC PROCESSION

Academic Procession will consist of the Chief Guest, Chairman Board of Governors, Director, Members of the Board of Governors and Senators. Registrar will lead the procession in the following order :-

Registrar

Senators in Two's

Deans in Two's

Members of Board of Governors in Two's
Director
Chairman Board of Governors
Chief Guest

3. AWARD OF MEDALS, CERTIFICATES AND PRIZES

Medals to be awarded: -

- (i) All Toppers in each discipline of B.Tech Degree Courses
- (ii) Best All-Rounder

Cash Prize of Rs. 250/- for the purchase of Books and a Certificate to be awarded.

- (iii) Dr. R. P. Singh Medal

To be awarded to the Toppers of 2nd & 3rd year B.Tech Mechanical Engg. Students.

- (iv) Private Medal, if any as approved by the Senate and BOG

Merit Certificates & Prizes to be awarded: -

- (i) Merit Certificates to the 10% Toppers in each branch of B.Tech. alongwith exemption from Tuition fee and a Cash prize of Rs.100/- to each student.
- (ii) Institute Cash Prize of Rs. 250/- for the purchase of Books to be awarded to the toppers of each branch in every semester B.Tech and the toppers of Major Project of B.Tech 8th Semester in each branch.

4. PROGRAMME OF PRESENTATION AND CITATION

- (i) The Convocation will be declared open and closed by the Chairman BOG of the Institute.
- (ii) The Degrees for B.Tech/M.Tech will be conferred by the Director. The Degrees for Ph.D. and higher and Medals will be awarded by the Chairman BOG of the Institute.
- (iii) The programme of presentation of award of Degrees and Medals will be as under:

LEVEL	PRESENTATION
Ph.D	Dean (Academic)
M.Tech/B.Tech Medals & Prizes	Respective Chairmen of Departments Registrar

- (iv) The scroll containing the record of Degrees will be signed by the Chairman, Board of Governors.
- (v) The exhortation will be read by the Director.

5. ACADEMIC COSTUMES/ROBES

- (i) In these Regulations 'Ordinary' Academic Costume includes a black cap and gown without hood or sash and 'Full' Academic Costume, which includes in addition a hood or sash.
- (ii) Members of the Senate and Board of Governors of the Institute and all those persons who will be receiving their degrees shall wear their Full Academic Costumes in Convocation of the Institute.
- (iii) The Chief Guest, Officers and Graduates of the Institute are entitled to wear Academic Costumes as follows: -

(a) CHIEF GUEST'S GOWN

Superior Maroon Velvet with 4 inches Golden Lace on front folds bottom of sleeves. On shoulders with zari work fronts and tufts and zari work on the sleeves with tufts, without Monogram, Cambridge style, fully interlined special padding and material. Special Academic Cap of Superior Maroon Velvet with 1 inch Golden Lace and with Golden Tassel, Mortar band and with special material.

(b) CHAIRMAN'S GOWN

Pure silk, hand woven, hand spun in Maroon colour with the Golden Lace on the front folds, bottom of sleeves, with ½ inch strip of green silk on the front folds and 3 strips on the sleeves in green silk. Oxford style, with two Institute Monograms, if available, fully interlined and with special padding and material. Cap of superior silk, hand woven, hand spun, with 1 inch Golden Lace. Mortar band with Golden Tassel.

Sash: Pure Silk, Hand Woven, Hand spun in Maroon Colour, Golden Lace on the bottom and with Golden Jhaller.

(c) DIRECTOR'S GOWN

Maroon silk with 2 inches Golden Lace on the front folds round neck and on bottom of sleeves, with two strips of ½ inch wide green silk on the front folds and 3 strips ½ inch width of green silk the sleeves with two Institute Monograms, if available, in Golden zari work the fronts with hand made fluting; Oxford style, fully interlined with special padding and material. Academic cap of pure silk Maroon colour with 1 inch Golden Lace. Mortar band with Golden Tassel.

Sash: Pure Silk, Hand Woven, Hand spun in Maroon Colour, Golden Lace on the bottom and with Golden Jhaller.

(d) REGISTRAR'S GOWN

Black Heavy silk with 2 inch silver lace on the front folds round the neck and on the bottom of the sleeves, bottom of the sleeves with ½ inch wide of green silk on the front folds and two strips ½ inch wide of green silk on the sleeves with two Monograms in silver zari work with hand made fluting with Institute Monograms, if available, in silver zari work with hand made fluting with special padding and material. Cap of black Velvet Mortar band ½ inch lace and Material.

(e) SENATE MEMBERS GOWN

Superior silk in Golden Yellow Colour with lacing of 3 inches Green Silk on front folds and with strips of green silk 1 inch wide on the sleeves with one Institute Monogram, if available, on the left front with hand made fluting. Oxford style and with special padding and material. For PhDs Pure Red silk will be used. Caps of superior Golden Yellow Velvet, Mortar band with 1 inch wide green silk border with Golden silk Tassel. For PhDs Red Velvet will be used.

(f) DEPUTY REGISTRARS AND ASSISTANT REGISTRARS

Whatever they are entitled by virtue of the degrees they hold or if they are non-graduates black gown only.

(g) FOR BACHELOR'S DEGREE (B.TECH/B.E.) AWARDEES

Gown	-	Black
Hood	-	White with Scarlet lining

(h) FOR MASTER'S DEGREE (M.TECH.) AWARDEES

Gown	-	Black
Hood	-	White with Golden lining

(i) FOR DOCTORATE DEGREE (Ph.D) AWARDEES

Gown	-	Black with Golden Lacing
Hood	-	Red and Silver Gray

- (iv) All candidate shall wear at the Convocation the Academic Costume of the degree to which they seek admission.

6. CONFERMENT OF HONORARY DEGREES

- (i) A member of the Senate or a member of the Board of Governors, may suggest the name of a person along with complete biodata for consideration by the Institute for the award of Degree of D.Litt./Doctor of Science/Doctor of Engineering as approved by the Senate. Such nominations will be put up to the Chairman of the Board for consideration. If the chairman is satisfied then he may appoint an Expert Committee to submit its recommendations in the matter.
- (ii) The Expert Committee may recommend to Senate that an Honorary Degree of D.Litt./Doctor of Science/Doctor of Engineering be conferred on the person on the ground that he/she is in their opinion, by reason of eminent position and academic and professional attainments, a fit and proper person for the award. The recommendations of the Expert Committee may be considered by the Senate and forward the same to the Chairman for approval. After the approval of the Chairman is received, the Director as Chairman of the Senate may confer on such person the Honorary Degree so recommended, without requiring him to undergo any examination.
- (iii) The Honorary Degree shall be conferred by the Institute either at Convocation or in absentia.

7. AWARD OF MEDALS/PRIZES AT THE ANNUAL ACADEMIC PRIZES DISTRIBUTION FUNCTION/CONVOCATION

(i) **Award of Medal/Prize/Certificate to the topper in each B.Tech Degree Course**

The award will be given discipline wise in all the disciplines of B.Tech Degree Course as per rules of the Institute from time to time.

In the eventuality of a tie for award of Medal*/Prize/Certificate in a class/discipline the tie would be broken by considering the candidate's performance on the basis of percentage of marks/CGPA obtained in all courses of the last two semesters. If, however, the tie still exists then it will be broken by considering the percentage of marks obtained in the entry level entrance examination.

*The Medal weighing 50 gm (app.) of Silver.

(ii) **Best All-Rounder Medal/Certificate**

It will be decided by the Proctor on the basis of performance in all the activities.

(iii) **Awards of Medal/Prize/Certificate to the topper in each M.Tech Degree Programme**

Medals to M.Tech students will be awarded discipline-wise and specialization-wise in all disciplines on the basis of the recommendation of the Chairman of the Department concerned.

(iv) **Private Medals**

(a) Dr. R P Singh Medal

Dr.R P Singh Medal will be awarded to the toppers of 2nd year and 3rd year in the discipline of B.Tech. Mech. Engg. only. The amount of the Medal will depend upon availability of interest to be earned on Rs. 10, 000/- to be deposited by Mrs.Singh.

(b) Any other private medal

Any other private medal as approved by the Senate from time to time may be also awarded.

क्रम सं/Sr.No.

अनुक्रमांक/ Roll No.

राष्ट्रीय प्रौद्योगिकी संस्थान
कुरुक्षेत्र
एतद्वारा
बैचलर ऑफ इंजिनियरिंग

की उपाधि
निर्धारित पाठ्यक्रम एवं संबद्ध परीक्षा सफलतापूर्वक

को प्रदान करता है। जिन्होंने
श्रेणी में उत्तीर्ण की है।

यह मुद्रित उपाधि

को प्रदत्त की गई।



National Institute of Technology
Kurukshetra
hereby confers the degree of
Bachelor of Engineering

in

an

hon has successfully completed the course of studies and passed the proscribed
Examinations in Class.

Given this day, the
the seal of the Institute.

of 20 under

Director/निदेशक

Chairman/
Board of Governors अध्यक्ष
निर्वाहक मण्डल

Registrar/कुलसचिव

क्रम सं/Sr.No.

अनुक्रमांक/Roll No.

राष्ट्रीय प्रौद्योगिकी संस्थान
कुरुक्षेत्र
एतद्वारा
बैचलर ऑफ़ टैक्नोलोजी

की उपाधि
निर्धारित पाठ्यक्रम एवं संबद्ध परीक्षा सफलतापूर्वक

को प्रदान करता है। जिन्होंने
श्रेणी में उत्तीर्ण की है।

यह मुद्रित उपाधि

को प्रदत्त की गई।



National Institute of Technology
Kurukshetra
hereby confers the degree of
Bachelor of Technology

is
an
who has successfully completed the course of studies and passed the prescribed
Examinations in Class.

Given this day, the
the seal of the Institute.

of 20 under

Director/निदेशक

Chairman/
Board of Governors अध्यक्ष
निपायक मण्डल

Registrar/कुलसचिव

क्रम प/Sr.No.

- 17 -

अनुक्रमांक/ Roll No.

राष्ट्रीय प्रौद्योगिकी संस्थान
कुरुक्षेत्र
एतद्वारा
मास्टर ऑफ़ टैक्नोलोजी

की उपाधि
निर्धारित पाठ्यक्रम एवं संबद्ध परीक्षा सफलतापूर्वक

को प्रदान करता है। जिन्होंने
श्रेणी में उत्तीर्ण की है।

यह मुद्रित उपाधि

को प्रदत्त की गई।



National Institute of Technology
Kurukshetra
hereby confers the degree of
Master of Technology

is

on

has successfully completed the course of studies and passed the prescribed
Examinations in Class.

Given this day, the
the seal of the Institute.

of 28 under

Director/निदेशक

Chairman/
Board of Governors

अध्यक्ष
नियामक मण्डल

Registrar/कुलसचिव

क्रम सं./Sr.No.

पंजी.सं./Regn.No.

राष्ट्रीय प्रौद्योगिकी संस्थान
कुरुक्षेत्र

अभिपद की अनुशंसा पर

को उनके शोध प्रबन्ध

के लिए

डॉक्टर ऑफ फिलासफी
की उपाधि से
विभूषित करता है

यह मुद्रित उपाधि

को प्रदत्त की गई।



National Institute of Technology
Kurukshetra

on the recommendation of the Senate
hereby confers the degree of
Doctor of Philosophy

for
for thesis entitled

Given this day, the
the seal of the Institute.

of 20 under

Director/निदेशक

Chairman/

अध्यक्ष

Registrar/कुलसचिव

Board of Governors

नियामक मण्डल

Item 3.2 To note the action taken on the minutes of the 1st meeting of the Senate of National Institute of Technology, Kurukshetra held on 16.4.2003.

In the 2nd meeting of the Senate held on 29.11.2003 it was informed that the follow-up action on the minutes of 1st meeting of the Senate held on 16.4.2003 are being taken by the concerned Section which will be reported to the Senate in its next meeting. Minutes of the 1st meeting of the Senate as referred to above are enclosed as Appendix **II** from page **21** to **53**.

The action on the minutes of the 1st meeting of the Senate held on 16.4.2003 has been taken as under:-

Item	Subject	Action Taken
1.1	To note declaration by the Govt. of India to make REC, Kurukshetra as the National Institute of Technology, Kurukshetra with Deemed University Status.	Noted.
1.2	To consider constitution of the Senate approved by the Board of Governors.	Noted
1.3	To consider powers and working/ functioning of the Senate and constitution of various Boards and their powers and function.	Noted for compliance
1.4	To consider the Academic Regulations for Under Graduate & Post Graduate Programmes at National Institute of Technology, Kurukshetra.	The Board of Governors in its 3 rd meeting held on 6.10.2003 while considering minutes of 1 st meeting of the Senate held on 16.4.2003, made observations on the academic issues and desired that the same may be referred to the Senate in its next meeting. Accordingly the Senate in

		its 2 nd meeting held on 29.11.2003 decided to constitute a Committee under chairmanship of Dr. C.V.Ramakrishanan, Prof., Deptt. of Applied Mechanics, IIT, Delhi to consider the said observations. However the aforesaid meeting could not be held. In the meantime as per decision taken by the Board in its 4 th meeting held on 8.12.2003 Prof. S.K. Gupta, (Retd.) from IIT, Kanpur was appointed to assist the Institute to frame the Academic Rules comparable to an IIT. The Academic Rules as per observations of the Board and in consultation with Prof. S.K. Gupta are under preparation.
1.5	To consider the Ordinances and Regulations for the Degree of Doctor of Philosophy.	Action taken.
1.6	To consider the fee structure of NIT, Kurukshetra.	Action taken. However, the matter is further placed before the Senate in this meeting under Agenda item 3.7 .

The Senate may note.

**NATIONAL INSTITUTE OF TECHNOLOGY,
(DEEMED UNIVERSITY)
KURUKSHETRA-136119**

**Minutes of the 1st meeting of Senate of National Institute
of Technology (Deemed University), Kurukshetra held on
16.4.2003 at 11.30 A.M. in the Board Room of National
Institute of Technology, Kurukshetra.**

The following were present:-

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| 1. | Dr. N P Mehta,
Director,
NIT, Kurukshetra. | In Chair |
| 2. | Er. Surya Kant,
Vice-President,
Tata Consultancy Services,
PTI Building, 5 th Floor, Parliament Street,
New Delhi-I. | Member |
| 3. | Dr. Krishna Gopal,
Professor, EED & Dean (P&D), NITK. | Member |
| 4. | Dr. D V S Verma,
Professor, CED, NITK. | Member |
| 5. | Dr. R K Arora,
Professor, EED, NITK. | Member |
| 6. | Dr. R K Bansal,
Professor, CED, NITK. | Member |
| 7. | Dr. T K Garg,
Professor, MED & P.T.S.W., NITK. | Member |
| 8. | Dr. I P Singh,
Professor & Chairman, MED, NITK. | Member |
| 9. | Dr. M K Soni,
Professor & Chairman, EED, NITK. | Member |
| 10. | Dr. S P Jain,
Professor, EED, NITK. | Member |

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| 11. | Dr. V K Arora,
Professor & Chairman, CED
& Chief Warden, NITK. | Member |
| 12. | Dr. S K Sharma,
Professor, MED, NITK. | Member |
| 13. | Dr. K C Goyal,
Professor, MED, NITK. | Member |
| 14. | Dr. A K Gupta,
Professor & Chairman, ECED, NITK. | Member |
| 15. | Dr. H M Rai,
Professor, EED, NITK. | Member |
| 16. | Dr. K S Kasana,
Professor, MED, NITK. | Member |
| 17. | Dr. K B Singh,
Professor & Chairman, Hum. Deptt., NITK. | Member |
| 18. | Dr. A Swarup,
Prof. & Chairman, Computer Engg. Deptt., NITK. | Member |
| 19. | Dr. D V Singh,
Professor, Mathematics Department, NITK. | Member |
| 20. | Dr. O P Vermani,
Assistant Professor & Chairman,
Chemistry Department, NITK. | Member |
| 21. | Dr. V K Aggarwal,
Asstt. Prof. & Chairman,
Mathematics Department, NITK. | Member |
| 22. | Shri R P S Lohchab,
Registrar, NITK. | Ex-officio Member-Secretary |

Following members could not attend the meeting:-

1. Prof. C.V. Ramakrishnan,
Professor,
Department of Applied Mechanics,
Indian Institute of Technology,
New Delhi-110016.

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2. Prof. S. Gupta,
Principal,
Nemi Chand College of Engineering,
Israna,
Distt. Panipat (Haryana).
3. Dr. M P Kapoor,
Director,
Thapar Centre for Industrial Research & Development,
Thapar Technology Campus, Post Box No. 68,
Patiala-147001 (Punjab).
4. Prof. Samresh Kar,
(Retired Professor, IIT Kanpur),
House No. 501,
IIT Campus,
Kanpur-208016 (UP).
5. Er. V K Sachdeva,
Executive Director,
The Saraswati Sugar Mills,
Yamuna Nagar-135001. (Haryana).
6. Prof. K R Sharma,
(Former Prof. & Head, EE, IIT Kanpur),
Vice-President, Samtel Colour Ltd.,
Ghaziabad (UP).
7. Shri V K Raizada,
(Former Member Rly. Board),
Managing Director, IRWO,
58, Rail Vihar, Sector 33,
NOIDA (UP).
8. Dr. A K Bhatnagar,
Petrotech Chair Professor,
Department of Chemical Engineering,
Indian Institute of Technology, Hauz Khas,
New Delhi-110016.
9. Dr. V K Sehgal,
Professor, CED, NITK.
10. Dr. S K Chakarvarti,
Professor & Chairman, Physics Department, NITK.

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Before the Senate, NIT, Kurukshetra started deliberations, Shri R P S Lohchab, Registrar & Member-Secretary on behalf of the Institute, on behalf of the Senate and on his own behalf warmly welcomed Dr. N P Mehta, the Chairman of the Senate and Director of the Institute. Shri Lohchab also extended hearty welcome to the members of the Senate on behalf of the Institute as well as on his own behalf. Then Dr. N P Mehta, the Chairman of the Senate and Director of the Institute addressed members of the Senate on various academic activities of the Institute.

The following decisions were taken:-

Item 1.1 To note declaration by the Govt. of India to make REC, Kurukshetra as the National Institute of Technology, Kurukshetra with Deemed University Status.

The Senate noted that the Govt. of India declared REC, Kurukshetra as the National Institute of Technology, Kurukshetra with Deemed to be University Status w.e.f. 26.6.2002 as mentioned in the agenda item.

Item 1.2 To consider constitution of the Senate approved by the Board of Governors.

The Senate considered and noted the constitution as approved by Board of Governors in its 1st meeting held on 19.10.2002.

The Director informed that all Deans are ex-officio members of the Senate as per MOA/Rules approved for the Institute.

The Senate decided that Professor-In-Charge (Senate), if any, will be a special invitee on the Senate.

Item 1.3 To consider powers & working/functioning of the Senate and constitution of various Boards and their powers & functions.

The Senate noted the powers and working/functioning of the Senate as contained in Appendix-I of the agenda item 1.3.

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The Senate noted Board's decision of constituting the six BOS and their constitution as given in the agenda item 1.3.

The constitution of any Board of Studies may be amended/changed by the Senate.

Item 1.4 To consider the Academic Regulations for Under-graduate and Post-graduate programmes at National Institute of Technology, Kurukshetra

The Senate had detailed deliberations on the agenda item 1.4 and the Academic Regulations for Under-graduate & Post-graduate Programmes duly modified on the basis of deliberations made during the course of meeting are enclosed as Appendix-A (containing 10 pages).

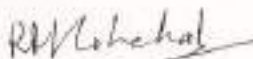
Item 1.5 To consider the Ordinances and Regulations for the Degree of Doctor of Philosophy.

The Senate had detailed deliberations on the agenda item 1.5 and the Ordinances and Regulations for the Degree of Doctor of Philosophy duly modified on the basis of deliberations made during the course of meeting are enclosed as Appendix-B (containing 16 pages).

Item 1.6 To consider the fee structure of NIT, Kurukshetra.

The Senate noted the proposed fee structure of NIT, Kurukshetra. The tuition fee and evaluation fee for the Ph.D Programme may be included at the rate of Rs. 5000/- P.A. and Rs. 5000/- respectively.

The meeting ended with a vote of thanks to the Chair.


(R P S Lohchab)
Registrar & Member-Secretary

ACADEMIC REGULATIONS

for

UNDER GRADUATE & POST GRADUATE
PROGRAMMES



**NATIONAL INSTITUTE OF TECHNOLOGY
(DEEMED UNIVERSITY)
KURUKSHETRA-136119**

2003

APPENDIX-A

- A. Academic Regulations**
All academic regulations contained herein both for Undergraduate and Postgraduate programmes shall come into force w.e.f. new semester starting in July/August, 2003 and applicable to all such Candidates as admitted in this Semester.
- A-1 Academic regulations shall cover the following courses of study at the Institute:**
- I Undergraduate Programmes**
Four years Bachelor of Technology (B.Tech.)
 - II Postgraduate Programmes**
Master of Technology (M.Tech.)
- A-2 Detailed Regulations are given in the following Schedules:**
Schedule A-I Regulations for Undergraduate programmes.
Schedule A-II Regulations for Postgraduate programmes.

ADMISSIONS

The Institute will have the following Admission Committees:

- A-3 Admission Committee for B.Tech.**
- i) Director shall appoint Admission Committee for B.Tech.
 - ii) Powers and duties of the Admission Committee shall be to select the candidates for admission to B.Tech. Courses in accordance with the approved procedure & rules of admission to the Institute, as decided by the Senate/Board of Governors/Govt. of India from time to time.
- A-4 Admission Committee for M.Tech.**
- i) There shall be one Committee for each Department of the Institute.
 - ii) The M.Tech. Admission Committee of each Department/School/Centre shall consist of:
 - a) Chairman of the Department/School/Centre Chairman
 - b) Faculty-in-charge of Post-graduate Programme
(To be appointed by the Chairman of the Department) Member
 - c) Senior most Professor/Assistant Professor in the Department. Member
 - d) One member from outside the Department to be nominated by the Dean Academic. Member
 - iii) Powers and duties of the Committee shall be to select the candidates for admission to M.Tech. in accordance with the approved procedure for M.Tech. admission to the Institute, by the Senate/Board of Governors/Govt. of India from time to time.
 - iv) The admission of the candidates on the recommendation of Admission Committee shall be approved by the Dean Academic.
- A-5 Fee Deposits and Others Dues for the Admissions**
The tuition fee and other dues will be as approved by the Board of Governors from time to time.

A-6 SCHOLARSHIPS

1. MERIT-CUM-MEANS AND OTHER SCHOLARSHIPS

Subject to availability, a small number of Merit-cum-Means scholarships and financial assistance may be awarded to the students, as decided by the Institute and given in the Information Brochure.

A-7 UNFAIR MEANS CASES (UMC) COMMITTEE

The Dean Academic shall appoint an Unfair Means Committee each year to deal with the cases of alleged misconduct and use of Unfair Means in the mid-semester and at the end of semester examinations.

As soon as a student is suspected by the invigilator or any authorized person of having resorted to unfair means, his/her answer book shall be seized. The papers etc. duly signed by the invigilator and Superintendent found in possession of the student shall be stitched with his/her answer book in his/her presence. The Superintendent shall ask the candidate to make a statement in writing, explaining his/her conduct. In case the candidate refuses to do so, the fact of his/her refusal shall be recorded by the Superintendent, which should be attested by atleast one Supervisor on duty.

After completing all above formalities, a fresh answer-book shall be given to the student for completing the examination. After a particular test/examination session is over, these answer books (duly marked I, II) shall be sent or delivered separately to the Controller of Exams along with the report. A committee will be appointed by the Director annually to enquire into the cases of attempt of unfair means in the test/examination. The Committee shall submit its recommendations after identifying clearly the category and nature of the offence as listed in regulations to the Dean Academic for consideration and necessary order.

A student whose guilt is established shall be dealt with under the provisions of the disciplinary regulations.

The recommendations of the Unfair Means Committee shall be submitted to the Dean Academic. If the Dean Academic finds that the recommendations need reconsideration, he/she may return the case(s) to the Committee for reconsideration and thereafter award suitable punishment as recommended originally or recommended after reconsideration after reference by the Dean Academic. The appeals, if any, against such punishment will be decided by the Chairman, Senate, whose decision shall be final. All punishment cases under UMC's would be reported to the Senate.

Schedule A-I

ACADEMIC REGULATIONS FOR UNDER GRADUATE PROGRAMMES

1.0 Admissions

- 1.1 The examination for the degree of Bachelor of Technology will be open to candidates admitted to the privileges of the Institute. Each academic year will comprise of two semesters, each of 16 to 18 weeks duration.
- 1.2 The minimum academic qualifications and age for admission to B.Tech. shall be as decided by the competent authority.
- 1.3 The qualifying marks/Merit list in the Entrance Test will be as prescribed and notified by the competent authority conducting the Entrance Test.

- 1.4 Distribution of seats including reservations shall be as approved by the MHRD, Govt of India, from time to time.
- 1.5 All seats except those for NRI candidates will be filled exclusively on the basis of merit in Entrance Test of eligible candidates under each category taking into account the choice exercised by the candidates.

2.0 Examinations

- 2.1 The examination in each semester will be held according to the syllabi prescribed by the Senate. Each course will carry credits as per the scheme of courses. A student must study all the courses given in the scheme approved by the Senate.
- 2.2 The examination will be held at the end of each semester on such dates as may be fixed by the Dean Academic.
- 2.3 In order to be eligible to sit for End Semester Examinations in paper(s) of any semester, a student must have registered for concerned paper(s) and must have attended not less than 75% of total classes separately in Lectures (including Tutorials) and Practicals in concerned paper(s). If a student falls short of the required attendance in Lectures (including Tutorials) or Practicals in concerned paper(s), he/she will automatically be awarded "E" Grade and will have to repeat the studies whenever offered in concerned paper(s).
- 2.4 The weightage of the End Semester Examination and evaluation during the semester in different courses will be as approved by the Senate.

3.0 Evaluation/Results

- 3.1 At the end of the Semester the students will be awarded a Letter Grade in each of the course taken during the semester depending on the total performance (which may consist of mid-semester examinations, quizzes-announced and unannounced, laboratory exercise, tutorial work, seminars, home assignment etc.,) as well as in the End Semester Examination.
- 3.2 Letter Grades will be awarded to the students as indicated below. Each Letter Grade indicates the level of performance in a course and has a Grade point for purposes of computing the Cumulative Grade Point Average (CGPA) as given below. CGPA is defined in Clause 4.2.

Letter Grades	Performance	Grade Point
A	Excellent	10
B	Good	8
C	Fair	6
D	Poor	4
E	Fail	2

A student who earns an E Grade in a course shall have to re-appear in that course in the subsequent examination(s), subject to the following:

Provided that a candidate shall not be allowed to attend classes and appear in the

Semester examination(s) mentioned in column (a), unless he/she has passed in the Semester Examinations mentioned in Column (b).

(a)	(b)
5 th semester onwards	1 st Semester
6 th Semester onwards	2 nd Semester
7 th Semester onwards	3 rd Semester
8 th Semester	4 th Semester

- 3.3 The Course Co-ordinator assisted by other teachers concerned of the course will compile all the marks and will award the Grades. He/she will submit a copy of award list to Dean Academic for the preparation of result.

Once Grades are submitted, any correction thereafter will only be made with the approval of the Director on the recommendation of the Dean Academic.

- 3.4 For the theory component of a course, the Course Co-ordinator (assisted by the team of teachers) will award the marks through continuous evaluation of the students during the semester as well as in the End Semester Examination.

For each theory paper, the question paper for all Examinations will be set by the Instructor(s) of the course. The Instructor(s) along with the tutors, if any, will evaluate the Answer Books.

- 3.5 (a) For the practical (Laboratory/design/drawing/survey camp/workshop and/or vocational training/project) course and the practical component of a course, the marks will be awarded by the Course Co-ordinator (assisted by the team of teachers) through continuous evaluation of the students during the Semester.

(b) The Project Semester evaluation will be done by Project Evaluation Committee as per the guidelines issued by the Institute from time to time.

- 3.6 The Controller of Examination shall publish the final result indicating the Grades and the ultimate CGPA obtained by each student.

4.0 General

- 4.1 All academic problems of the students other than those affecting the Institute rules and regulations framed from time to time may be looked into by the Dean Academic.

- 4.2 A student is required to maintain a Cumulative Grade Point Average (CGPA). The CGPA is the weighted average of all the Letter Grade obtained by the student since his/her entry into the Institute upto and including the latest semester and computed as follows:

$$CGPA = \frac{\sum C_i G_i}{\sum C_i}$$

Where C_i denotes credits assigned to i th course and G_i indicates the Grade point equivalent to the Letter Grade obtained by the student to the i th course. Provided that when a student re-appears in/repeats a course as per Clause 3.2 and Clause 2.3, the new Grade will replace the earlier one in the calculations of the CGPA.

If a student after obtaining pass Grades (A/B/C/D) in all the courses at the end of the programme obtains a CGPA less than minimum CGPA=4.5 required for the award of

degree, he/she may be allowed by Dean Academic to improve the CGPA by studying the course(s) in which he/she has earned 'D' Grade(s) provided the said courses are offered in the semester under consideration. First preference will be given to the professional course(s). This concession of additional semester(s) for improvement will be counted within maximum duration permissible for the programme.

Note:

The Percentage of marks obtained by a student if so required, can be calculated as =CGPA multiplied by 9.00.

- 4.3 At the end of each semester (i.e. after End Semester Examination), students will be supplied a Grade Card indicating the Grades secured in each course and up to date CGPA.
- 4.4 A Student is deemed to have completed the requirements for graduation and is eligible for the award of degree if:
- (a) he/she has satisfied all the academic requirements as per the regulations.
 - (b) he/she has paid all fees due from him/her.
 - (c) there is no case of indiscipline pending against him/her.

5.0 Absence/ Dropping of Semester

- 5.1 If a student absents from the Institute with due permission of the Dean Academic due to illness, he/she will be permitted to rejoin provided the period of absence does not exceed one semester. If the period of absence is more than one semester or the absence is for reasons other than illness, the case will be referred to the Director by Dean Academic with his/her recommendations.

The student will, however, be charged the prescribed fee even for the period of absence.

In no case, the total period of absence shall exceed two semesters during student's stay in the Institute. In that eventuality, the student's name shall be struck off from the rolls of the Institute.

- 5.2 Notwithstanding the above the Senate may at its discretion, on appeal, relax any of the conditions of Clause 5. Its decision shall be final and binding.

6.0 Re-admission/Duration

- 6.1 In case a student absents from the Institute without prior permission, he/she may be permitted to join back with the permission of the Director on payment of penalty of Rs. 5000/- in addition to the prescribed fee for the period of absence.

In no case, the period of unauthorized absence will exceed one semester. If the period of unauthorized absence exceeds one semester, the student's name will be struck off from the rolls of the Institute.

The maximum period in which a student must qualify for the award of B.Tech degree will be eight years, failing which a student will not be allowed to continue his/her studies for B.Tech Degree

- 6.2 The gap of one/two semesters missed by the student(s), as the case may be, will count towards the total durations of the Programme permissible under the Regulations.

ACADEMIC REGULATIONS FOR POST-GRADUATE PROGRAMMES

1.0 Admissions

- 1.1 The admissions for the regular postgraduate programmes will be open to candidates admitted to the privileges of the Institute. The duration of the course will be two years (Four semesters) for M.Tech. programmes. Each academic year will be divided into two semesters, each of 16-18 weeks duration.
- 1.2 The admission to the first semester will be open to the candidates on merit and as per rules given in the Information Brochure. The Candidates must have passed the qualifying examination with minimum 60% marks from Universities recognized by the Institute in the disciplines prescribed by the Senate. GATE qualified Candidates shall be given preference over other candidates as per rules.
- 1.3 Relaxation of 5% marks in the eligibility conditions will be allowed to Scheduled Caste/Tribe candidates. In case of special circumstances, the Director in consultation with Chairman of the Deptt. concerned may further relax this condition for these reserved category candidates.

2.0 Examinations

- 2.1 The examination in each semester will be held according to the syllabi prescribed by the Senate. Each course will carry credits as per the scheme of courses approved by the Senate. A student must study all the courses given in the scheme approved by the Senate.
- 2.2 The examination will be held at the end of each semester on such dates as may be fixed by the Dean Academic.
- 2.3 In order to be eligible to sit for End Semester Examinations in paper(s) of any semester, a student must have registered for concerned paper(s) and must have attended not less than 75% of total classes separately in Lectures (including Tutorials) and Practicals in concerned paper(s). If a student falls short of the required attendance in Lectures (including Tutorials) or Practicals in concerned paper(s), he/she will automatically be awarded "E" Grade and will have to repeat the studies whenever offered in concerned paper(s).
- 2.4 The weightage of the End Semester Examination and the Sessional work in different courses/papers will be approved by the Senate.

3.0 Evaluation/Results

- 3.1 At the end of the Semester the students will be awarded a Letter Grade in each of the course taken during the semester depending on the total performance in the Sessional Work (which may consist of class test, quizzes-announced and unannounced, laboratory exercise, tutorial work, seminars, home assignment etc.) as well as in the End Semester Examination.
- 3.2 Letter Grades will be awarded to the students as indicated below. Each Letter Grade indicates the level of performance in a course and has a Grade point for purposes of

computing the Cumulative Grade Point Average (CGPA) as given below. CGPA is defined in Clause 4.1.

Letter Grade	Performance	Grade Point
A	Excellent	10
B	Good	8
C	Fair	6
D	Poor	4
E	Fail	2

Student who earns an E Grade in a course shall have to re-appear in that course again when it is offered.

- 3.3 The Course Co-ordinator of the course will compile all the marks and will award the Grades. He/she will submit a copy of award list to Controller of Examinations for the preparation of result. Once Grades are submitted, any correction thereafter will only be made with the approval of the Director on the recommendations of the Dean Academic.

4.0

General

- 4.1 CGPA is the weighted average of all the Grades awarded to a student since his/her entry into the Institute upto and including the latest semester and computed as follows:

$$CGPA = \frac{\sum C_i G_i}{\sum C_i}$$

Where C_i denotes credits assigned to i th course and G_i indicates the Grade point equivalent to the Letter Grade obtained by the student to the i th course.

Provided that when a student repeats a course, the new Grade will replace the earlier one in the calculations of the CGPA.

Note:

The Percentage of marks obtained by a student if so required, can be calculated as =CGPA multiplied by 9.00.

- 4.2 At the end of each semester (i.e. after End Semester Examination), students will be supplied a Grade Card indicating the Grades secured in each course and up to date CGPA.
- 4.3 A Student is deemed to have completed the requirements for graduation and is eligible for the award of degree if:
- he/she has satisfied all the academic requirements as per the regulations.
 - he/she has paid all fees due from him/her.
 - there is no case of indiscipline pending against him/her.

5.0

Absence/ Dropping of Semester

- 5.1 If a student absents from the Institute with due permission of the Dean Academic due to illness, he/she will be permitted to rejoin provided the period of absence does not exceed one semester. If the period of absence is more than one semester or the absence is for reasons other than illness, the case will be referred to the Director by Dean Academic Affairs with his/her recommendations.

The student will, however, be charged the prescribed fee even for the period of absence.

In no case, the total period of absence shall exceed two semesters during student's stay in the Institute. In that eventuality, the student's name shall be struck off from the rolls of the Institute.

- 5.2 In case a student absents from the Institute without prior permission, he/she may be permitted to join back with the permission of the Director on payment of penalty of Rs. 10,000/- in addition to the prescribed fee for the period of absence.

In no case, the period of unauthorized absence will exceed one semester. If the period of unauthorized absence exceeds one semester, the student's name will be struck off from the rolls of the Institute.

A student will be allowed to study the courses as defined by a department carrying prescribed credits. The total period of stay at the Institute for award of M.Tech. degree will not, in any case, exceed 5 years (Ten Semesters).

- 5.3 The gap in studies, if any, will count towards the total duration of the Programme permissible under the Regulations.

- 5.4 The minimum CGPA required for the award of degree is 5.50. If a student after obtaining pass Grades (A/B/C/D) in all courses at the end of the programme obtains a CGPA less than minimum CGPA=5.5 required for the award of degree, he/she may be allowed by Dean Academic to improve the CGPA by studying the course(s) in which he/she has earned 'D' Grade(s) provided the said courses are offered in the semester under consideration of additional semester(s) for improvement will be counted within maximum duration permissible for the programme.

5.5 **Appeal**

Notwithstanding the above, the Senate may at its discretion on appeal, relax any of the conditions of Clause 5.1 and 5.2.

6.0 **Eligibility for admission**

- 6.1 Admission to M.Tech regular courses shall be made on the basis of joint merit in lower exam (B.Tech./B.E.) and GATE in the relevant discipline.

Part-Time M.Tech. programme is open only to the faculty members of the Institute.

- 6.2 Every student will be required to offer for examinations:

- 6.2.1 Prescribed number of papers (exclusive of seminar/Minor project) out of the list of subjects approved by the Senate from time to time.

- 6.2.2 A thesis properly typed or printed and prepared as per the standard format approved by the Institute.

- 6.3 The students will work for and prepare his/her thesis under the supervision of a teacher of the Institute. However, if the Director on the recommendation of the Chairman of the Department concerned, is satisfied that the work can be fruitfully carried out at another institute/organization/industry of repute, he/she may allow the student to do his/her thesis at an alternate Institution and this period will count towards the requirements for the Master's degree, but the student will spend for completing his/her thesis a minimum of one month in the Institute under his/her supervisor.

- 6.4 On completion, the student will submit the thesis to the Chairman, BOS through the supervisor. The thesis will present an orderly and critical exposition of the existing knowledge of the subject and will embody results of original investigations.

demonstrating the capacity of the student to do independent research work. While writing the thesis, the student will layout clearly the work done by him independently and the sources from which he/she has obtained other information contained in his/her thesis.

- 6.5 Duration of the Programme**
- 6.5.1** The normal duration of the M.Tech. Programme including thesis for regular students shall be 4 semesters. The maximum duration for regular students shall be 10 semesters, failing which a student will not be allowed to continue his/her studies for the programme.
- 6.5.2** The normal duration of the M.Tech. Programme including thesis for part-time students shall be 6 semesters. The maximum duration for part-time students shall be 10 semesters, failing which a student will not be allowed to continue his/her studies for the programme.
- 6.6** The student will submit his/her thesis within the prescribed maximum period as per Clause 6.5 but not earlier than the end of fourth semester for a regular student and the end of sixth semester for a part-time student. The result of the thesis will be declared only after the student has passed the prescribed number of papers and has fulfilled the academic requirements of his/her seminar/Minor project.
- 6.7** The minimum requirement to pass the M.Tech. examination will be:
- i) D or better Grade in each paper/seminar/Minor Project;
 - ii) Cumulative Grade Point Average (CGPA) of 5.50 for the entire degree.
 - iii) If a student admitted to the M.Tech. programme is unable to attain the minimum CGPA as per Clause 6.7 (ii), he/she may be permitted to improve his/her CGPA by studying upto a maximum of five courses in which he/she either obtained Grade 'D' earlier or by taking substitute courses with the concurrence of the Chairman of the Department concerned in two semesters only in case of regular students and upto a maximum of three semesters in case of a part-time student.
- Provided that this concession of additional semester(s) will be counted for maximum duration permissible as per Clause 6.5.
- 6.8** The award for the thesis will be either "approved with Distinction" "approved" or "rejected". In case thesis is rejected, the candidate will have to resubmit after a minimum period of three months and subject to Clause 6.5. In case thesis is again rejected, the candidate will be declared ineligible for award of M.Tech degree of this Institute.
- 6.9** A student fulfilling requirements of the M.Tech. course as per Clause 6.7 and having fulfilled the requirements of thesis as per Clause 6.6 & 6.8 will be eligible for the award of degree.
- The result card of the students will show Letter Grades earned by the student in each paper/Seminar/Minor project and the CGPA for the degree and title of thesis alongwith award.
- 6.10** Sponsored Candidates with 60% marks in the qualifying examination are eligible for admission. Such candidates must have a minimum of two years of full time work experience in a registered firm/company/industry/educational and research institutions/

Government Department/Organization in the relevant field in which admission is being sought. The employer in the sponsorship certificate must indicate that the fee will be borne by the sponsoring organization and the candidate will not be withdrawn before the completion of the programme and absorbed after the completion of the programme.

7.0

Scholarship:

GATE qualified M.Tech. candidates may be awarded GOI Scholarship and contingency grant as per rules, if available. Non-Gate candidates may also be eligible for such assistance if available and also rules permit, from the date they clear the GATE after admission.

The interpretation of any of the regulations contained here in shall lie with the Director of the Institute and shall be final.

The Senate has a right to change/amend/introduce any of the existing and new rules/regulations.

ORDINANCES & REGULATIONS

for

The Degree of DOCTOR OF PHILOSOPHY



**NATIONAL INSTITUTE OF TECHNOLOGY
(DEEMED UNIVERSITY)
KURUKSHETRA-136119**

2003

**NATIONAL INSTITUTE OF TECHNOLOGY (DEEMED UNIVERSITY)
KURUKSHETRA-136119**

**ORDINANCES & REGULATIONS FOR THE
DEGREE OF DOCTOR OF PHILOSOPHY**

PREAMBLE

National Institute of Technology (NIT) (Deemed University), Kurukshetra offers postgraduate programmes leading to the award of Ph.D. degree through its Departments. The award of Ph.D. degree is in recognition of high academic achievements, quality research and application of knowledge to the solution of technical and scientific problems in Science, Technology, Humanities & Social Sciences.

The institute also encourages research in interdisciplinary areas through a system of co-supervision and provides excellent opportunities for such programmes. The institute also undertakes sponsored research and development projects from industrial and other organizations in the public as well as private sector.

It is desired that the research work be an original work characterised either by the discovery of facts or by a fresh approach towards the interpretation and application of facts or development of equipment making a distinct advance in instrument technology. It shall evince the candidate's capacity for critical examination and sound judgement and shall represent original contribution to the existing knowledge.

ORDINANCES

I. DEFINITIONS

- (i) "DRC" shall mean Department Research Committee.
- (ii) "Applicant" shall mean an individual who applies for admission to the Ph.D. programme of the National Institute of Technology, Kurukshetra on a prescribed Application Form.
- (iii) "BOS" shall mean the Board of Studies of the National Institute of Technology, Kurukshetra.
- (iv) "Candidate" shall mean a person registered for the Ph.D. Degree and who has successfully completed the requirements.
- (v) "Caretaker Supervisor" shall mean a member of the academic staff appointed to look after the candidate's research interests in the absence of the Supervisor and after the submission of the thesis.
- (vi) "Co-Supervisor" shall mean an additional supervisor approved by the BOS on the recommendations of Department to help in the accomplishment of the research work of the candidate.
- (vii) "DAc" shall mean the Dean Academic.

- (viii) "Degree" shall mean the Degree of Doctor of Philosophy (Ph.D.) of the National Institute of Technology, Kurukshetra.
- (ix) "Educational Institution" shall mean those colleges which offer Bachelor's Degree or higher.
- (x) "Full-time Research Candidate" shall mean a person registered for the Ph.D. Degree devoting full time for completing the degree requirements.
- (xi) "Institute" shall mean the National Institute of Technology, Kurukshetra.
- (xii) "Institute Research Candidate" shall mean a person registered for the Institute Ph.D. Degree as a full time research candidate.
- (xiii) "Minimum Registration Period" shall mean the minimum period for which a candidate must be registered.
- (xiv) "ORG" shall mean PSU/ Govt. depts./ R&D units.
- (xv) "Part time research Candidate" a person who is registered for the Ph.D. degree and will devote part of his/her time towards this pursuit and devote part of time towards the discharge of his/her official obligations.
- (xvi) "Registration Period" shall mean the length of time span commencing with the date of initial registration at the Institute on full-time basis.
- (xvii) "Residency" shall mean the minimum period for which a candidate must attend the institute on full-time basis.
- (xviii) "Sponsored Research Candidate" shall mean a full time research candidate except that he/she receives complete financial support from the sponsoring organization/ his/her (her) employer.
- (xix) "Supervisor" shall mean a member of the academic staff of the Institute approved by BOS on the recommendation of Department/ Centre to guide/supervise the research/ academic work of the candidate.

NOTE: 'He/she' & 'His/her' imply 'he/she'/'she' and 'his/her'/'her' respectively.

2. 0.1 The minimum entry qualification for admission to the Ph.D. programme shall be:
A Master's degree in Engineering/ Technology/ Science/ Humanities and Social Sciences/ Management or any other equivalent qualification recognized by the Institute.
- 0.2 A candidate registered for the Ph.D. programme shall be required to satisfy a minimum registration period requirement, as laid down in the Regulations
- 0.3 A candidate shall be required to work at the Institute, under the guidance of approved supervisor(s). In special circumstances, a full-time candidate may be permitted by the BOS to carry out his/her research outside the Institute.
- 0.4 A candidate will be required to complete all the requirement for the award of the degree within a period specified in the regulations
- 0.5 The date of initial registration shall normally be the date on which the student formally registers and deposits the fee for the first time in the beginning of a Semester for the Ph.D. programme, which shall also be the date of his/her joining the programme for all intents and purposes.

- 0.6 For a student to become a candidate for the degree, he/she shall have to satisfy the requirements as laid down in the Regulations and be accepted by DRC.
- 0.7 For the purpose of minimum residential requirement in the case of change of status from full-time to part time, the time spent as full time will be taken into account.
- 0.8 If a candidate withdraws from his/her Ph.D. programme or his/her registration is terminated, his/her status as a candidate ceases.
- 0.9 The award of the Ph.D. to an eligible candidate shall be made in accordance with the Regulations of the Institute.

REGULATIONS

The following Regulations shall apply to all categories of candidates pursuing courses of study and research leading to the Ph.D. degree:

R.1 CLASSIFICATIONS

R.1.1 The applicant for admission to the Ph.D. programme shall be classified under any one of the following categories which will be decided and recommended by DRC.

(i) Full-time Research Candidate:

a) Institute Research Candidate

Institute Research Candidate getting Institutional Fellowship, if available

b) Govt./Semi Govt. Fellowship Awardee (QIP, CSIR, UGC, DAE, DST, DBT, etc.)

Research scholars receiving fellowship and contingency grants from outside organizations such as CSIR, UGC, QIP, DST, AICTE etc.

c) Sponsored Candidates

An employee of a Government Department/organisation/industry/institution, with a minimum of two years relevant working experience duly sponsored by employer for the period of study. Such candidates will be considered for admission only if concerned DRC accepts the sponsorship.

d) Self-financed (Indian/ Foreign)/ Study Leave/ College Teacher

- Indian: Indian national.
- Foreign: Foreign nationals admitted through Embassy of the respective Govts. after getting approval from the Ministry of External Affairs and No Objection Certificate from the Ministry of Human Resources Development, Department of Education, Govt. of India or admitted under an MOU.
- Study Leave: Candidates on study leave from other organizations/institutions for a period of not less than two years for pursuing Ph.D. programme.

e) ICCR Awardees (Foreign Students)

Candidates sponsored by their Governments and awarded scholarship by ICCR, Govt. of India. Such candidates shall apply for admission through Indian Embassy in their country.

ii) Part-time Research Candidate:

f) Institute Faculty/ Staff

The permanent employees of the Institute/Educational Institutes/ ORG with more than 2 years of service and are admitted to the Ph.D. Programme. Such candidates will work for their Ph.D. Programme in addition to their normal duties.

g) Project Staff

Persons working on various projects undertaken by the Institute where Ph.D. registration is not a requirement but are admitted to Ph.D. programme. Such candidates will work for their Ph.D. Programme in addition to their normal duties and their Ph.D. programme should be related to their project work.

h) External Candidates (Sponsored)

The candidates sponsored by institutions/organizations and pursuing research work in their parent organization by taking supervisor from the Institute and other from parent organization.

R.2. CONSTITUTION OF DEPARTMENTAL RESEARCH COMMITTEE

The DRC shall consist of:

- (i) Chairman of the Department
- (ii) All Professors of the Department
- (iii) Three Assistant Professors of department by rotation provided they are Ph.Ds. The term of Assistant Professors will be 2 years.
- (iv) Supervisor(s) of the candidate

R.3. ELIGIBILITY

R.3.1 Educational Qualifications

An applicant possessing the following qualifications in appropriate areas shall be eligible to apply for admission for Ph.D. programme of the Institute.

Master's degree in an appropriate discipline or equivalent with a minimum Cumulative Grade Point Average (CGPA) of 6.75 on a 10 point scale or equivalent as determined by the Institute wherever Letter Grades are awarded; or 60% marks in aggregate (of all the years/ semesters) where marks are awarded.

R.3.2 Admission of Institute Staff

A member other than teaching faculty of the Institute who satisfies eligibility qualifications may be considered for admission to the Ph.D. programme as a part time student provided he/she has been given administrative clearance by the Director.

R.3.3 Eligibility for Part-time Ph.D.

- a) the applicant possesses the minimum entry qualifications(R.3.1).
- b) the applicant proves to the satisfaction of the HOS that his/her official duties permit him to devote sufficient time to research;
- c) facilities for pursuing research are available at the applicant's place of work in the chosen field of research;
- d) he/she will be required to reside at the Institute for a period of not less than 6 months after his/her registration for the degree. (This condition of minimum residence period will be automatically waived off for candidates who are working in Kurukshetra or in ORG/ Educational Institutions located within a radial distance of 200 km from the Institute).

R.3.4 Eligibility for Institute Fellowship to teachers of Engineering/ Science colleges

The faculty of Engineering/ Science Colleges may be considered for the award* of Institute Fellowship for pursuing Ph.D. Programme at NIT, Kurukshetra subject to the following terms and conditions:

- (a) The concerned faculty member of the Engineering/ Science College must be sponsored by their respective Institutions to pursue the Ph.D. Programme at NIT, Kurukshetra.
- (b) The sponsored faculty member of the Engineering/ Science Colleges should satisfy the eligibility as per R.3.1.
- (c) The number of Fellowship should be within the sanctioned limit of a particular Department.
- (d) The DRC should examine each case on merit before making recommendations to the DAe for the award of Institute Fellowship.

* Subject to availability of such fellowships

R.3.5 Relevant Documents in support of eligibility for the concerned categories.

R.4 RESERVATION/ RELAXATION

- R.4.1** Fifteen percent (15%) fellowships (of the total sanctioned institutional fellowships) shall be reserved for Scheduled Caste applicants and 7.5% for Scheduled Tribe applicants in each of the categories of Research Candidates. A total of 3% fellowships, over and above the sanctioned strength, will be reserved for physically handicapped applicants in all the Ph.D. programmes of the Institute put together.
- R.4.2** For the SC/ST/ physically handicapped applicants, the eligibility requirement of CGPA may be relaxed to 6.25 on a 10 point scale or equivalent, or to 55% marks.
- R.4.3** Applicants with master's degree in English, seeking admission to Ph.D. English, eligibility requirement of CGPA may be relaxed to 6.25 on a 10 point scale or equivalent or to 55% marks.

R.5 SHORTLISTING

- (a) The short listing of applicants for the purpose of admission test/ interview will be done by the DRC of concerned department.

- (b) The DRC of the concerned department may set the shortlisting criteria, if considered necessary, higher than the minimum eligibility defined above.
- (c) The basic guidelines/ instructions for short listing will be issued by DRC with a copy to Director.

R.6 REGISTRATION

- R.6.1** Every candidate will be deemed to have been registered on completion of admission for the 1st semester of the course. Every candidate will be required to renew the registration every semester till the submission of the thesis. The renewal of registration every semester shall be subject to satisfactory progress in his/her research work as recommended by DRC.
- R.6.2 Time Period Requirement for Submission**
 - a) The minimum period of registration shall be 24 months for a full time candidate and 36 months for a part time candidate.
 - b) The candidate of all categories shall normally submit their thesis within a period of five years from the date of their initial registration for the Ph.D. Programme. However, as a special case, this limit may be extended up to a maximum period of seven years by the Director after which the registration shall stand cancelled automatically.
 - c) Notwithstanding above, the senate may relax the conditions under (a), (b) above in exceptional circumstances and in individual cases, as per the recommendations of DRC and HOS.

R.7 THESIS SUPERVISOR(S)

- R.7.1** Every registered candidate shall be assigned a Research Supervisor(s) by the Department as per preference of the candidate, subject to approval of DRC & BOS.
- R.7.2** Supervisor(s) can be any full-time faculty member of the Institute with a Ph.D. degree.
- R.7.3** The Director on the recommendations of the DRC, may appoint more than one Supervisor(s) not exceeding a total of three. These may be from inside or outside the Institute and normally, there should not be more than two supervisors from within the Institute. Appointment of any other Supervisor(s) would not be made after the lapse of 18 calendar months from the date of initial registration of the candidate. However, if appointed, he/she will be designated as co-supervisor.
- R.7.4 Appointment of Supervisors and Caretaker Supervisor for Ph.D. students**

A faculty member appointed as Ph.D. supervisor is normally expected to be available to a research candidate in the Institute till the thesis is submitted. However, under unavoidable circumstances, such as: long leave of more than 12 months; resignation; retirement; or death, a supervisor may not be available to the scholar. In such special cases, appointment of supervisor(s) will be regulated as under:

 - R.7.4.1 A Supervisor proceeding on long leave of more than 12 months.**
 - (i) Where more than one supervisor exists, the supervisor proceeding on leave can continue to be a supervisor.

- (ii) Where only one supervisor exists, another supervisor may be appointed by the DRC in cases where a candidate has not yet submitted his/her synopsis.
- (iii) If the thesis/synopsis of the thesis has been submitted before the supervisor proceeds on leave, he/she will continue to be the supervisor and only a caretaker supervisor will be appointed.
- (iv) Further, if major revision becomes necessary, and the sole supervisor is on leave, he/she should be asked to specifically state whether he/she would effectively help the student carrying out the major revisions within a reasonable period. In case the sole supervisor expresses his/her inability due to one reason or the other, the caretaker supervisor, if he/she provides the required help in carrying out the major revision, will automatically be treated as a co-supervisor of that candidate.
- (v) If a supervisor proceeds on leave for a period less than 12 months initially, but later extends his/her leave beyond 12 months, the above procedure (i-iv) will be followed. The extension granting authority will inform the DRC/BOS accordingly.
- (vi) If the supervisor proceeds on leave for more than 24 months he/she will cease to be supervisor.

R.7.4.2 A Supervisor retires

A faculty member who is due to retire within the next two years can be appointed as a supervisor and can continue to be the supervisor even after his/her retirement provided the Director is convinced of his/her availability/continued guidance to the student. In other cases, a faculty member on retirement may continue as a supervisor, if reemployed or appointed Emeritus Fellow; or, if the synopsis of the thesis has been submitted. Appointment of another Supervisor, if necessary, will be as per Clause R. 7.4.1.

R.7.4.3 A Supervisor resigns

A new Supervisor will be appointed, if necessary, as per Clause R.7.4.1.

R.7.4.4 A Supervisor expires

A new Supervisor will be appointed, if necessary.

R.7.5 The maximum number of students which can be supervised by a faculty member at any time at NIT, Kurukshetra will be as under:

Professor-08, Assistant Professor-06, Lecturer-04

R.8 COURSES AND CREDITS

The Candidate shall have to meet the requirements of courses and credits as decided by the Senate from time to time.

R.9 COMPREHENSIVE EVALUATION

- R.9.1** Each candidate will be required to take a comprehensive examination after admission & registration which will test candidate's comprehensiveness of his/her broad field of

research and his/her academic preparation and potential to carry out the proposed research plan. The comprehensive evaluation may be a combination of written and oral examination and may be separately conducted before evaluation of the research proposal. The examination will be conducted by a DRC, of the concerned department.

R.9.2 The following procedure is to be uniformly followed by all the Departments in conducting the comprehensive evaluation of Ph.D. candidates.

- (a) The written examination should be conducted by the DRC within the specified guidelines.
- (b) The result of the written examination should be declared within two weeks as passed/failed.
- (c) After the student has passed the written examination, the oral examination should be conducted by the DRC of the candidate within the broad guidelines.
- (d) After passing in the oral examination, research proposal will be evaluated by DRC through seminar.

R.9.3 (a) Written and oral examination

If a candidate fails in written/oral examination, he/she has to reappear in examination after a period specified by DRC.

(b) Research Plan

In case research plan is not approved by DRC, the candidate will have to improve the research plan as per the suggestion of DRC and get it reevaluated.

R.9.4 A student will be provided a maximum of two attempts to pass the comprehensive evaluation.

R.9.5 All candidates must qualify the comprehensive evaluation between 3-12 months, failing which their registration will be cancelled.

R.10 PERFORMANCE MONITORING

R.10.1 The academic/research progress of each candidate will be monitored by DRC. For this purpose, each candidate will be asked to submit a progress report at the end of each semester to Chairman-DRC through Supervisor(s).

R.10.2 The Chairman-DRC in the Department will be coordinating collection of progress reports written and signed by the candidate and forwarded by the supervisor(s) every semester.

R.10.3 The Supervisor(s) and DRC will evaluate the progress report of the candidate.

R.10.4 If the progress is 'unsatisfactory' a warning would be issued to the candidate. Subsequently, the fellowship (in case of regular scholar) of the candidate would be withheld, if approved so by BOS, Director. The candidate may be given two chances to improve upon the progress.

R.10.5 The cases where some action is required will be reported to Director.

R.11 SEMINAR/ SYNOPSIS/ PANEL OF EXAMINERS

R.11.1 Seminar

- a) DRC shall assess the work of candidate through a pre-synopsis seminar which will be held not earlier than the 18 months for full time and 24 months for part time candidate from the date of passing comprehensive evaluation.
- b) The candidate will submit the synopsis only on the satisfaction of quality of the work.
- c) Details of the pre-synopsis seminar shall be notified well in advance so as to enable the interested staff members and students to attend it.

R.11.2 Synopsis

- a) The synopsis should be submitted normally within 2 months after the presentation of pre-synopsis seminar. In case the synopsis is not submitted in the specified period, the student may be asked to present another pre-synopsis seminar.
- b) The students shall submit the synopsis of his/her work normally at least one month before submitting the thesis.
- c) On completion of the research work the candidate shall submit to DRC through supervisor(s), 3 copies of the synopsis. The DRC will forward the synopsis with its recommendations to the DAo
- d) The candidate shall be required to submit fresh synopsis if he/she fails to submit his/her thesis within 8 months of the submission of the earlier synopsis. However, in case a candidate fails to submit his/her thesis within the stipulated time and has suitable justification for the same, the Director may on recommendations made by the DRC and on individual merits of each case grant his/her extension in time by not more than two months, i.e. the candidate may be allowed to submit his/her thesis within a period normally not exceeding 10 months from the date of the submission of the synopsis. However, the thesis should be submitted within the prescribed time limit as per regulations and approved by BOS.

R.11.3 Panel of Examiners

- a) A panel of at least ten external experts in the area of the Ph.D. thesis would be suggested by the Supervisor(s) and recommended by the DRC while forwarding the title and synopsis of the thesis. The panel so recommended may include the examiners from outside India. The recommended panel will be considered and approved by BOS.

R.12 BOARD OF EXAMINERS

On receipt of the title and synopsis of the thesis, the Director will appoint a Board of Examiners for each candidate from the list approved by the BOS. The Board will consist of one internal examiner, normally the Supervisor as recommended by DRC & BOS and two external examiners, who shall be experts in the subject of the thesis. These external examiners shall be chosen normally from the panel of examiners recommended and approved by the DRC and BOS as aforesaid. A person working in the same laboratory (ies)/ institution(s) where Research Candidate is employed cannot, however, be appointed as External Examiner for evaluating the Thesis of that Research

Candidate. Further no person can be appointed as External Examiner from Laboratory/Institution to which the Co-Supervisor(s) of the Research candidate belongs.

R.13 THESIS SUBMISSION

R.13.1 The candidate will submit the thesis along with the prescribed evaluation fee.

R.13.2 The thesis shall be written in English and shall contain a critical account of the candidate's research. It should be characterised by discovery of facts or fresh approach towards interpretation of facts and theories or significant contribution to knowledge or development or a combination of these. It should bear evidence of the candidate's capacity for analysis and judgement as well as ability to carry out independent investigation, design or development.

No part of the thesis or supplementary published work, shall have been submitted for the award of any other degree or diploma.

R.13.3 A candidate may submit his/her thesis within the time period as stipulated in regulations provided that he/she has completed the minimum period of registration.

R.13.4 The candidate for the degree shall submit four unbound copies of the thesis with a soft cover.

R.14 THESIS EVALUATION

R.14.1 Each examiner will be requested to submit to the Controller of Examinations a detailed assessment report and his/her recommendation on the prescribed proforma within six weeks of the date of receiving the thesis.

R.14.2 In the event of the thesis report not being received from an examiner within a period of three months, the Director may appoint another examiner in his/her place for evaluating the thesis from the approved list of examiners.

R.14.3 (i) Examiners will examine the thesis individually with a view to judge that the thesis is a piece of research work characterised by:

- a) The discovery of facts, or
- b) A fresh approach towards interpretation and application of facts or theories, or
- c) A distinct advancement in technology.

(ii) The examiner will be required to give his/her opinion about candidate's capacity for critical examination and sound judgement. Each examiner will submit the reports on the prescribed form clearly stating that:

- a) The thesis is recommended for the award of Ph.D., or
- b) The thesis is recommended for the award of Ph.D. Degree subject to the candidate giving satisfactory answer to queries specifically mentioned in the report at the time of Viva-Voce examination, or
- c) The candidate be allowed to resubmit his/her thesis in the revised form, or
- d) The thesis be rejected.

- (iii) a) If all the three examiners recommend acceptance of the thesis, their recommendations shall be accepted.
- b) If two of the three examiners recommend resubmission under (c) above, their decisions would be accepted. In such an event candidate may, however, be allowed to submit the thesis normally within one year, provided the title of the thesis remains unchanged. Normal procedure will be followed for the evaluation of the thesis.
- c) If one of the examiners recommends rejection, the comments made by the examiners be sent to the examiner and his/her clear verdict sought. The examiner may then recommend acceptance, rejection or revision of the thesis.

In case the thesis is accepted, sub-clause (a) above will be applicable. In case recommendation for revision, sub-clause (d) below will apply. However, if the examiner still recommends rejection, a fourth examiner would be appointed from the panel of the examiner already approved by the Director. In such cases sub-clause (e) will apply.

- d) In case one examiner recommends revision of the thesis, the thesis would be revised normally within one year, if the candidate so desires. The revised version of the thesis would be sent to all the examiners for their recommendations.

If the candidate does not agree for revision, he/she may ask for appointment of the fourth examiner under sub-clause (e) below:

- e) The new examiner if appointed, shall be Indian or Foreign depending on whether the thesis was rejected by an Indian or a Foreign examiner in the first instance. The reports of all the examiners will be sent to him/her without revealing the identity of the examiners, along with the response of the candidate, if any, to these. The thesis shall be deemed to be acceptable if three out of four examiners recommended acceptance.

If the fourth examiner recommends revision, the thesis would be suitably revised and resubmitted normally after 3 months and sent for examination to all the examiners except the one in whose place the fourth examiner was appointed.

In case the fourth examiner recommends rejection and the same is not accepted by the candidate, the thesis would be rejected. The candidate may then avail the benefit of sub-clause (b) above.

- f) If two of the three examiners recommend revision of the thesis, the candidate may revise the thesis accordingly and resubmit it normally within a period of one year for the evaluation by the same set of examiners.
- g) The correspondence regarding (c), (d) and (e) above will be done by the DAe.
- h) If one examiner recommends rejection and other examiner recommends revision of the thesis, the candidates may revise the thesis and resubmit it normally within a period of one year for reevaluation by the same set of examiners.

- (iv) Any doubt arising out of the procedure laid down above shall be referred to the Director for a decision.

R.15 RESUBMISSION

In case of resubmission of the thesis, a fresh fee for the examination shall be paid by the candidate.

R.16 VIVA-VOCE EXAMINATION

R.16.1 If the thesis is recommended for the award of degree, the candidate shall be required to defend his/her work/thesis orally (viva-voce examination) before a committee of examiners comprising of one internal and one external examiner. The questions/queries specified by the thesis examiners in their report shall be intimated to the candidate through his/her supervisor at least one week prior to the conduct of the viva-voce examination. Details of the viva-voce examination shall be adequately notified so as to enable interested staff members and students to attend it.

R.16.2(i) In case of non-availability of the Indian External Examiner for conducting the viva-voce examination, the Director may appoint alternate examiner to conduct the viva-voce examination from the existing panel.

If need be, the DRC may suggest a fresh panel of examiners.

- (ii) The viva-voce examiners shall be provided with the reports of the examiners before the viva-voce examination.
- (iii) Internal examiner shall arrange for the viva-voce examination of the candidate as early as possible.
- (iv) In case of the inability of the internal examiner to have the viva-voce examination conducted due to any reason whatsoever, the Director may appoint another Internal Examiner from amongst the faculty of the department concerned who belongs to the particular field in consultation with DRC and Chairman of the Department concerned to conduct the viva-voce examination. In such cases also, the Ph.D. work will be deemed to have been carried out under the guidance of the supervisor(s) only.
- (v) After the viva-voce examination, both the examiners will prepare a detailed joint report giving one of the following recommendations.
 - (a) recommended for award of degree
 - (b) that thesis be resubmitted after a minimum period of six months incorporating the suggestions of the examiners.
 - (c) not recommended for award of degree
- (vi) Any other matter not explicitly provided herein or of an exceptional nature, may be referred to the Director for his/her decision.

R.17 AWARD OF Ph.D. DEGREE

R.17.1 On the completion of all stages of the examination, a committee consisting of Director, Dean Academic and Chairman of the Department concerned shall examine the reports of all the examiners (thesis and viva-voce) and decide as under:-

(a) that the degree be awarded;

(b) that the degree shall not be awarded. The thesis will be rejected on the conclusion that the thesis is not genuinely the work of the candidate.

In case of (a) the Committee shall also provide to the candidate a list of all corrections and modifications in the thesis (if required) including suggestions made by the examiners during the thesis evaluation and the result of the candidate will be declared after the candidate submits two copies of the corrected thesis.

R.18 FINANCIAL ASSISTANCE (Institutional Fellowship)

R.18.1 Those candidates who are admitted on full-time basis are considered on request, for the award of Institutional Fellowship of the amount as decided by the Board of Governors and directed by the Government of India from time to time.

The students getting Institutional Fellowship will provide 8 hrs of teaching assistance per week.

R.18.2 In addition, the students will be given contingency grant in accordance with the rules of the Institute.

It is to be noted that admission to the Programmes and award of fellowship are not linked. Admission to any programme does not guarantee the award of fellowship. Those who are not awarded fellowship can continue with the programmes as a self-financing candidate.

The Institute may provide fee waiver subject to the final approval of Director on the recommendation of DRC & DAC

R.19 LEAVE AND ATTENDANCE

A candidate is entitled to avail leave as per Leave and Attendance Rules formulated and amended from time to time by the Senate. Presently these are as under:

During Course work: A full-time Ph.D. candidate during his/her stay at the Institute will be entitled to leave for 30 days including leave on medical grounds, per academic year. He/she will not be entitled to mid-semester breaks, summer and winter vacations.

Leave beyond 30 days in an academic year may be granted to a Research Scholar in exceptional case, by the Chairman of the Department concerned, subject to the following conditions:

- (i) the leave beyond 30 days will be without Assistantship/ Scholarship; and
- (ii) such an extension of leave upto additional 30 days will be granted only once during the programme of the scholar.

- (iii) The leave may be subject to the approval of the Chairman of Department concerned on the recommendation of the Supervisor; and a proper leave account of each candidate shall be maintained by the Department concerned.
- (iv) The women research candidate will be eligible for Maternity Leave fellowship once during the tenure of the award.

R.20

CANCELLATION OF REGISTRATION

R.20.1 Registration of a candidate shall be cancelled in any one of the following eventualities, after due approval of Director.

- (i) if he/she absents himself for a continuous period of four weeks without prior intimation/ sanction of leave.
- (ii) if he/she resigns from the Ph.D. Programme and the resignation is duly recommended by the Supervisor.
- (iii) if he/she fails to renew his/her registration within 4 weeks of the start of the semester as per provision contained in these Ordinances & Regulations.
- (iv) if his/her academic progress is found unsatisfactory.
- (v) If he/she does not clear the comprehensive evaluation as stipulated.
- (vi) If he/she is found involved in an act of misconduct and/or indiscipline and termination has been recommended by a competent authority.

R.21

GENERAL.

R.21.1 Notwithstanding anything contained in these Ordinances & Regulations, all categories shall be governed by the rules and procedures framed by the senate in this behalf, and in force from time to time.

R.21.2 Any doubt or dispute about the interpretation of these Ordinances and Regulations shall be referred to the Director whose decisions shall be final.

R.21.3 Eligibility for admission to Ph.D. programmes in different disciplines may be reviewed from time to time by the concerning department and approved by the Senate.

R.21.4 All exceptions and issues not covered above may be decided by a committee consisting of Director, Dean Academic, Chairman of the Department concerned and supervisor of the candidate concerned subject to subsequent ratification by Senate.

ANNEXURE-A

**NATIONAL INSTITUTE OF TECHNOLOGY
(DEEMED UNIVERSITY)
KURUKSHETRA-136119**

Sr. No.....
**APPLICATION FOR ADMISSION TO THE DEGREE OF
DOCTOR OF PHILOSOPHY (Ph. D.) COURSE.**



To
The Chairman,
Department of.....
National Institute of Technology,
Kurukshetra

Sir/Madam,

I hereby apply for admission as a research candidate to the Ph.D. Course in the Department of National Institute of Technology, Kurukshetra and submit the following particulars in support of my application. I have read the Ordinance & Regulations for this course and undertake to abide by it and also the amendments/additions made therein from time to time. I hereby declare that all the statements made in this application are true, complete and correct to the best of my knowledge and belief and I authorize the Institute to take any action against me in the event of any information given by me in this application having been found false or incorrect subsequently.

Yours faithfully,

Signature of Candidate

Place.....
Dated.....

(Particulars to be filled by the Candidate)

1. Name (in block letters) Mr./Mrs./Miss.....
2. Father's Name.....
3. Date of Birth (as given in Matriculation Certificate).....
4. Registration No. (if already registered with Institute)
5. Permanent Address.....
6. Local Address.....
7. Whether belong to Scheduled Caste /Scheduled Tribe/Physically Handicap Category?
8. Academic Qualification :-

Examination Passed	Name of the University/Institute	Year	Roll No	Max. Marks	Marks/Grade Obtained	% age of Marks	Discipline/Specialization
Bachelor Degree							
Master's Degree							
National Test/ CAT/NET etc.							

Title of Dissertation, if any.....

9. Have you ever been disqualified or punished (state Yes/No).....
if so, Class of examination.....Session/Year..... Name of the
University..... and punishment awarded.....
10. Proposed area of research.....
.....
11. Details of previous research experience, if any.....
12. No. of publications, if any (Attach copies)
13. If employed,
(a) Name of employer.....
(b) Nature of work (Teaching/Other).....
(c) Total experienceyear.....months.....

**CERTIFICATE TO BE SIGNED BY THE HEAD OF THE INSTITUTION / EMPLOYER IN CASE
THE CANDIDATE IS EMPLOYED**

I do hereby certify that the application of the above mentioned candidate, who has been serving in the Institution/ department as (designation)since.....on regular/temporary basis..... is being made with my consent and permission. I further certify that the post on which he/she is working here is a teaching/Non-teaching post.

Place.....
Date.....

Signature of the Head of the
Institution/Employer with
seal.

Note - The candidate is required to submit one attested photocopy of each certificate/degree with the application form.

1. Matriculation certificate.
2. Bachelor's Degree and Mark Sheet
3. Master's Degree and Mark Sheet
4. Valid GATE/NIT (Grade Card).
5. Migration certificate (in the case of a student coming from other University/Institute).
6. No-Objection-eum-Service Certificate from the employer (in case the candidate is employed).
7. Scheduled Caste/Scheduled Tribe/Physically Handicapped.
8. Nature of employment, Research experience, publications and other related details.

Item 3.3 To note the action taken on the minutes of the 2nd meeting of the Senate of National Institute of Technology, Kurukshetra held on 29.11.2003.

The action on the minutes of the 2nd meeting of the Senate held on 29.11.2003 has been taken as under:-

Item	Subject	Action taken
2.1	To confirm the minutes of the 1 st meeting of the Senate of the Institute held on 16.4.2003.	No action required.
2.2	To note the action taken on the minutes of the 1 st meeting of the Senate of National Institute of Technology, Kurukshetra held on 16.4.2003.	Matter reported to the Senate in this meeting under agenda item 3.2.
2.3	To note the decision of Board of Governors of the Institute taken in its 3 rd meeting held on 6.10.2003.	Noted for compliance. The action taken under the agenda item 3.2 of this meeting of the Senate may also be referred to.
2.4	To consider the Regulations regarding Convocation, award of degrees, medals, certificates and prizes, programme of presentation and citation, academic procession and use of academic costumes/robes.	Action Taken. However, matter is further placed before the Senate under the agenda item 3.10.
2.5	To note the name of all students who have become qualified for the award of degrees of the Institute.	Action taken.
2.6	To consider the syllabi of B.Tech. 1 st semester and 2 nd semester (common to all branches) - from the academic session 2004-05 onwards.	The item was deferred, hence no action required.

2.7	To consider a proposal to award a medal alongwith cash prize of Rs. 5000/- w.e.f. the year 2003 onwards to the topper of B.Tech. Electrical Engineering Branch in the memory of Late Sh. Shyam Sunder Dhingra, a student of this Institute, 1981-86 batch.	Action taken. However, matter is further placed before the Senate under the agenda item <u>3.8</u> .
2.8	To consider Degree Formats to be awarded to the students of the Institute.	Action taken. The Degree Formats were finalized as per decision of the Board taken in its 4 th meeting held on 8.12.2003.

The Senate may note.

Item 3.4 To consider fixing the criteria for admissions to the M.Tech. Programmes.

The admissions to the M.Tech. Programmes upto the year 2003 were made on the basis of score of GATE and score of qualifying examinations (with 70:30 ratio respectively). The admissions to the sponsored category candidates (5 Nos. in each discipline) were made on the basis of qualifying B.Tech./B.E. examinations.

It has been felt that admissions in the M.Tech. programmes from the year 2004 may be made on the basis of merit in the GATE score only to attract the talented students and to complete the admissions well in time. In case any seat remains vacant the same may be filled on the basis of merit of qualifying examination with at least 60% marks. However, the admissions to the sponsored category candidates may be made as per existing practice.

The Senate may decide.

Item 3.5 To consider prescribing cut-off date for receiving applications for Ph.D. registration.

The Ordinances and Regulations for Ph.D. were approved by Senate in its 1st meeting held on 16.4.2003 and by the Board of Governors in its 3rd meeting held on 6.10.2003. The notification for admission of Ph.D. scholars was thereafter issued and the candidates are now being enrolled for Ph.D. based on the recommendations of the Departmental Research Committees and BOSSs. In the approved rules and regulations no cut-off date has been fixed for receipt of applications. As such the admission of scholars for Ph.D. continues without a cut-off of date.

It is, therefore, proposed that the cut-off date for receiving the applications for Ph.D. admission for the July-December(Odd) Semester may be as 31st August and the cut-off date for January-May (Even) Semester may be as 31st January. The applications received late in a semester may be considered for Ph.D. admission in the next semester.

The Senate may consider and approve the above proposal.

Item 3.6 To consider permitting change of Branch to B.Tech. students in 3rd Semester.

The students admitted in B.Tech. during 2003 are being governed by new Academic Regulations approved by Senate in its 1st meeting held on 16.4.2003. The B.Tech. 1st year students in all the branches have common courses in 1st and 2nd semesters.

It is proposed that students who intend to change their Branch may be allowed to do so in the 3rd Semester on the basis of CGPA obtained in 2nd semester i.e. 1st year of their study, subject to the condition that the number of students in a particular branch does not fall below 75% of the sanctioned strength. In case of a tie, the rank in the AIEEE may be considered as tie breaker. If there is still some case of tie, the percentage of marks obtained in +2 qualifying examination may be taken into account to break the tie.

The Senate may consider and approve the above proposal.

Item 3.7 To consider fees and amounts payable by the Ph.D. Scholars

The matter regarding fees and amounts payable by the Under-graduate and Postgraduate students was placed before the Senate in its 1st meeting held on 16.4.2003.

While considering the issue the Senate also decided that Tuition Fee and Evaluation Fee for Ph.D. Programme may be charged @ Rs. 5000/- per annum and Rs. 5000/- respectively. However, detailed fee structure for the Ph.D. Scholars was not decided. Accordingly the detailed fee structure for Ph.D. scholars is proposed as under:

<u>Sr.No.</u>	<u>Head of Account</u>		<u>Remarks</u>
		Ph.D.	
1.	Tuition Fee		
(a)	Normal Fee	Rs. 5000/- p.a.	Payable in two instalments i.e. at beginning of each sem.
(b)	NRI	US\$ 2500 p.a.	-do-
2.	Institution Development Fund		
(a)	Normal Fee	Rs. 4000/- p.a.	-do-
(b)	NRI	US\$ 500 p.a.	-do-
3.	Students Fund		
(a)	Normal Fee	Rs. 3500/- p.a.	-do-
(b)	NRI	US\$ 450 p.a.	-do-
4.	Thesis Evaluation Fee		The fee shall be payable afresh if the Thesis is resubmitted for examination
(a)	Normal Fee	Rs. 5000/-	
(b)	NRI	US\$ 2500	
5.	Semester Renewal Fee (3rd Sem. Onward)		
(a)	Normal Fee	Rs. 2500/- per sem.	
(b)	NRI	US\$ 1250 per sem.	

6. Room Rent			
(a) Single seater	Rs. 3500/- p.a.	Payable in two instalments i.e. at beginning of each sem.	
(b) Double seater	Rs. 2500/- p.a.	-do-	
7. Caution money(refundable)			
(a) Institution caution money	Rs. 2000/-	Payable at the time of admission	
(b) Hostel caution money	Rs. 1500/-	-do-	
(c) Library caution money	Rs. 1000/-	-do-	
(d) Unforeseen expenditure such as m/c. Of watch & ward, sweeping and scavenging of hostels etc.	Rs. 500/-	-do-	

The above mentioned fee structure may be subject to change as per directions of Govt./Institute authorities from time to time.

The matter is placed before the Senate for consideration and making suitable recommendations to the Board of Governors.

Item 3.8 To note the award of Shyam Sunder Dhingra Medal alongwith cash prize of Rs. 5000 w.e.f. the year 2003 onwards to the overall topper of the batch.

The matter regarding introduction of Shyam Sunder Dhingra Medal in the memory of Late Sh. Shyam Sunder Dhingra, a student of 1981-86 Batch, was placed before the Senate in its 2nd meeting held on 29.11.2003. The Senate decided as under:-

*The Senate noted with regret that Shri Shyam Sunder Dhingra (Roll No. 112/81), a brilliant alumni of the Institute who passed his B.Sc. Engg. in Electrical in the year 1986 has passed away. The Senate placed its sorrow on record.

The Senate agreed to introduce Shyam Sunder Dhingra Medal with cash prize out of interest to be earned from the funds to be received from the batch mates of Shri Shyam Sunder Dhingra as mentioned by Shri Ankur Gupta, IAS, batch mate of Shri Shyam Sunder Dhingra, now Managing Director of Haryana Agro Industries Limited, in his letter enclosed with the agenda item 2.7 subject to availability of funds from this year i.e. 2003. The Senate accordingly desired that the issue of funds for the purpose be taken up with Shri Ankur Gupta, IAS*.

Sh. Ankur Gupta, IAS, batch mate of Sh. Shyam Sunder Dhingra vide letter No. 21968 dated 19.3.2004 (Appendix- **III** page **62**) who coordinated the whole issue on behalf of his batch mates requested that Shyam Sunder Dhingra Medal alongwith cash prize of Rs. 5000/- may be given to the overall academic topper of the batch instead of topper of Electrical Engineering. Considering the above proposal of Sh. Gupta, the above medal was awarded to the overall academic topper of 1999 Batch (Ms. Noopur, Roll No. 99286) in the Convocation held on 27th March, 2004.

The Senate may note.



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APPENDIX-III

Haryana Agro Industries Corporation Ltd.

S.C.O.811-12, Sector 22-A, Chandigarh

Phone : 706489, 710862 Fax : (0172) 701501

Ankur Gupta, I.A.S.
MANAGING DIRECTOR

D.O. No. : 21968

Dated : 19-3-04

Fax:01744-238050

Mr. Sanjay Mehta,
National Institute of Technology,
Kurukshetra.

Dear Sir, Sir,

With reference to the earlier communication and the telephonic discussions held today, I would request you that the Shyam Sander Dhangra Gold/Topper Medal be given to the over-all academic topper of the batch.

With Best wishes,


Ankur Gupta, I.A.S.

Item 3.9 To note the registration of Ph.D. Scholars

On the recommendations of the various Departmental Research Committees and approval of BOSSs, 15 Nos. scholars in various Departments have been provisionally admitted as per details furnished in the notification No. Acad./2522 dated 23.4.2004 (Appendix **IV** Page **64-65**). Some more candidates are in the pipeline which may be admitted from the next semester.

The Senate may note.

No. Acad./ 25 २२

Dated: 23.4.2004

Sub: Ph.D. Registration

With reference to their applications and on the basis of recommendation of the concerned departments the following candidates have been provisionally selected for

Ph.D. research till date in the current semester in this Institute:-

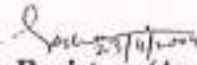
<u>Sr. No.</u>	<u>Name.</u>	<u>Deptt.</u>	<u>Brief Address</u>	<u>Full-time/Part-time</u>
1.	Sh.Dheeraj Joshi	Elect.	NITK	Part-time
2.	Sh.Rajiv Kumar	-do-	EET College, G.Noida	-do-
3.	Ms. Anju Gupta	-do-	ITM, Gurgaon	-do-
4.	Sh.Yash Pal Singh	-do-	NITK	-do-
5.	Sh. Sathans	-do-	NITK	-do-
6.	Ms. Jyoti Ohri	-do-	NITK	-do-
7.	Ms. Sameerjya Lakshmi Parsa	-do-	NITK	-do-
8.	Sh. Mahabir Nain	Physics	Govt.College, Karnal	-do-
9.	Sh. Rajesh	-do-	Jind	-do-
10.	Sh. Vijay Kumar	-do-	Fatehgarh (Pb.)	-do-
11.	Ms. Prabhavati Turaga	-do-	Girls Hostel, NITK	Regular
12.	Ms. Anu Sharma	-do-	Urban Estate, Kurukshetra	-do-
13.	Sh. Amit Manojin	Math.	NC College, Israna	Part-time
14.	Sh. Mohan Lal	Civil	Karnal	-do-
15.	Sh. Mohinder Singh	-do-	SKIET, Kurukshetra	-do-

The above mentioned scholars are required to deposit the first instalment of fee of Rs. 2500/- (total Rs. 5000/- payable in two instalments) in the Accounts Branch and report the same in the Academic Office for allotment of Enrolment number etc.

In addition, the other fees and deposits payable by the scholars (such as Institute Development Fund, Semester Renewal Fee, Thesis Evaluation Fee, Students Fund, Library Caution Money, Hostel Room Rent and Caution Money etc.) shall be intimated later.

The detailed guidelines are given in the copy of Ordinances and Regulations already available with the candidates. Specific attention of the candidates is drawn to the following:-

- (i) The date of initial registration shall normally be the date on which the scholar formally registers and deposits the fee for the first time in a semester. This date will also be treated as the date of joining the Ph.D. programme for all intents and purposes.
- (ii) There will be a comprehensive examination of the candidate conducted by DRC which will test candidate's comprehensiveness of his/her broad field of research, academic preparation and potential for carrying out proposed research plan after admission and registration. The specified guidelines for this purpose will be conveyed by the DRC of the concerned Deptt.
- (iii) A candidate will get a maximum of two attempts to pass the comprehensive evaluation between 3-12 months of registration.
- (iv) The performance monitoring of the candidate will also be done by concerned DRC. The candidate will be required to submit a progress report at the end of each semester to the Chairman, DRC through his/her supervisor(s).
- (v) The candidate will be given two chances to improve upon the progress. In case of "Unsatisfactory" report, a warning would be issued/fellowship withdrawn, if applicable to the candidate.
- (vi) The candidates registered for Ph.D. shall normally submit their thesis within a period of five years from the date of their initial registration for the Ph.D. programme. However, as a special case, this limit may be extended to a maximum of seven years by the Director after which the registration shall stand cancelled automatically.


Deputy Registrar (Academic)

Circulation:

1. All related candidates.
2. All Chairmen of the deptts.
3. Registrar.
4. Deputy Registrar(A)
5. DS to Director for the kind information of the Director.

Item 3.10 To note the Academic Regulations regarding convocation and use of costumes/robes.

The Academic regulations regarding Convocation and use of Academic Costumes/Robes etc. were approved by Senate in its 2nd meeting held on 29-11-2003. Some practical difficulties have been experienced in procuring the exact type of costumes as prescribed in the aforesaid Regulations. To overcome such difficulties in future, the following amendments are proposed in the Academic Regulations which are of cosmetic nature with no material change. The pattern underlined in the existing rules as mentioned below may be removed:

Existing Rules	Proposed Amendments
<p>1. ACADEMIC COSTUMES/ROBES</p> <p>(i) In these Regulations 'Ordinary' Academic Costume includes a black cap and gown without hood or sash and 'Full' Academic Costume, which includes in addition a hood or sash.</p> <p>(ii) Members of the Senate and Board of Governors of the Institute and all those persons who will be receiving their degrees shall wear their Full Academic Costumes in Convocation of the Institute.</p> <p>(iii) The Chief Guest, Officers and Graduates of the Institute are entitled to wear Academic Costumes as follows: -</p>	<p>1. ACADEMIC COSTUMES/ROBES</p> <p>(i) No Change</p> <p>(ii) No Change</p> <p>(iii) No Change</p>
<p>(A) CHIEF GUEST'S GOWN</p> <p>Superior Maroon Velvet with 4 inches Golden Lace on front folds bottom of sleeves. On shoulders with zari work fronts and tufts and zari work on the sleeves with tufts, without Monogram, Cambridge style, fully interlined <u>special padding and material</u>. Special Academic Cap of Superior Maroon Velvet with 1 inch Golden Lace and with Golden Tassel, Mortar band <u>and with special material</u>.</p>	<p>(A) CHIEF GUEST'S GOWN</p> <p>Superior Maroon Velvet with 4 inches Golden Lace on front folds bottom of sleeves. On shoulders with zari work fronts and tufts and zari work on the sleeves with tufts, without Monogram, Cambridge style, fully interlined. Special Academic Cap of Superior Maroon Velvet with 1 inch Golden Lace and with Golden Tassel, Mortar band.</p>

<p>(B) CHAIRMAN'S GOWN</p> <p>Pure silk, <u>hand woven, hand spun</u> in Maroon colour with the Golden Lace on the front folds, bottom of sleeves, with ½ inch strip of green silk on the front folds and 3 strips on the sleeves in green silk. Oxford style, with two Institute Monograms, <u>if available, fully interlined and with special padding and material.</u> Cap of superior silk, <u>hand woven, hand spun</u>, with 1 inch Golden Lace. Mortar band with Golden Tassel.</p> <p>Sash: Pure Silk, <u>Hand Woven, Hand spun</u> in Maroon Colour, Golden Lace on the bottom and with Golden Jhaller.</p>	<p>(B) CHAIRMAN'S GOWN</p> <p>Pure silk in Maroon colour with the Golden Lace on the front folds, bottom of sleeves, with ½ inch strip of green silk on the front folds and 3 strips on the sleeves in green silk. Oxford style, with two Institute Monograms, Cap of superior silk, with 1 inch Golden Lace. Mortar band with Golden Tassel.</p> <p>Sash: Pure Silk in Maroon colour, Golden Lace on the bottom and with Golden Jhaller.</p>
<p>(C) DIRECTOR'S GOWN</p> <p>Maroon silk with 2 inches Golden Lace on the front folds round neck and on bottom of sleeves, with two strips of ½ inch wide green silk on the front folds and 3 strips ¼ inch width of green silk the sleeves with two Institute Monograms, if available, in Golden zari work the fronts <u>with hand made fluting; Oxford style, fully interlined with special padding and material.</u> Academic cap of pure silk Maroon colour with 1 inch Golden Lace. Mortar band with Golden Tassel.</p> <p>Sash: Pure Silk, <u>Hand Woven, Hand spun</u> in Maroon Colour, Golden Lace on the bottom and with Golden Jhaller.</p>	<p>(C) DIRECTOR'S GOWN</p> <p>Maroon silk with 2 inches Golden Lace on the front folds round neck and on bottom of sleeves, with two strips of ½ inch wide green silk on the front folds and 3 strips ¼ inch width of green silk the sleeves with two Institute Monograms, if available, in Golden zari work the fronts, Oxford style. Academic cap of pure silk Maroon colour with 1 inch Golden Lace. Mortar band with Golden Tassel.</p> <p>Sash: Pure Silk, in Maroon Colour, Golden Lace on the bottom and with Golden Jhaller.</p>
<p>(D) REGISTRAR'S GOWN</p> <p>Black Heavy silk with 2 inch silver lace on the front folds round the neck and on the bottom of the sleeves, bottom of the sleeves with ½ inch wide of green silk on the front folds and two strips ½ inch wide of green silk on the sleeves with two Monograms in silver zari work with hand made fluting with Institute Monograms, if available, in silver zari work <u>with hand made fluting with special padding and material.</u> Cap of black Velvet Mortar band ½ inch lace and Material.</p>	<p>(D) REGISTRAR'S GOWN</p> <p>Black Heavy silk with 2 inch silver lace on the front folds round the neck and on the bottom of the sleeves, bottom of the sleeves with ½ inch wide of green silk on the front folds and two strips ½ inch wide of green silk on the sleeves with two Monograms in silver zari work with hand made fluting with Institute Monograms, if available, in silver zari work. Cap of black Velvet Mortar band ½ inch lace and Material.</p>

SENATE MEMBERS GOWN	SENATE MEMBERS GOWN
Superior silk in Golden Yellow Colour with lacing of 3 inches Green Silk on front folds and with strips of green silk 1 inch wide on the sleeves with one Institute Monogram, if available, on the left front with hand made fluting. Oxford style <u>and with special padding and material</u> . For PhDs Pure Red silk will be used. Caps of superior Golden Yellow Velvet, Mortar band with 1 inch wide green silk border with Golden silk Tassel. For PhDs Red Velvet will be used.	Superior silk in Golden Yellow Colour with lacing of 3 inches Green Silk on front folds and with strips of green silk 1 inch wide on the sleeves with one Institute Monogram, if available, on the left front with hand made fluting. Oxford style. For PhDs Pure Red silk will be used. Caps of superior Golden Yellow Velvet, Mortar band with 1 inch wide green silk border with Golden silk Tassel. For PhDs Red Velvet will be used.

The Senate may consider and approve the amended Academic regulations.

Supple.Item 3.11 To consider the Syllabi of B.Tech. 1st and 2nd Semester (common to all branches) from the Academic Session 2004-05 onwards.

The Syllabi of B.Tech. 1st Semester (CHT-105 and CHT-107) and 2nd Semester (CHT-106 and CHT-108) to be effective from the session 2004-05 onwards as received from Dr. O.P. Vermani, Chairman of the Chemistry Department duly recommended by the BOS of the Chemistry Department was placed before the Senate in its 2nd meeting held on 29.11.2003. However the item was deferred.

The Chairman of the Chemistry Department has requested that the aforesaid matter may be again considered by the Senate. The aforesaid syllabi is placed as Appendix-V on pages from 70 to 75.

The Senate may consider and decide

B.Tech. Ist Semester(Common to all branches) **APPENDIX- V**
CHT-105 Chemistry-I
(2004-05 on wards)

1.	T		Class tests	:	40 marks
3	I		Teacher's assessment	:	10 marks
			End Sem. Exam.	:	50 marks
			Time	:	3 hrs.

1. **Chemical Equilibrium:** pH, buffer solutions and salt hydrolysis. **03**

2. **Chemical Kinetics:** Second order reactions, derivation of velocity constant with same and different concentrations of the reactants, half life period, basic concepts of complex reactions, Collision theory & absolute reaction rate theory.. **04 I.**

3. **Electrochemistry including Corrosion:** Half-reaction concept, reversible cells, galvanic cells, concentration cells. Theories of corrosion, types of corrosion(water-line corrosion, stress corrosion, pitting corrossions, microbiological corrosion). Factors affecting the rate of corrosion and corrosion control (design, cathodic protection, modification of environment, protective coatings) **08 I.**

4. **Photochemistry:** Photochemical and dark reactions, laws of photochemistry, quantum efficiency, classification of photochemical reactions on the basis of their quantum efficiencies. Non-radiative processes (isc & ic), fluorescence, phosphorescence (Jablonski diagram), chemiluminescence, photosensitization, technology based on photochemical processes. **06 I.**

5. **Phase Rule:** Description of various terms(phase, component and degrees of freedom). One component system(water system), freeze drying. Two components system with simple eutectic formation(Pb-Ag and KI-H₂O systems), solders, safety plugs, freezing mixtures. **05I.**

6. **Organic Chemistry & Polymers:** Covalent bond cleavage(homolytic and heterolytic), reaction intermediates(carbocations, carbanions, carbenes and free radicals).

 Organic polymers-types and mechanism of polymerisation(free radical, anionic, cationic and coordination), thermoplastic(low and high density polyethenes, PMMA) and thermosetting resins(bakelite, epoxy).
Isorganic polymers-preparation, properties and uses of silicones. **09 I.**

7. **Transition Elements and Coordination Chemistry:** General characteristics of transition elements, coordination compounds, introduction to various theories of bonding, applications of coordination compounds. **04 L.**
8. **Water:** Demineralization, desalination, formation of deposits in boilers, scale and sludge formation: their composition, properties and methods of prevention. **05 L.**
9. **Spectroscopy:** Introduction (excluding instrumentation) and applications-UV-visible, IR and NMR spectroscopy. **04 L.**
- Total: 48 L**

Books Recommended:

1. Physical Chemistry, P.W. Atkins.
2. Principles of Physical Chemistry, B.R.Puri, L.R.Sharma & M S Pathania
3. Organic Chemistry, Morrison and Boyd.
4. Reactions Mechanism in Organic Chemistry, S.M.Mukherji & S.P.Singh.
5. Inorganic Chemistry, J.D. Lee.
6. Principles of Inorganic Chemistry, B.R.Puri, L.R.Sharma & K.C.Kalia.
7. Spectrometric Identification of Organic Compounds, R.M.Silverstein, G.C.Bassiè and T.C.Morrill.
8. Chemistry in Engg. & Tech. Raja Ram & J.C.Kuriasose.
9. Engineering Chemistry, Jain & Jain.

Note for Paper-setter: *Eight* questions should be set in all. The students should be asked to attempt any *five* questions.

**B.Tech. 1st Semester(Common to all branches)
CHT-107 Chemistry-I Practical
(2004-05 onwards)**

L T P
- - 2

Mid Sem. Evaluation : 15 marks
Teacher's assessment : 15 marks
End Sem. Exam. : 20 marks
Total : 50 marks
Time : 3 hrs.

S.No. List of Experiments

1. Determination of total hardness of water by EDTA titration.
2. Determination of temporary and permanent hardness by water by EDTA titration.
3. Determination of calcium and magnesium hardness of water separately by EDTA titration.
4. Determination of copper in copper alloy/ore solution.
5. Determination of ferrous and ferric iron present in the given ore solution with $K_2Cr_2O_7$ using external indicator method.
6. Determination of ferrous and ferric iron in given ore solution with $K_2Cr_2O_7$ using internal indicator method.
7. Determination of total iron in a solution of iron ore by $KMnO_4$ method.
8. Determination of calcium as calcium oxide volumetrically in cement.
9. Determination of the available chlorine in bleaching powder suspension and to find out the chlorine demand of the given water sample.
10. Analysis of coal for moisture and ash contents.
11. Determination of ion exchange capacity of a given cation exchanger/anion exchanger.
12. Determination of manganese dioxide in pyrolusite.
13. Determination of the composition of a liquid mixture by surface tension method using Stalagmometer.
14. (i) Conductometric determination of hydrochloric acid with standard NaOH.
(ii) Conductometric determination of acetic acid with standard NaOH.
15. Conductometric determination of the composition of a mixture of acetic acid and hydrochloric acid with standard NaOH.

**B.Tech. 2nd Semester
(Common to all branches)
CHT-106 Chemistry-II
(2004-05 onwards)**

L	T	Class tests	: 40 marks
2	1	Teacher's assessment	: 10 marks
		End Sem. Exam.	: 50 marks
		Time	: 3 hrs.
1.		Biomolecules: Elementary knowledge of Enzymes and coenzymes, Carbohydrates, Proteins, Lipids and their biodegradation.	05 L.
2.		Environmental Chemistry: Segments of Environment, Earth's radiation balance, horizontal and vertical dispersion of pollutants, temperature inversion, Green House Effect, Acid Rains, Ozone Layer, Photochemical Smog, Bhopal gas release accident, D.O., B.O.D., C.O.D. and their significance, surface water pollution and self purification, Waste water treatment-Sedimentation & Biological Methods.	05 L. 07 L.
3.		Coal: Proximate and ultimate analysis, liquification and gassification.	03 L.
4.		Petrochemicals: Sources of petrochemicals, CNG. Basic building block processes-thermal cracking(mechanism, production of ethylene and co-products, petrochemicals from ethylene and propylene) and catalytic reforming(mechanism, production of BTX aromatics), petrochemicals from BTX aromatics.	06 L.
5.		Lubricants: Principle and mechanism of lubrication, dewaxing of oil fraction acid and solvent refining, properties of refined oils(viscosity, viscosity index, acid value, saponification value, iodine value, pour point, cloud point, aniline point) and their determination, lubricating greases and their penetration and drop point tests, solid lubricating greases and their penetration and drop point tests, solid lubricants, their structure and uses.	06 L.
		Total:	32 L

Books Recommended:

1. Chemistry for Environmental Engineering, Sawyer & McCarty.
2. Chemistry in Engg & Tech, Raja Ram & J.C.Kuriaseose.
3. Environmental Chemistry, A.K.De.
4. Applied Chemistry, Theory and Practice, O.P.Vermani & A.K.Narula.
5. Introduction to Petrochemicals, Sukumar Maiti.
6. Engineering Chemistry, Jain & Jain.
7. Petrochemicals, Peterwiseman.

Note for Paper-setter: *Eight* questions should be set in all. The students should be asked to attempt any *five* questions.

The Director may approve one of the names from list A and another name from list B.

He has further mentioned in his proposal that this practice of evaluation of Ph.D. thesis by one Indian and one foreigner examiner is being followed in most of the IITs and if this system is adopted, the same will certainly improve the academics of the Institute.

The proposal mooted by Dr. R.K. Arora was put up in a meeting of the Director with Deans and Chairpersons of respective Departments of the Institute held on 18.5.2004 wherein it was decided that this issue be put up before the Senate.

The matter is placed before the Senate for consideration and decision.

Tabled Agenda

Item 3.13

To note the observation of the Board made in its 4th meeting held on 8.12.2003 on the minutes of the 2nd meeting of the Senate held on 29.11.2003.

The Board of Governors in its 4th meeting held on 8.12.2003 while considering the minutes of the 2nd meeting of the Senate made the following observations:-

- (i) The meetings of the Senate should be held frequently so that delay in taking decisions on the academic matters and implementation thereof is avoided.
- (ii) A complete and detailed home work is required to be done by the Senate for taking decisions on academic matters, implementation of the academic decisions taken by the Senate as well as by the Board.
- (iii) While evaluating result of the Undergraduate students and making assessment, their participation in training held during summer and winter vacations may be taken into account.
- (iv) As per practice followed in IITs the Answer Sheets may be shown to the students before preparing their results.
- (v) The Institute may examine if the part-time M.Tech. programs are extended to external students/employees too.
- (vi) It may be examined by the Senate as to whether there can be admissions to M.Tech. Courses twice a year.
- (vii) Sequential summer/winter courses may be introduced by the Departments of Civil Engineering, Electrical Engineering, Mechanical Engineering, Electronics and Computer Science for the faculty of Self-financing & Govt. Engg. Colleges on the pattern of IITs, leading to award of M.Tech. (part-time) degree, in order to improve the quality of teaching.
- (viii) A scholarship of the value of Rs. 500/- P.M. may be introduced as advised by Shri Dharam Vir, IAS, Financial Commissioner & Principal Secretary to Govt. of Haryana, Technical Education Department, Chandigarh. Accordingly, the matter may be taken up with Shri Dharam Vir, IAS.
- (ix) The Hindi version of the degree formats enclosed with the agenda item 2.8 of the Senate has to be a literal translation of the English version. The English version should be on one side of the page and the Hindi version on the other side.

The Senate may note.