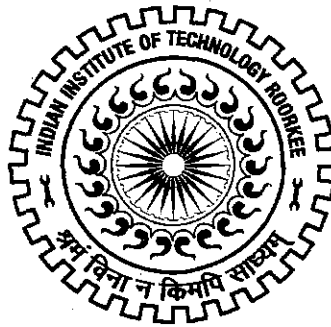


अभिशासक परिषद
की सप्तम् बैठक का कार्यवृत्त

**MINUTES OF THE 7TH MEETING OF THE
BOARD OF GOVERNORS**

11TH OCTOBER 2003



भारतीय प्रौद्योगिकी संस्थान रूड़की
रूड़की - 247 667 (भारत)

**INDIAN INSTITUTE OF TECHNOLOGY ROORKEE
ROORKEE-247 667 (INDIA)**

INDIAN INSTITUTE OF TECHNOLOGY, ROORKEE
ROORKEE – 247 667



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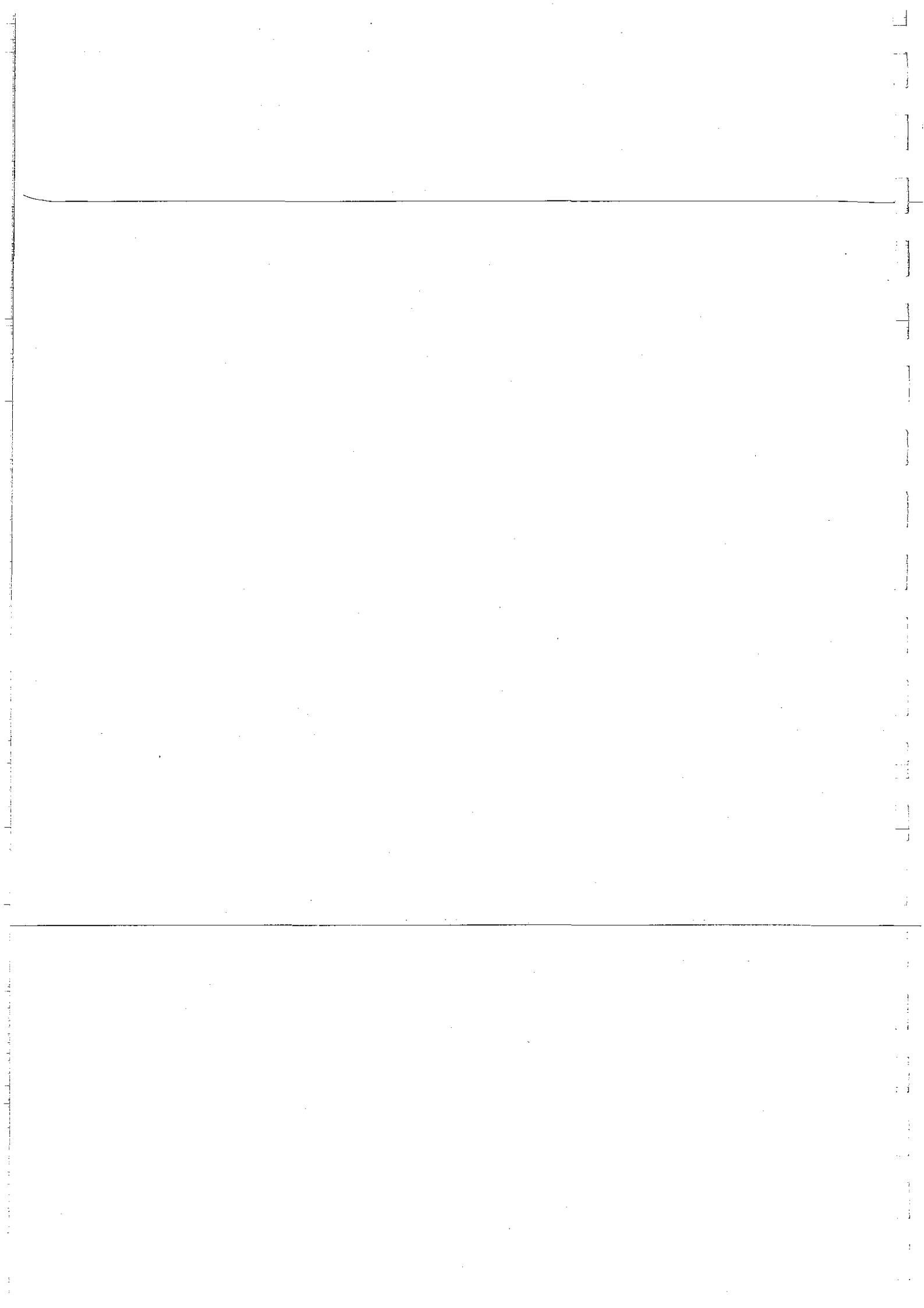
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INDIAN INSTITUTE OF TECHNOLOGY, ROORKEE
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**MINUTES OF THE SEVENTH MEETING OF THE BOARD OF GOVERNORS
 HELD ON 11th OCTOBER 2003 AT 2.00 P.M. IN THE BOARD ROOM OF THE
 INSTITUTE.**

PRESENT:

- | | | |
|----|-----------------------------------|-------------|
| 1. | Prof. S. K. Joshi | - Chairman |
| 2. | Prof. Prem Vrat, Director, IITR | - Member |
| 3. | Mr. Sudripto Roy | - Member |
| 4. | Dr. R.S.Tolia | - Member |
| 5. | Mr. Dharamvir | - Member |
| 6. | Prof. R. Natarajan | - Member |
| 7. | Prof. K. G. Ranga Raju | - Member |
| 8. | Prof. M. L. Kapoor | - Member |
| 9. | Lt. Col. (Retd.) A. K. Srivastava | - Secretary |
| | Registrar, IITR | |

Apologies were received from the following members for not attending the meeting:

1. Mr. V.S. Pandey, IAS, Joint Secretary, MHRD, New Delhi.
2. Dr. K. Kasturirangan, Member of Parliament (Rajya Sabha).
3. Dr. D.P. Singh, Vice-Chancellor, UP Rajarshi Tandon Open University, Allahabad.

At the outset, the Chairman welcomed the members to the Seventh Meeting of the Board of Governors. Special welcome was extended to new member, namely Dr. R.S.Tolia, Chief Secretary to Uttaranchal Govt., Dehradun, Prof. M.L.Kapoor as Dy. Director and thanked Mr. Madhukar Gupta & Dr. K.G.Ranga Raju for their valuable contribution.

The agenda was then taken up.

Item No.7.1.1 To confirm the minutes of the Sixth Meeting of the Board of Governors held on 7th June 2003.

The minutes of the sixth meeting of the Board of Governors held on 7th June 2003 were confirmed as circulated.

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Item No.7.1.2

To receive a report on the action taken on the decisions of the previous meeting of the Board of Governors held on 7th June 2003 and pending items.

The Board **NOTED** the position of the actions taken on the Minutes of the above meetings and observed that the CVOs report on item No.2.4.9 dated 29th June 2002 has been received.

Item No. 7.1.3

Presentation by Professor-in-charge, Planning on utilization and proposed expenditure of plan funds, showing the details of projects in hand, projects in the pipeline, equipment procured and to be procured with the capital outlay involved in each case.

The Board appreciated the presentation made by Dr. Ravi Bhushan, Professor-In-charge, Planning on utilization and proposed expenditure of plan funds.

Item No. 7.1.4

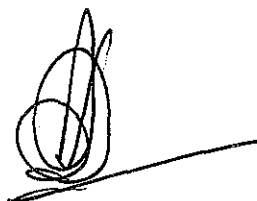
To receive a report on the academic activities of the Department of Chemistry.

The presentation made by Dr. R.N.Goyal, Professor & Head, Department of Chemistry on the academic activities/ achievements of the Department evoked interest from members of the Board. The Board decided that a comparative quantitative analysis of the Department of Chemistry vis a vis Chemistry Departments of other IITs be sent to Chairman, Board of Governors within one month by Head, Department of Chemistry.

Item No. 7.1.5

To receive a report from the Director on the significant developments/ issues since the last meeting of the Board held on 07.06.2003

The Board appreciated the report presented by the Director highlighting the significant developments/issues with special reference to (a) Visit of IIT Review Committee (b) Director's visit to Australia (c) Honours and Awards (d) Academic matters (e) Placement (f) Student Affairs (g) Admission 2003-04 (h) International Collaboration (i) MoUs (j) Research & Development (k) Consultancy & other Extension activities (l) New Equipment/ Lab (m) Budget (n) Appointments (o) New Faculty (joined) (p) Faculty matters (q) Seminars & other Academic Events (r) Meetings organised (s) AHEC (t) QIP Centre (u) Centre for Continuing Education (v) Important visitors to the Institute (w) Construction/other infrastructure (x) Publications (y) Retirements (x) Miscellaneous Activities.



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Item No. 7.2.1

To consider the proposal to start a new M.Tech. programme on Industrial Safety Hazard Management as recommended by the Senate.

The Board considered the recommendations of the Senate to start a new M.Tech. programme on Industrial Safety Hazard Management and approved the same.

RESOLUTION NO. BG/59/2003: RESOLVED THAT as recommended by the Senate in the meeting held on 30th April 2003, the proposal to start a new M.Tech. programme on Industrial Safety Hazard Management as given at **APPENDIX 'A'** be approved and forwarded to MHRD.

Item No. 7.2.2

To consider the further course of action on the proposal for Widening and Strengthening of Road from SDM Chowk to BEG & Centre Gate of IIT Roorkee in compliance of the decision taken by the BOG/FC in the meeting held on 7th June 2003.

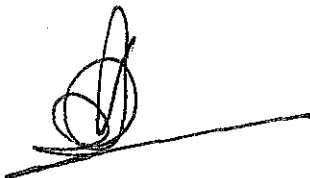
The recommendations of the Finance Committee (item No. 7.9) were placed before the Board of Governors. After discussion, the Board approved the recommendations of the Finance Committee as well as preliminary estimates of Rs. 14.00 lacs for widening the Road.

RESOLUTION NO. BG/60/2003: RESOLVED THAT administrative approval and expenditure sanction for the preliminary estimate amounting to Rs. 14.00 lacs as given at **APPENDIX 'B'** for Widening and Strengthening of Road from SDM Chowk to BEG & Centre Gate of IIT Roorkee be approved. Further, the matter be negotiated with the Nagar Palika Roorkee so that the technical control of the road vests with IIT Roorkee. However, removal of encroachments by the Nagar Palika Roorkee will be a pre-requisite for commencement of work on widening the road.

Item No. 7.2.3

To consider the proposal regarding faculty initiation grant out of interest earned on Institute Development Fund (IDF) or SRIC fund for new faculty members joining the Institute.

The Finance Committee had considered this issue vide item No. 7.10. The recommendations of the Finance Committee were placed before the Board of Governors. After discussion, the Board resolved as under:



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RESOLUTION NO. BG/61/2003: RESOLVED THAT the proposal regarding faculty initiation grant for new faculty members joining the Institute be approved as under:

- (a) Rs. 0.50 - 1.0 lacs be given to new faculty members joining the Institute for initiating the research work, out of SRIC funds.
- (b) Rs. 1.00 crore (10.00 lacs x 10) be given from MHRD funds to all faculty members for projects rated outstanding after evaluation.
- (c) Accountability of the research work and efficient monitoring be ensured. The Six monthly reports be taken from the concerned Faculty members. The monitoring of grant above Rs. 2.50 lacs will be carried out by a group with external members.
- (d) The Chairman, Board of Governors can sanction an amount beyond Rs. 10.00 lacs to new faculty members, after due consideration and the same will be reported to the Board.

Item No. 7.2.4

To consider according administrative approval and expenditure sanction for the works recommended by the Building & Works Committee in the 6th meeting held on 18th September 2003.

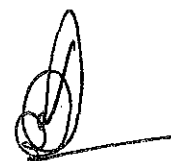
The Board noted the recommendations of the Sixth Meeting of the Building & Works Committee held on 18th September 2003 with the observation that the items needing specific approval of the Board are presented as separate agenda items for the Finance Committee and Board of Governors, respectively.

Item No. 7.2.5

To approve award of degrees/ diplomas to the students who have qualified for the award of degrees/ diplomas in various disciplines / courses as recommended by the Senate.

The Board approved the award of degrees/ diplomas to the students who have qualified for the award of degrees/ diplomas in various disciplines/ courses as recommended by the Senate.

RESOLUTION NO. BG/62/2003: RESOLVED THAT the award of degrees/ diplomas to the students who have qualified for the award of degrees/ diplomas in various disciplines/ courses



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during the session 2002-2003 as recommended by the Senate, be approved as indicated below:

Sl. No.	Name of the Degree /Diploma	Number of Degrees/Diploma
1.	B.Tech. / B.Arch.	374
2.	M.Tech. /M.Arch. / MURP/MCA/MBA/M.Phil. M.Tech. (Applied Geology/Applied Geophysics)/ M.Tech. (SSEM)/P.G. Diploma	682*
3.	Ph.D.	32
Total		1088

*The case of a student, Mr. Pankaj Kumar of M.Tech. (IT) is under enquiry and the award of degree to him has been withheld.

Item No. 7.2.6

To consider the proposal for creation of three posts of J.E. Grade-II (Civil) and one post of Technical Assistant (Sanitation) for the Construction Division, IIT Roorkee for Construction and Maintenance Works, chargeable to works as recommended by the B&WC

The Finance Committee had considered this issue vide item No. 7.14. The recommendations of the Finance Committee were placed before the Board of Governors. After discussion, the Board approved the recommendations of the Finance Committee.


RESOLUTION NO. BG/63/2003: RESOLVED THAT the proposal to engage three J.E.s Grade-II (Civil) and one Technical Assistant (Sanitation) for the Construction Division, on a consolidated remuneration of Rs. 8,000/- p.m. (for each post) chargeable to works, for a period of 03 years, purely on contract basis be approved.

FURTHER RESOLVED that additional JEs may also be taken on deputation from CPWD/ DOT/MES.

Item No. 7.2.7

To consider the proposal for construction of a Table Tennis Hall at the first floor of Sports Association Office as recommended by the B&WC.

The Finance Committee had considered this issue vide item No. 7.15. The recommendations of the Finance Committee were placed before the Board of Governors. After discussion, the Board approved the recommendations of the Finance Committee.


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RESOLUTION NO. BG/64/2003: RESOLVED THAT administrative approval and expenditure sanction for the preliminary estimate amounting to Rs. 11.90 lacs as given at **APPENDIX 'C'** for the construction of a Table Tennis Hall on the first floor of Sports Association Office be approved.

Item No. 7.2.8 To consider the proposal for construction of 200 kilolitre capacity overhead tank at D.P.T. Saharanpur campus as recommended by the B&WC.

The Finance Committee had considered this issue vide item No. 7.16. The recommendations of the Finance Committee were placed before the Board of Governors. After discussion, the Board approved the recommendations of the Finance Committee.

RESOLUTION NO. BG/65/2003: RESOLVED THAT administrative approval and expenditure sanction for the preliminary estimate amounting to Rs. 16.60 lacs as given at **APPENDIX 'D'** for construction of a 200 kilolitre capacity overhead tank at the D.P.T. Saharanpur campus be approved.

Item No. 7.2.9 To consider the proposal for construction of Lecture Hall and Lab. Block at second floor of the Department of Earth Sciences as recommended by the B&WC.

The Finance Committee had considered this issue vide item No. 7.17. The recommendations of the Finance Committee were placed before the Board of Governors. After discussion, the Board approved the recommendations of the Finance Committee.

RESOLUTION NO. BG/66/2003: RESOLVED THAT administrative approval and expenditure sanction for the preliminary estimate amounting to Rs.17.06 lacs as given at **APPENDIX 'E'** for construction of the additional Lecture Halls and Lab. Block on the second floor of the Department of Earth Sciences be approved.

Item No. 7.2.10 To consider the estimate for the proposed Extension of the Department of Biotechnology Building as recommended by the B&WC.

The Finance Committee had considered this issue vide item No. 7.18. The recommendations of the Finance Committee were placed before the Board of Governors. After discussion, the Board approved the recommendations of the Finance Committee.



RESOLUTION NO. BG/67/2003: RESOLVED THAT administrative approval and expenditure sanction for the preliminary estimate amounting to Rs. 23.60 lacs as given at **APPENDIX 'F'** for extension of the building of the Department of Biotechnology at Ground Floor and Second Floor be approved.

FURTHER RESOLVED that a new state of the art building be planned for the Department of Biotechnology.

Still further, resolved that an eminent Architect be included as a member of the B&WC.

Item No. 7.2.11 To consider the proposal for demolition of 11 Nos. (dilapidated condition) 'D' Category Residences (147/68 to 147/79) of Block No. 147, D Colony Vikas Nagar as recommended by the B&WC.

RESOLUTION NO. BG/68/2003: RESOLVED THAT as recommended by the B&WC, the proposal for demolition of 11 Nos. dilapidated 'D' Category Residences (147/68 to 147/79) of Block No. 147, D Colony Vikas Nagar be approved.

Item No. 7.2.12 To consider the award of M.Phil/M.Tech. and Ph.D. degrees which have been approved by the Director on behalf of the Senate subsequent to the last meeting of the Senate:

The Board approved the award of M.Phil/ M.Tech. and Ph.D. degrees which were approved by the Director on behalf of the Senate subsequent to the last meeting of the Senate.

RESOLUTION NO. BG/69/2003: RESOLVED THAT the award of M.Phil/ M.Tech. and Ph.D. degrees which were approved by the Director on behalf of the Senate subsequent to the last meeting of the Senate, be approved as per numbers indicated below:

Sl. No.	Degree	Number
1.	Doctor of Philosophy	10
2.	Master of Technology	03
Total		13

FURTHER, THE BOARD authorized the Chairman Senate/ Chairman Board of Governors to


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approve the award of degrees/ diplomas to such candidates whose results are declared after this meeting of the Board and before the Convocation-2003.

Item No. 7.3.1

To consider the recommendation of the Board, SRIC in its 5th meeting held on 22.5.2003 for modification in the Office Memo No. ITR/ Gen./Con.Edu./1560 dated 11th May 2003 regarding

- (a) 20% of the registration fee so received may be allowed to be deposited in the account of the Centre for Continuing Education (CCE) instead of Institute Development Fund (IDF).**
- (b) The amount of 20% be reduced to 15%**
- (c) Savings in the account of CCE at the end of the year shall be transferred to IDF.**

The Finance Committee had considered this issue vide item No.7.7. The recommendations of the Finance Committee were placed before the Board of Governors. After discussion, the Board approved the recommendations of the Finance Committee.

RESOLUTION NO. BG/70/2003: RESOLVED THAT the recommendations of the Board SRIC be approved as under:

- (a) At the time of forwarding estimates to the Sponsoring agencies for conducting any course in the consultancy mode, the registration fee and the service tax will be indicated separately. The course charges and the Service Tax will also be shown separately in the utilization certificate to be sent to the Sponsoring agency. The amount of service tax received for each course in the consultancy mode, will be deposited with the Department of Excise, Government of India, without any delay.**
- (b) 15% of the registration fee received for all courses will be credited to the account of the Centre for Continuing Education, as Institutional Charges.**
- (c) The amounts received as Institutional Charges will be used by the Centre for Continuing Education to meet the running expenses of the Centre and, if there are any savings at the end of the year, the same will be transferred to the Institute Development Fund (IDF). Unspent balance from a course from the 85% share placed at the disposal of the Principle Investigator, will also be transferred to the IDF after the course is concluded.**
- (d) The Accounts of the Centre, will be duly audited by CAG Auditors.**



Item No. 7.3.2 To consider the exemption of tuition fee for SC/ST students pursuing MBA programme at IIT.

The Finance Committee had considered this issue vide item No. 7.8. The recommendations of the Finance Committee were placed before the Board of Governors. After discussion, the Board approved the recommendations of the Finance Committee.

RESOLUTION NO. BG/71/2003: RESOLVED THAT 100% tuition fee waiver be extended to SC/ST students pursuing the MBA programme at IIT Roorkee w.e.f. 1st July 2003.

Item No.7.3.3 To consider the rules & guidelines for allowing the faculty members to accept membership of the Board of Directors of companies.

RESOLUTION NO. BG/72/2003: RESOLVED THAT the rules & guidelines as given at APPENDIX 'G' for allowing the faculty members to accept membership of the Board of Directors of companies be approved with the following condition:

- (a) A faculty member can have upto five honorary Directorships in the respective area of expertise.
- (b) There will be no direct involvement of faculty in concerned industry.

Item No. 7.3.4 To consider the procedure for obtaining approval of the Board of Governors with regard to un-audited annual accounts for a year as a pre-requisite to commence the Audit of accounts at IIT Roorkee.

The Finance Committee had considered this issue vide item No. 7.20. The recommendations of the Finance Committee were placed before the Board of Governors. After discussion, the Board resolved as under.

RESOLUTION NO. BG/73/2003: RESOLVED THAT the Chairman be authorised to approve the un-audited accounts/ balance sheet on behalf of the Board of Governors for subsequent audit by the CAG, Auditors.

FURTHER RESOLVED THAT an internal Audit Cell in the Finance & Accounts Office of the Institute be established for concurrent audit. A Chartered Accountant approved by CAG may be engaged to help in preparing the balance sheet,

income and expenditure statement, receipts and payments account of the Institute till our own system is geared up to take-up the same independently.

Item No. 7.4.1 **To consider the issue of the revision of range of emoluments for 'Y' pool contract workers w.e.f. 01.04.2003.**

The Finance Committee had considered this issue vide item No. 7.5. The recommendations of the Finance Committee were placed before the Board of Governors. After discussion, the Board approved the recommendations of the Finance Committee.

RESOLUTION NO.BG/74/2003: RESOLVED THAT the revised range of emoluments for 'Y' pool contract workers as given at **APPENDIX 'H'** be approved w.e.f. 01.04.2003.

Item No. 7.4.2 **To consider the recommendation of Board SRIC of its 5th meeting held on 22.5.2003 for enhancement of Fellowship and HRA for the Research Staff working in the Sponsored Research & Consultancy Projects not covered by the notification issued by the DST, DAE, and CSIR for enhancing the fellowship & HRA.**

The Finance Committee had considered this issue vide item No. 7.6. The recommendations of the Finance Committee were placed before the Board of Governors. After discussion, the Board approved the recommendations of the Finance Committee.

RESOLUTION NO. BG/75/2003: RESOLVED THAT the new project proposals should be submitted taking into account the revised emoluments including HRA for Project Fellows/Junior Research Fellows/Senior Research Fellows (Science/Engineering)/Research Associates "A", "B" & "C" and Fellows 'A', 'B' & 'C' as given at **Appendix 'I'**. For the existing projects, the fellowships may be enhanced with immediate effect i.e. 11.10.2003, if funds are available, otherwise the respective agencies be approached for releasing extra funds so that fellowships can be paid at the enhanced scales to every body. (If funds are not available in projects, the enhancement can not be done for ongoing projects). Provisions for revised rates be made in all future projects.


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Item No. 7.4.3 **To consider the procurement of a new EPABX system of 5000 lines in replacement of the existing EPABX system of 1250 lines at IIT Roorkee.**

The Finance Committee had considered this issue vide item No. 7.4. The recommendations of the Finance Committee were placed before the Board of Governors. After discussion, the Board resolved as under:

RESOLUTION NO. BG/76/2003: RESOLVED THAT -

- (a) The proposal for procurement of a modern EPABX of 5000 lines be approved in principle.
- (b) The System should be State of the art and futuristic one. It should be optical fiber based facility and Broad band. Y5 (Wireless mode) be adopted.
- (c) Equipment should be upgradable.
- (d) Information about the technical and other details be obtained from the IITs & other Institutions.
- (e) The Board authorised the Chairman to constitute a committee to identify the equipment to be purchased and approve additional expenditure.

Item No. 7.4.4 **To consider the issue of Dr. Ram Phal Ram, Asstt. Professor in Mett. & Mat. Engg. Department, who has not opted the retirement option of IIT Roorkee from 60 years to 62 years in reference to Notification No. Estt.(B)/236/E-2266 dated 25.1.2002.**

RESOLUTION NO. BG/77/2003: RESOLVED THAT the legal opinion and advice from MHRD be taken on the issue and the matter be placed again before the Board for consideration.

Item No.7.4.5 **To consider termination of Contract Appointment of Dr. S.K. Padmarajaiah as Lecturer Ex-cadre.**

RESOLUTION NO. BG/78/2003: RESOLVED THAT the termination of Contract Appointment of Dr. S.K. Padmarajaiah as Lecturer Ex-cadre be approved.

Item No. 7.4.6 To consider filling up one post of Assistant (Legal).

The Finance Committee had considered this issue vide item No. 7.11. The recommendations of the Finance Committee were placed before the Board of Governors. After discussion, the Board approved the recommendations of the Finance Committee.

RESOLUTION NO. BG/79/2003: RESOLVED THAT an internal advertisement be issued and applications be invited from Assistants/UDCs of the Institute for working in the Legal Cell, who may be given an honorarium of Rs. 500/- p.m. A maximum of 4 Assistants/UDCs may be so deployed to strengthen the Legal Cell.

FURTHER RESOLVED THAT if required, a retired local Judge may be engaged as a permanent Legal Advisor of the Institute on last pay drawn less pension.

Item No. 7.4.7 To consider the revision of remuneration/facilities for Dy. Directors/Deans/Wardens/Asstt. Wardens in the light of past practices and information received from other IITs.

The Finance Committee had considered this issue vide item No. 7.12. The recommendations of the Finance Committee were placed before the Board of Governors. After discussion, the Board approved the recommendations of the Finance Committee.

RESOLUTION NO. BG/80/2003: RESOLVED THAT the remuneration/facilities for Dy. Directors/ Deans/ Associate Deans/ Wardens/ Asstt. Wardens be approved as under w.e.f. 11.10.2003:

(a)	Dy. Director	Free accommodation.
(b)	Deans	Free accommodation.
(c)	Dean of Students Welfare	Free accommodation plus Rs.1000/- p.m.
(d)	Associate Dean of Students Welfare	Rs. 1,200/- p.m.
(e)	Wardens	Rs. 800/- p.m.
(f)	Asstt. Wardens (Residential)	Free accommodation plus Rs. 400/- p.m.

Item No.7.4.8

To consider the request of retired employees of the Institute for retention of Institute accommodation for a period of one year from the date of retirement.

RESOLUTION NO.BG/81/2003: RESOLVED THAT the request of Mr. S.K. Sharma, Supdt. (Retd.), Mr. J.B.Sharma, STA (Retd.), Mr. A.P.Nautiyal, STA (Retd.), Mr. Vijay Singh, STA (Retd.) and Mr. Rehtu Lal, Lab. Attdt. (Retd.) for retention of Institute accommodation after retirement on 30.06.2003 be approved as under:

- (a) 1.7.2003 to 31.10.2003 (04 months) on normal licence fee.
- (b) 1.11.2003 to 29.2.2004 (04 months) on double the normal licence fee.
- (c) Thereafter, penal rent.

Item No. 7.4.9

To consider the specification/ quality/ price range of the woolen cloth to be provided to the IIT Staff.

The Finance Committee had considered this issue vide item No. 7.19. The recommendations of the Finance Committee were placed before the Board of Governors. After discussion, the Board approved the recommendations of the Finance Committee.

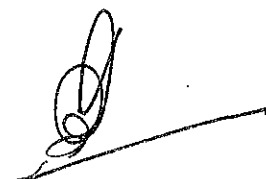
RESOLUTION NO. BG/82/2003: RESOLVED THAT the purchase of woolen cloth (35% wool and 65% Polyester) in the price range of Rs. 325/- to 375/- per meter from manufacturers like M/S Raymond/ OCM/ Khadi Gramudyog be approved.

Item No. 7.4.10

To consider the implementation of BOG resolutions on granting of stagnation increment to academic staff.

The Finance Committee had considered this issue vide item No. 7.24. The recommendations of the Finance Committee were placed before the Board of Governors. After discussion, the Board approved the recommendations of the Finance Committee.

RESOLUTION NO. BG/83/2003: RESOLVED THAT the first stagnation increment will be admissible to the academic staff who are in service on and after 21st September 2001, i.e. the date of conversion to IIT Roorkee, on completion of two years from the date on which they reached the maximum of their respective pay scales. The



subsequent stagnation increments will be admissible after a further period of two/four years, as applicable and as per MHRD rules.

Item No. 7.4.11 **To increase the amount of token money from Rs. 2000/- to Rs. 5000/ for seeking funds from other sources for attending an International Conference abroad.**

The Finance Committee had considered this issue vide item No. 7.21. The recommendations of the Finance Committee were placed before the Board of Governors. After discussion, the Board approved the recommendations of the Finance Committee.

RESOLUTION NO. BG/84/2003: RESOLVED THAT the token money be raised from Rs. 2000/- to Rs. 5000/ for seeking funds from other sources for attending an International Conference abroad.

Item No. 7.4.12 **To consider the proposal for organising an Indo-US Workshop on River Bank Filtration, at IIT Roorkee on 1st & 2nd March, 2004.**

RESOLUTION NO. BG/85/2003: RESOLVED THAT the proposal for organising an Indo-US Workshop on River Bank Filtration, at IIT Roorkee on 1st & 2nd March, 2004 be approved and the same be forwarded to Ministry of Human Resource Development/Ministry of External Affairs for specific approval.

Item No. 7.4.13 **To consider opening of separate bank account for each category of MHRD project and loading of interest with retrospective date.**

The Finance Committee had considered this issue vide item No. 7.22. The recommendations of the Finance Committee were placed before the Board of Governors. After discussion, the Board approved the recommendations of the Finance Committee.

RESOLUTION NO. BG/86/2003: RESOLVED THAT status quo be maintained. Single account be opened and separate ledgers be maintained for each MHRD project

Item No.7.4.14 **To consider the issue related to future of Demonstration Farm of WRDTC and follow up action to mitigate the problems arising out of its location at its present site.**

The Finance Committee had considered this issue vide item No. 7.23. The recommendations of the Finance Committee were



placed before the Board of Governors. After discussion, the Board approved the recommendations of the Finance Committee.

RESOLUTION NO. BG/87/2003: RESOLVED THAT the Demonstration Farm alongwith the equipment be relocated near the Department of Hydrology. Further, the Board suggested that instead of going in for a permanent farm outside the Campus on leased land, the WRDTC may collaborate with other Agricultural Institutions such as the Pusa Institutes, the Pant Nagar Agricultural University and the Agriculture College at Meerut for organising practical work for the students.

Item No.7.4.15 To consider the essential qualification for filling up the posts of Medical Officers.

RESOLUTION NO. BG/88/2003: RESOLVED THAT the essential qualification for filling up the posts of Medical Officers as recommended by the Hospital Advisory Committee be approved as under:

1. Medical Officer (Physician)

Minimum Qualification/Experience:

MD (Medicine) from a University, recognized by Medical Council of India (MCI)

2. Medical Officers (on Contract)

Specializations:

- | | |
|-------------------------------|----------------------------------|
| (a) Physician (Medicine) | : 02 Nos. (1 for DPT Saharanpur) |
| (b) Gynaecologist | : 01 No. |
| (c) Surgeon (General Surgery) | : 01 No. |
| (d) Paediatrician | : 01 No. |

Essential Qualifications:

MD/MS from a university, recognized by Medical Council of India (MCI), in the appropriate branch of medicine.

OR

PG Diploma from a university, recognized by Medical Council of India (MCI), in the appropriate branch of medicine + at least 2 years of experience in a recognized Hospital.

NOTE:-Candidates having Post Graduate degrees will be preferred over those having Post Graduate Diplomas.

Item No. 7.4.16

Release of GPF Contribution of Institute employees lying with the State Governments of Uttar Pradesh and Uttaranchal-consideration of legal opinion in the matter.

The Finance Committee had considered this issue vide item No. 7.25. The recommendations of the Finance Committee were placed before the Board of Governors. After discussion, the Board approved as under:

RESOLUTION NO. BG/89/2003: RESOLVED THAT the Director will approach Chief Secretary, Uttaranchal to get the money released from Roorkee Treasury and report to next meeting of BOG for further action.

FURTHER RESOLVED THAT the Registrar will sue and be sued in the name of IIT Roorkee in all litigations.

Item No. 7.5.1

To report the decisions/ actions taken by the Chairman, Board of Governors on behalf of the Board of Governors.

The Board ratified the approvals accorded by the Chairman, BOG on behalf of the Board.

RESOLUTION NO. BG/90/2003: RESOLVED THAT the approvals accorded by the Chairman, BOG on behalf of the Board, in the matters listed below, be ratified.

- (a) Payment of Dearness Allowance at Revised Rates w.e.f. 1.7.2003
- (b) Payment of Dearness Allowance to Pensioners/Family pensioners at Revised Rates w.e.f. 1.1.2003
- (c) Signing of MoU between Department of Secondary and Higher Education, MHRD, Govt. of India and IIT-Roorkee. (Refer APPENDIX 'J')
- (d) Signing of MoU between University of Waterloo, Canada and IIT Roorkee. (Refer APPENDIX 'K')
- (e) Signing of MoU between CIRT, Pune and IIT Roorkee. (Refer APPENDIX 'L')
- (f) Statement of Annual Accounts 2001-2002 of the Institute (Refer APPENDIX 'M')
- (g) Inclusion of the name of Prof. (Mrs) Ritu Barthwal, Department of Biotechnology as Member Coordinator in


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the committee constituted to examine the proposal for setting up a Central Nuclear Magnetic Resonance (NMR) facility at IIT Roorkee.

- (h) Nomination of members to the New School Management Committee for ABN Sr. Secondary School, IIT Roorkee.
 - (i) Signing of MoU between Macquarie University, Sydney and IIT Roorkee. (Refer APPENDIX 'N')
 - (j) Appointment of Prof. H.K.Verma as Dean of Faculty Affairs w.e.f. 1.8.2003.
 - (k) Extension of contractual assignment to Sri Arun Kumar as Head, A.H.E.C. for a period of one year w.e.f. 18.5.2003.
 - (l) Recommendations of the Selection Committee for one post of Assistant Executive Engineer (Electrical)
 - (m) Recommendations of the Selection Committee for one post of Scientific Officer Grade-II in the Institute Instrumentation Centre (IIC)
 - (n) Recommendations of the Selection Committee for the positions of Associate Professor, Assistant Professor and Lecturer (on contract) in the Department of Electronics & Computer Engineering
 - (o) Recommendations of the Selection Committee for the position of Assistant Registrar (Admn.)
 - (p) Recommendations of the Selection Committee for the positions of Associate Professor, Assistant Professor and Lecturer (on contract) in the Department of Management Studies
 - (q) Extension of the contract assignment to Dr.(Mrs.) Chhaya Sharma, Lecturer Ex-cadre in the Department of Paper Technology, Saharanpur w.e.f. 13.7.2003 to 30.6.2004.
-
- (r) Holding an International Conference on Hydraulic Engineering Research and Practice at Roorkee in October 2004 in honour of Prof. K.G. Ranga Raju, Professor, Civil Engg. Department.
 - (s) Extension of the contract assignment to Dr. Vikas Pruthi, Lecturer Ex-cadre in the Department of Biotechnology w.e.f. 1.7.2003 to 31.12.2003.



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- (t) Request of Dr. Bharat Singh, Former Vice-Chancellor and Dr. C.P. Gupta, Former Pro-Vice Chancellor, University of Roorkee to permit them to change their retirement options from CPF to Pension in accordance with U.P. Govt. G.O. No. 2938/15(15)/95-46(14)/83 dated 22.9.1995.
- (u) Proposal for engagement of Prof. P.C. Pandey in the Deptt. of Mech. & Indl. Engg. w.e.f. 1.8.2003 to 15.12.2003
- (v) Extension of appointment of Mr. K.C. Jain, A.E. (Civil) for further period of one year w.e.f. 28.6.2003 to 27.6.2004
- (w) Re-employment of Prof. S.K. Thakkar, Earthquake Engg. Deptt., Prof. S.D. Bhattacharya, Chemical Engg. Deptt., Prof. A.P. Gupta, Mathematics Deptt. and Prof. B. Prakash, Earth Sciences Deptt. upto 31.12.2003.
- (x) Change in "the guidelines for financial assistance for attending International Conferences abroad" raising the requirement of one paper in refereed journals to two.
- (y) Proposal of re-employment of Prof. P.K. Jain, Civil Engg. Deptt. & Prof. R.M. Vason, Civil Engg. Deptt. upto 31.12.2003.
- (z) Recommendations of the Selection Committee for the positions of Assistant Professor and Lecturer (on contract) in the Department of Physics held on 30.9.2003 as per details given below:

Assistant Professor

1. Dr. Alok Misra
2. Dr. Sadiqali A. Rangwala
3. Dr. Vipul Rastogi
4. Dr. G.D. Varma

Lecturer

Dr. B.K. Patra

- (aa) Guidelines for appointment of Joint Professors. (Refer APPENDIX 'O').



Item No. 7.5.2 To report certain matters for the Information of the Board of Governors.

RESOLUTION NO. BG/91/2003: RESOLVED THAT the matters, as listed below, be noted and recorded.

- (a) Urgent meeting of the Senate of IIT Roorkee held on 1st July 2003.
- (b) 7th meeting of the Senate of IIT Roorkee held on 17th September 2003.
- (c) 6th meeting of the Finance Committee of IIT Roorkee was held on 7th June 2003.
- (d) The following faculty members and other staff were appointed as per the details given below:-

Sl. No.	Name	Department	Designation	Date of appointment
1.	Dr. Sumit Gupta	E & CE	Lecturer On Contract	21.07.2003
2.	Dr. (Mrs.) Sangita Sahney	D.O.M.S.	Lecturer On Contract	27.07.2003
3.	Dr. Santosh N. Rangnekar	D.O.M.S.	Lecturer On Contract	21.07..2003
4.	Dr. Krishna Mohan Singh	M & IED	Asstt. Professor	03.09.2003
5.	Dr. Ashish K. Darpe	M & IED	Asstt. Professor	15.07.2003
6.	Mr. Mahesh Kumar	Const. Division	Asstt. Executive Engineer (Elect.)	08.07.2003
7.	Dr. Ram Narayan Patel	Elect. Engg.	Lecturer on Contract	10.09.2003
8.	Dr. Partho Prtim De	E & CE	Asstt. Professor	08.09.2003

- (e) The following faculty members have been brought on the regular cadre on completion of their probation period.

Sl. No.	Name	Designation	Department	Date
1.	Dr. Anil Kumar Sharma	Asstt. Professor	D.O.M.S.	5.10.2002
2.	Dr. Zulfequar Ahmad	Asstt. Professor	Civil Engg.	14.12.2002


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- (f) The following faculty members have been granted extra Ordinary Leave: -

Sl. No.	Name, Designation & Department	Period		Nature	Purpose
		From	To		
1.	Dr. R. Sridhar, Sr. Scientific Officer Grd-I Q.I.P. Centre	11.8.2003	10.2.2004	EOL	To join a job assignment in "Kindred Estates Health & Rehab Centre, U.S.A."
2.	Dr. S.C. Sharma Asstt. Professor D.P.T. Saharanpur	20.8.2003	19.8.2005	EOL	To join a teaching assignment at "ETA-Network of Education & Training" 'Al Ghurair University', Dubai.
3.	Ms. Meera Asstt. Librarian Central Library	16.7.2003	2.5.2004	EOL	To join an assignment at University of Delhi
4.	Sri Subodh Kumar Sharma Workshop Supdt. DPT Saharanpur	29.7.2003	28.7.2005	EOL	To join an assignment as "President, Marketing & International Business Development" with M/s Barnala Steel Industries Ltd. Muzaffarnagar

- (g) The following faculty members have been brought on the regular cadre on completion of their probation period.

Sl. No.	Name	Designation	Department	Date
1.	Dr. Satyendra Mittal	Asstt. Professor	Civil Engg.	28.6.2002
2.	Dr. A.K.Ahuja	Assoc. Professor	Civil Engg.	18.2.2002

- (h) Annual Convocation - 2003 of the Indian Institute of Technology, Roorkee will be held on 17th November 2003. His Excellency, Dr. A.P.J.Abdul Kalam, President of India will be the Chief Guest on this occasion.
- (i) A Note regarding the proposal for setting up a Central Nuclear Magnetic Resonance (NMR) facility at IIT Roorkee was placed before the Board for information.

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


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APPENDIX 'A'
Item No.7.2.1

Course No. & Title : CH-546: HAZARDOUS WASTE MANAGEMENT

Semester : SPRING

Contact Hours : L T P
3 1 0

Credits : 4

Prerequisite(s) : None

Objective :
To provide a comprehensive coverage of treatment, utilization and management of hazardous wastes.

Short Syllabus

- Characterization of industrial wastes-hazardous and non-hazardous wastes. Waste disposal and management laws and guidelines.
- Non-hazardous industrial wastes-treatment, disposal, utilization and management. Thermal gasification, combustion and landfill. Value-extraction from the wastes.
- Hazardous wastes: handling, storage and disposal of hazardous wastes. Wastes from electroplating, lead batteries/cells, soldering and electro winning operations, wastes from refineries and petrochemical units.
- Case studies of a few real scenarios of hazardous waste management in industries.

Suggested Text Books:

1. Tedder, D. W. & Pohland, F. G. (editors), "Emerging Technologies in Hazardous Waste Management", ACS (1990)
2. Conway, R. A. & Ross, R. D., "Handbook of Industrial Waste Disposal", Van-Nostrand Reinhold (1980)

Course No. & Title : CH-502C: MODELING OF PROCESS SAFETY AND CONTROL SYSTEMS

Semester : SPRING

Contact Hours : L T P
3 1 0

Credits : 4

Prerequisite(s) : None

Objective :

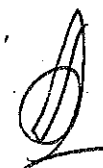
To educate the students about the modeling methodologies for Chemical Engineering Systems involving safety and their utility in designs of control systems.

Short Syllabus :

Models, need of models and their classification, models based on transport phenomena principles, scaling, alternate classifications of models, population balance, stochastic, and empirical models; Source models, flashing liquids, liquid pool evaporation and boiling; Toxic release and dispersion models; models for fire & explosion control; models of two phase flow during runaway reaction relief; Leung models for reactors and vessels.

Suggested Text Books:

1. Himmelblau, D.M. & Bischoff, K.B., "Process Analysis & Simulation, Deterministic Systems", Wiley (1968)
2. Crowl, D. A. & Louvar, J. F., "Chemical Process Safety : Fundamentals with Applications", Prentice Hall (1990)
3. Lees, F. P., "Loss Prevention in the Process Industries", Vol I, II & III, 2nd ed. Butterworth Heinemann (1996)



CH-544 Design of Safety Systems

Cr	L	T	P
4	3	1	05

Aim : To make aware the students of the need to design safety systems in the industries.

Course Content :

Importance of safety in design; Relief concepts, definitions, Emergency relief system design, DIERS/DIERS users group, ERS design basis; Impact of two-phase flow, codes, terms devices & rules; vessel disengagement dynamics, vapour-liquid disengagement modes; prediction of two-phase flow onset/disengagement; vent flow dynamics.

Determining Pressure relief, types of relief devices, Design of relief systems; Deflagration venting for dust and vapour explosions, venting system design for fires external to process vessels, Reliefs for thermal systems, Flare design for toxic release from industries.

Advances in fire prevention and control systems.

Text Books :

1. F.P. Lees, "Loss Prevention in the Process - Industries", 2nd ed. Butterworths, London, 1996.
2. Crowl, D.A. & Douvar, Joseph, "Chemical Process Safety Fundamentals with Applications", Prentice Hall, New Jersey (1990).

Major Elective I

CH-548 Case Studies in Safety and Hazards Management

Cr	L	T	P
4	3	1	0

Aim & Objectives : To explain to the students few cases of industrial disasters and to make them aware of improved procedures to prevent such disasters

Contents :

Accident processes – causes and consequences. Case histories in general categories, static electricity, chemical reactivity, material failure, fire and explosion, system design and management procedures.

Text Books :

1. F.P. Lees, "Loss Prevention in the Process Industries" 2nd Ed. Vol. 3, Butterworths, London (1996).
2. T.A. Kletz, "What went Wrong? Case Histories of Process Plant Disasters", Gulf Publishing, Houston (1985).
3. T.A. Kletz, "Plant Design for Safety", Hemisphere Publishing, NY (1991).


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CH-550 Laws for Safety & Hazards

Cr	L	T	P
4	3	1	0.

Aim & Objectives :

To make the students aware of various legislations and rules framed thereunder to deal with industrial safety, hygiene and hazards management.

Prerequisite : None

Course Contents :

The legislative frame work for the management of environmental loss due to industrial hazards and the factories regulation and hygiene. The Environment (Protection) Act, 1986, and Rules, 1986, The Hazardous Waste (Management and Handling) Rules, 1989, The Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989; Rules for the Manufacture, Use, Import, Export and Storage of Hazardous Micro-organisms, Genetically engineered Organisms or Cells, 1989, The chemical Accidents (Emergency Planning, Preparedness and Response) Rules, 1996. The Factories Act, 1948 with its amendments, BIS codes for safety and hazards management, Federal Register Legislations of U.S.A. for comparative assessment of Indian Laws and Rules.

Text Books :

1. Acts & Rules and Notifications as published in the Gazette of India from time to time.


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CH-523 Reliability Engineering

Cr	L	T	P
4	3	1	0


Aim & Objectives : To understand the failure and reliability concepts of industrial systems

Prerequisite : None

Introduction to probability theory, failure mechanisms and distributions, moment generating functions, theory of chaos and catastrophic failure models, series, parallel, k-out-of -m configurations, stand-by-arrangements, Markov models and computer simulations, methods for computing system reliability, availability, and expected number of failures, reliability upgradation, fault tree, event tree and consequence modelling. Probabilistic approaches and applications.

Text Books :

1. CCPS, "Guidelines for Hazard Evaluation Procedures, AIChE, 2nd Edn. 1992
2. F.P. Lees, "Loss Prevention in the Process Industries", 2nd Ed., Butterworths, London, 1996.
3. J.F. Louvar and B.D. Louvar, "Health and Environmental Risk Analysis : Fundamentals with Applications, Prentice Hall, 1998.


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CH-521 Fire Science & Engineering

Cr	L	T	P
4	3	1	-

Aim : To understand the basics of fire, its propagation and its prevention and control aspects in industrial environment.

Pre requisite : None

Short Syllabus :

Fire, combustion and explosion, flammability characteristics of chemicals and materials : liquids, vapours, gaseous/vapourous mixtures, gas-liquid two phase mixtures, flame propagation, Flammability diagram, ignition energy, autoignition and auto oxidation, fire initiation and propagation-severity and duration, adiabatic ignition temperature, effect of enclosure and heat transfer in fire development, stack and pool fires. Critical aspects of fire dynamics, diffusion flame and fire plumes, flame spread, production and movement of smoke, computer simulations of fire dynamics. Fire detection systems. Fire prevention and control : Engineering aspects of fire prevention and control, inerting procedures, static electricity – charge accumulation, electrostatic discharging, charge balancing in flow systems, static electricity control techniques, - general design methods, flame arrestors- their design, design of sprinkler systems, flare design, fire extinguishment – different methods.

Advances in fire prevention and control systems.

Text Books :

1. F.P. Lees, "Loss Prevention in the Process – Industries", Vol. 1 & 2, Butterworths, London (1996).
2. D.R. Stull, "Fundamentals of Fire and explosion", AIChE Monograph Series, (New York) (1977).


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DEPARTMENT OF CHEMICAL ENGINEERING
INDIAN INSTITUTE OF TECHNOLOGY, ROORKEE

PROPOSED SCHEME OF TEACHING AND EXAMINATION OF M.Tech. INDUSTRIAL SAFETY & HAZARDS MANAGEMENT

SEMESTER - I

Code	Subject	Subject Area	Credits	L	T	P	TED	PED	THE	PE	MT E	CW S	PRS
MA-501B	Advanced Mathematics (Module-2)	PG-11	4	3	1	-	3	--	50%	--	20%	30%	--
CH-501	Transport Phenomena	PG-13	4	3	1	-	3	--	50%	--	20%	30%	--
CH-503	Chemical Reactor Analysis	PG-14	4	3	1	-	3	--	50%	--	20%	30%	--
CH-521	Fire Science & Engineering	PG-14	4	3	1	-	3	--	50%	--	20%	30%	--
CH-523	Reliability Engineering	PG-14	4	3	1	-	3	--	50%	--	20%	30%	--
	TOTAL		20	15	05	-							

SEMESTER - II

Code	Subject	Subject Area	Credits	L	T	P	TED	PED	THE	PE	MT E	CW S	PRS
CH-502C	Modeling of Process Safety and Control Systems	PG-12	4	3	1	-	3	--	50%	--	20%	30%	--
CH-530	Industrial Safety & Hazards Mgt.	PG-14	4	3	1	-	3	--	50%	--	20%	30%	--
CH-544	Design of Safety Systems	PG-14	4	3	1	-	3	--	50%	--	20%	30%	--
	Major Elective I*	PG-14	4	3	1	-	3	--	50%	--	20%	30%	--
	Major Elective II*	PG-14	4	3	1	-	3	--	50%	--	20%	30%	--
	Minor Specialisation**	PG-15	4	3	1	-	3	--	50%	--	20%	30%	--
	TOTAL		24	15	05	8							

* A student has to opt for one course from the list of Major Electives given in Annexure - A.

** A student has to opt for one course out of the courses running in other specialization groups from the Department as well as outside the department.

NOTE: Students may opt HS-501: Technical Communication course of 2 credits (2 L & 1 T) on the advice of the FACULTY ADVISOR during Autumn / Spring semester. The credits of this course will be over and above the total credits required for M. Tech. Degree.


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SEMESTER - III

Code	Subject	Subject Area	Credits	L	T	P	TED	PED	THE	PE	MTE	CWS	PRS
CH-603	Project	PG-19	4	-	-	8	-	2	--	50%	--	--	50%
CH-605	Seminar	PG-18	4	-	-	2	-	2	--	50%	--	--	50%
CH-602	Dissertation	PG-20	16	-	-	24	-	2	--	100%	--	--	--
	TOTAL		24	-	-	34							

SEMESTER - IV

Code	Subject	Subject Area	Credits	L	T	P	TED	PED	THE	PE	MTE	CWS	PRS
CH-602	Dissertation	PG-20	20	-	-	40	-	2	--	100%	--	--	--
	TOTAL		20	-	-	40							

NOTE:

The portion of the dissertation work of 16 credits carried out in the Semester-III shall be examined at the end of 3rd semester and the evaluation shall be recorded as "Satisfactory" or "Unsatisfactory" with grade 'S' or 'U', respectively. For SGPA of 3rd semester / CGPA up to 3rd semester, only the credits of course, seminar and project shall be taken into account. If the dissertation is graded unsatisfactory (U) he/she shall cease to get scholarship / assistanceship in the fourth semester and he/she shall not be awarded a grade higher than B Plus (B+) at the end of fourth semester. The final evaluation of the Dissertation of 32 credits shall be carried out in the 4th semester.


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DEPARTMENT OF CHEMICAL ENGINEERING
INDIAN INSTITUTE OF TECHNOLOGY, ROORKEE

ANNEXURE - A

LIST OF COURSES FOR M. Tech. INDUSTRIAL SAFETY & HAZARDS MGT. STREAM

MAJOR ELECTIVE I

1. CH-546: Hazardous Waste Mgt.
2. CH-548: Case Studies in Safety and Hazards Mgt.
3. CH-550: Laws for Safety & Hazards
4. MT-517: Failure Analysis
5. EE- : Electrical Safety

To be offered by Met. & Materials Engg. Deptt.
To be offered by Electrical Engg. Deptt.

MAJOR ELECTIVE II

1. CH-512: Optimization of Chemical Processes
2. CH-516: Data Acquisition & Monitoring
3. CH-518: Experimental Design Parameter Estimation & Data Analysis
4. EE-521: Advanced Industrial & Electronic Instrumentation
5. MT-539: Inspection & Quality Control

To be offered by Electrical Engg. Deptt.
To be offered by Met. & Materials Engg. Deptt.


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APPENDIX 'B'

Item No.7.2.2

ESTIMATE FOR WIDENING (3.0 M) AND STRENGTHENING 62.5 M OF ROAD FROM S.D.M. CHAURAHIA TO I.L.T. ROORKEE GATE (BEG GATE)

Length = 700 m

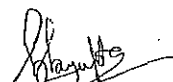
SL. NO.	ITEM OF WORK	QUANTITY	UNIT	RATE	PER	AMOUNT
1.	Earth work in excavation including removal of surplus earth by cartage.	600.00	M ³	103.30	M ³	61,980.00
2.	Laying 63-45 mm stone ballast in 7.50 cm compacted thickness by road roller etc. complete as per MOST specifications.	150.00	M ³	582.00	M ³	87,300.00
3.	Same as above item No. 2 but stone ballast 53-22.4 mm in two layers of each 7.50 cm compacted thickness as per MOST specifications.	300.00	M ³	646.00	M ³	1,93,800.00
4.	Primer coat on W.B.M. surface with bitumen as per MOST specifications.	1950.00	M ²	12.70	M ²	24,765.00
5.	Tack coat on existing black top surface with rapid setting emulsion before laying B.M. & SDBC as per MOST specifications.	9200.00	M ²	6.08	M ²	55,936.00
6.	B.M. of compacted thickness of 5.0 cm with paver finish as per MOST specification.	280.00	M ³	2021.30	M ³	5,65,964.00
7.	SDBC 25 mm thickness complete as per MOST specification.	115.00	M ³	2781.20	M ³	3,19,838.00
8.	Brick on edge pavement on patives	300.00	M ²	110.00	M ²	33,000.00
9.	Construction of Barrier with hut complete	1	Nos.	1,00,000.00	Nos.	1,00,000.00

Total Rs. 14,42,583.00

Add. Contingency @ 3.00%


43277.00

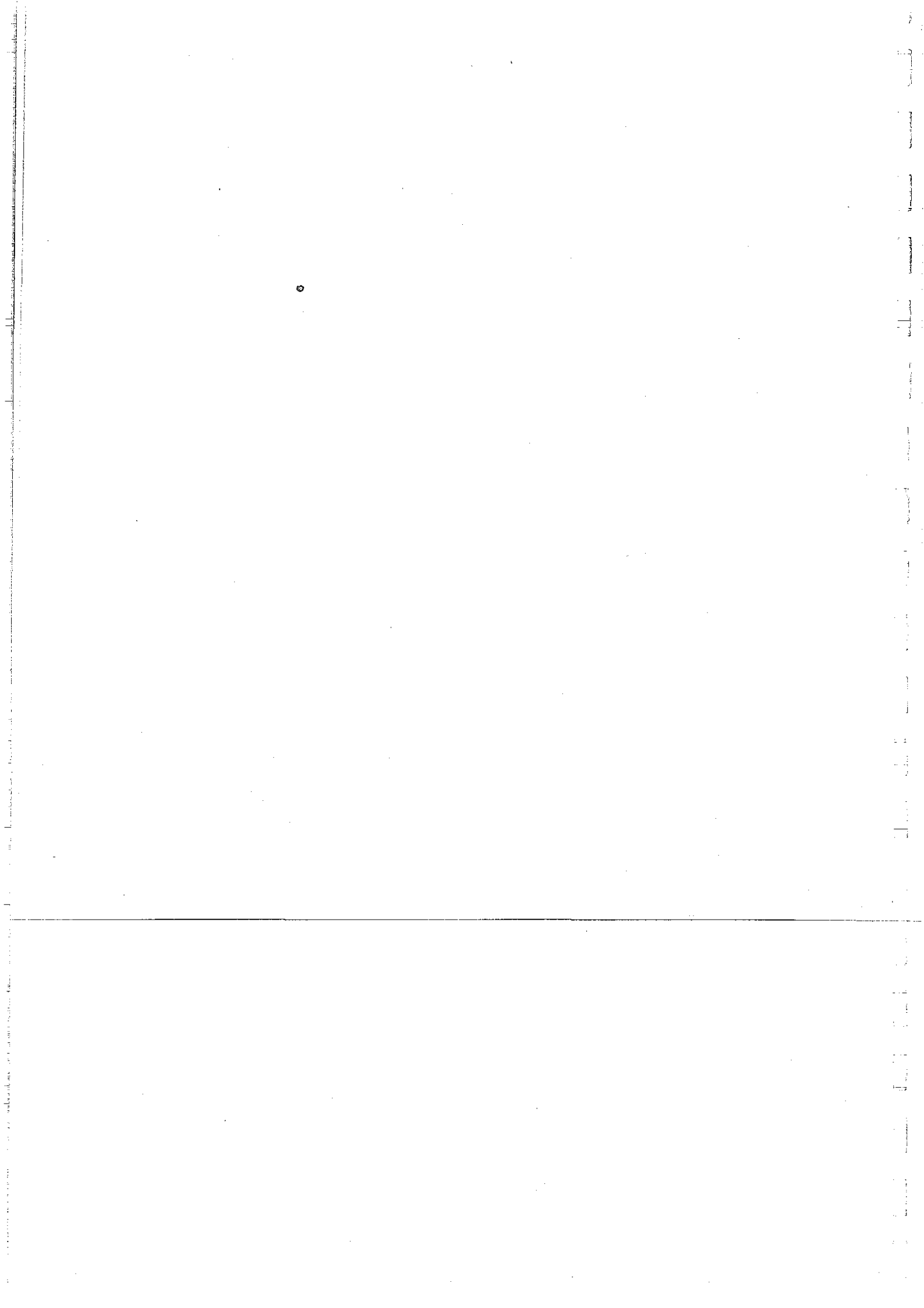
After deducting Cost of Barrier (Rs. 10,000.00)
Gross Total Rs. 14,85,860.00
Rs. 13,85,860.00
Say Rs. 14.00 lacs


J.E.


A.E. IV


I.E.


22 OCT 2003




APPENDIX 'C'
Item No.7.2.7

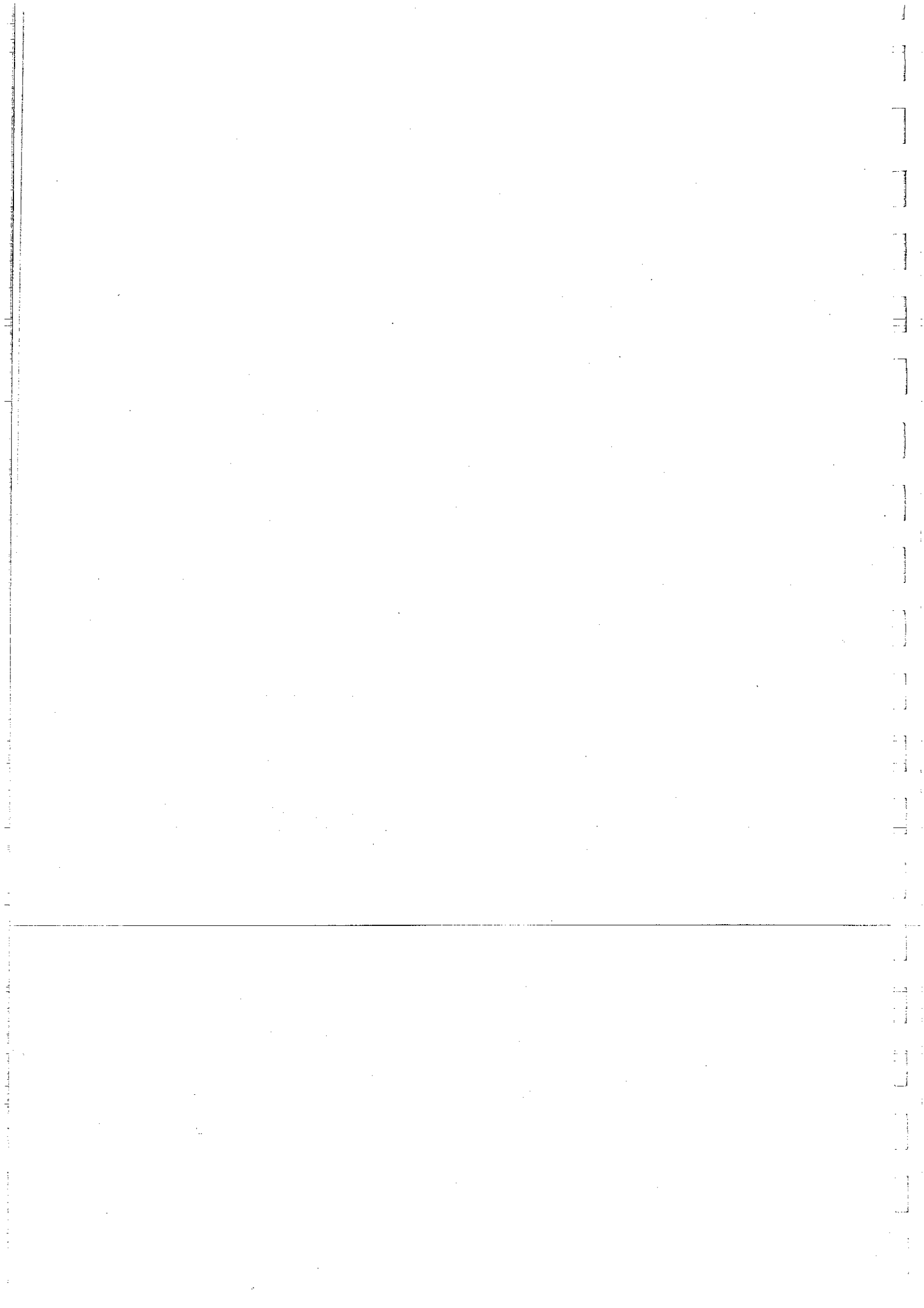
**ESTIMATE FOR PROPOSED CONSTRUCTION OF TABLE TENNIS HALL AT
FIRST FLOOR OF SPORTS OFFICE**

Sl. No.	Item	Plinth Area	Cost of Const. per sq. mt. (Plinth area rate)	Estimated Cost
1.	Const. of Table Tennis Hall	281 m ²	4225.00	11,87,225.00

Say 11.90 lacs


Institute Engineer


22 OCT. 2003




APPENDIX 'D'**Item No.7.2.8****CONSTRUCTION OF OVERHEAD TANK AT D.P.T. SAHARANPUR**

Sl. No.	Name of Item	Rate	Estimated Cost
1.	Construction of 200 KL overhead tank upto staging height 20.00 meters including inlet & outlet water pipe line.	8.05 per litre (Rate as per CPWD schedule as on 1.1.92)	16,10,00.00

3% contingencies 48,300.00

Total 16,58,300.00

Say 16.60 lacs


Institute Engineer
22 OCT 2003

APPENDIX 'E'


Item No.7.2.9

**ESTIMATE FOR PROPOSED CONSTRUCTION ON SECOND FLOOR OF
EARTH SCIENCE DEPARTMENT**

Sl. No.	Item	Plinth Area	Cost of Const. per sq. mt. (Plinth area rate)	Estimated Cost
1.	Const. of Lecture Hall and Lab Block	375 m ²	4550.00	17,06,250.00

Say 17.06 lacs


Institute Engineer


22 OCT 2003

APPENDIX 'F'

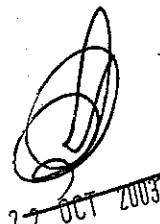
Item No.7.2.10

**ESTIMATE FOR PROPOSED CONSTRUCTION OF BIOTECHNOLOGY
DEPARTMENT BUILDING AT GROUND FLOOR AND FIRST FLOOR.**

Sl. No.	Name of Item	Plinth Area	Cost of Const. per sq. mt. (Plinth area rate)	Estimated Cost
1.	Extension of Biotechnology Department Building at Ground Floor & First floor	518 m ²	4550.00 per m ²	23,56,900.00

Say 23.60 lacs


Institute Engineer


22 OCT 2003

APPENDIX 'G'

Item No.7.3.3

INDIAN INSTITUTE & TECHNOLOGY, ROORKEE

Annexure - II

Draft Rules & Guidelines for accepting the membership of the Board of companies

1. A faculty member who wishes to be on the Board of Directors of a company must make a formal request through Head of the Dept./ Centre and submit information about the Company in the prescribed proforma as per Appendix-II duly signed by the Chairman/Secretary of the Board of Directors of the said company.
2. Each request/proposal will be considered, on a case to case basis.
3. The association of faculty member should promote Institute-Industries interaction and enrich his/her professional competence.
4. Proposals will be considered only for Nominee Directorship and not for 'Shareholding' Directorship.
5. For attending the meeting of the Board, faculty member may be paid TA/DA by the Company and if admissible, a sitting fee also. No other payment will be made. The total time devoted to function as a member of the Board will be within the norms for consultancy. Leave/Special Casual Leave will be taken as per rules.
6. Membership of the Board will not involve any liability to the Institute. Liabilities, if any, to the faculty member on the Board, will be clearly specified by the Company at the time of making a request.
7. The acceptance of the membership of the Board of Directors of the Companies by the faculty members will not be at the cost of their normal duties at the Institute.

Lo
17/9/03
10m 15-9-2003
DEAN (SRIC)

[Signature]
22 OCT 2003

Annexure - III

REQUEST/PROPOSAL FOR THE MEMBERSHIP OF THE BOARD OF A COMPANY

1. Name of the Company :
2. Status of the Company : Private/Public Sector/ Other. (Please Specify)
- 2A. Year established :
3. Constitution of the Board of Directors of the Company (Attach list of Members and their Professional qualifications, if any):
4. Brief statement on the present and projected scope of business of the company (Attach). Indicate if the company has inhouse R&D.
5. Expectation of the company regarding special technical/professional role, if any, the faculty member may play as a Board Member.
6. Whether membership involves any personal liability(ies) to the faculty member, as a member of the Board ? if yes, what ?
7. Besides TA/DA to attend Board meetings, is any other payment made to Board members. If yes, please give details.

Certified that membership of the Board by a member of the faculty of the I.I.T. Roorkee will not involve any liability to the I.I.T. Roorkee.

Chairman/ Secretary
of the Board of Directors
of the Company
SEAL

Date:

I would like to accept the membership of the Board of the Company.

Signature
Faculty Member.....
Designation.....
Department.....
I.I.T. Roorkee

Date:

Comments / Recommendations
of Head of Department

Date:

Signature of Head of the Department
Seal

Tr
15/8

15.9.2003
BBA (SRIC) - 37 -

[Signature]
22 OCT 2003

APPENDIX 'H'

Item No.7.4.1

MEMBERS OF THE COMMITTEE CONSTITUTED TO CONSIDER THE REVISION OF RANGES OF EMOLUMENTS (FIXED BASIS) FOR DIFFERENT CATEGORIES OF 'Y' POOL CONTRACT WORKERS

The Committee met on 19.8.2003 at 4.00 PM in the Chamber of Dean (SRIC) to consider the revision of the ranges of emoluments (fixed basis) for different categories of 'Y' pool contract workers on the basis of increase in dearness allowance during 2002-2003. The committee recommends the under mentioned range of emoluments for the following 11 categories of 'Y' pool contract workers with the proviso that there would be no change in the present designations and qualifications in the respective categories. The following attended the meeting:

- | | | |
|----|--|----------|
| 1. | Prof. J.S. Saini, Dean (SRIC) | Chairman |
| 2. | Ltd. Col. (Retd.) A.K. Srivastava, Registrar | Member |
| 3. | Sri Prashant Garg, Dy. Registrar | Member |

Prof. S.K. Kaushik, Chairman, E & W and Prof. Ravi Bhushan, Professor-in-Charge (Finance) could not attend the meeting.

Sl. No.	Name of Position	Present Range of Emoluments (fixed) from 1.4.2002	Increase allowed at the minimum of the range from 1.4.2003	Revised Range of Emoluments (fixed) from 1.4.2003	Qualification and Experience approved by the B.O.G
1.	Helper	2850-3150	Rs. 200/-	3050-3350	8 th Pass
2.	Skilled Worker 'A'	3050-3350	Rs. 200/-	3250-3550	8 th Pass + one year relevant technical experience
3.	Skilled Worker 'B'	3500-3800	Rs. 250/-	3750-4050	ITI/High School & One year relevant experience
4.	Field Asstt.	3600-3900	Rs. 250/-	3850-4150	High School/ITI & Two years experience in relevant field
5.	Technical Asstt. 'A'	4000-4300	Rs. 250/-	4250-4550	Inter Science/ITI & two years experience in relevant field.
6.	Ministerial Asstt. 'A'	4000-4300	Rs. 250/-	4250-4550	Intermediate and two years experience in handling office work. or High school and ten years experience in handling office work.
7.	Technical Asstt. 'B'	4550-4850	Rs. 300/-	4850-5150	B.Sc/Three Years Diploma in relevant field or Inter Science/ITI with ten years experience.
8.	Ministerial Asstt. 'B'	4550-4850	Rs. 350/-	4900-5200	Graduate or Intermediate and ten years experience in handling office work.

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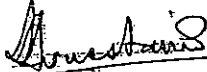
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22 OCT 2003

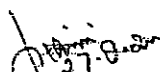
9.	P.C. Operator	4600-4750 5500-5800 5800-7100	Rs. 300/- Rs. 350/- Rs. 450/-	4750-5750 5850-6150 7250-7550	Three years Diploma in relevant field/ Graduate and one year working experience on PC/ Main Frame in an organisation of repute subject to passing department test.
10.	Technical Asstt. 'C'	5500-5800	Rs. 350/-	5850-6150	B.Sc/Three Years Diploma in relevant field, and 4 years experience.
11.	Project Technician	7250-7550	Rs. 500/-	7750-8050	B.Sc/Three Years Diploma in relevant field and 7 years experience.

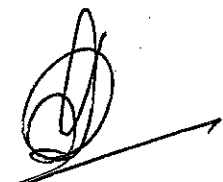
These emoluments will be effective from 1.4.2003.

The present designations and the aforementioned emoluments will not be changed or upwardly revised under any circumstances.


(Prashant Garg)
Member


(Lt. Col. (Retd.) A.K. Srivastava)
Member



(Prof. J.S. Saini)
Chairman


22 OCT 2003


List of Designation of Research Staff, their Qualifications and Enhanced Emoluments, as available for various Projects (Research / Consultancy)
(as recommended by Board for SRIC in its meeting held on 22.5.2003)

Designations & Emoluments	Existing		Recommended		Remarks
	Qualifications and Experience		Designations & Emoluments	Qualifications and Experience	
Project Fellow Rs. 4,000/- or Rs. 5,000/- + HRA	M.Sc. I Class Age Limit - 25 years		Project Fellow Rs. 6,500/- + HRA or Rs. 8,000/- + HRA	Master's Degree in a non-engineering discipline with I Class or equivalent* or B.E./B.Tech. I Class or equivalent* Age Limit - 28 years	Change in emoluments and age limit in consonance with enhancement in other positions notified by DST. B.E./B.Tech. included
JRF I & II Yr - Rs.5,000/-+ HRA III Yr onwards Rs.5,600/- + HRA	M.Sc. I Class with NET/GATE Age Limit 28 years		JRF I & II Yr - Rs.8,000/-+ HRA III Yr onwards Rs.9,000/- + HRA	Master's Degree in a non-engineering discipline with I Class or equivalent* (with NET/GATE) B.E./B.Tech. I Class or equivalent* Age Limit 28 years	Change in emoluments as per DST notification. B.E./B.Tech. included other disciplines of Master's degree included. No change in age limit
(a) SRF (Science) Rs. 5,600/- + HRA	I Class M.Sc./M.Tech. (not post. M.Sc.) with 2 years experience Age Limit 32 years		(a) SRF (Science) Rs. 9,000/- + HRA	Master's degree in a non-engineering discipline with I Class or equivalent with 2 years experience Age Limit 32 years	Change in emoluments as per DST notification. other disciplines of Master's degree included. No change in age limit
(b) SRF (Engg.) I & II year Rs. 6000/- III Year onwards Rs.6,400/- + HRA	B.E./B.Tech. with 2 years experience Or M.E./M.Tech. or equivalent degree in Engg. Age Limit 32 years		(b) SRF (Engg.) I & II year Rs. 9,500/- III Year onwards Rs.10,000/- + HRA	B.E./B.Tech. or equivalent with 2 years experience Or M.E./M.Tech. or equivalent degree in Engg. Age Limit 32 years	Change in emoluments as per DST notification. No change in age limit
Research Associates A- 8,000/- + HRA B- 8,800/- + HRA C- 10,500/- + HRA	Ph.D. in Science with research publication or M.E./M.Tech. with 3 years research experience Age Limit 35 years		Research Associates A- 11,000/- + HRA B- 11,500/- + HRA C- 12,000/- + HRA	Ph.D. in Science with research publication or M.E./M.Tech. with 3 years research experience Age Limit 35 years	Change in emoluments as per DST notification No change in age limit

* Means 6.5 CGPA on 10 point scale or equivalent.


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Existing		Recommended		Remarks
Designations & Emoluments	Qualifications and Experience	Designations & Emoluments	Qualifications and Experience	
Fellow 'A' Rs.8,500/9,000/9,500/10,000/ 10,500 + HRA	M.Sc. /B.E./B.Tech. with three years experience / M.E./M.Tech. or equivalent degree, with good academic record and proven ability for high quality R&D work Age Limit 40 years	Fellow 'A' Rs.12,000/12,500/13,000 + HRA	M.Sc./B.E./B.Tech. or equivalent with three years experience / M.E./M.Tech. or equivalent degree, with good academic record and proven ability for high quality R&D work Age Limit 40 years	Change in emoluments on the lines of DST notification. No change in age limit
Fellow 'B' Rs.10,500/11,000/11,500/ 12,000/12,500 + HRA	M.E./M.Tech. or equivalent degree with three years R&D experience / Ph.D. (Sc.)/ Ph.D. (Engg.) with original research publications in referred journals. Age Limit 40 years	Fellow 'B' Rs.14,000/14,500/15,000 + HRA	M.E./M.Tech. or equivalent degree with three years R&D experience / Ph.D. (Sc.)/ Ph.D. (Engg.) with original research publications in referred journals. Age Limit 45 years	Change in emoluments on the lines of DST notification. Change in age limit
Fellow 'C' Rs. 12,000/13,000/14,000/ 15,000 + HRA	M.E. /M.Tech. or equivalent degree with five years R&D experience / Ph.D. (Sc)/ Ph.D. (Engg.) with two years R&D experience in respective discipline and with original research work as evidenced by good quality research publications in referred journals. Age Limit 45 years	Fellow 'C' Rs.16,000/16,500/17,000 + HRA	M.E. /M.Tech. or equivalent degree with five years R&D experience / Ph.D. (Sc)/ Ph.D. (Engg.) with two years R&D experience in respective disciplines and with original research work as evidenced by good quality research publications in referred journals. Age Limit 50 years	Change in emoluments on the lines of DST notification. Change in age limit


22 OCT 2003

माध्यमिक तथा उच्च शिक्षा विभाग
मानव संसाधन विकास मंत्रालय
भारत सरकार

एवं

भारतीय प्रौद्योगिकी संस्थान, रुड़की
के मध्य

करार

Memorandum of Understanding

between

**Department of Secondary & Higher Education,
Ministry of Human Resource Development
Government of India**

and

Indian Institute of Technology Roorkee, Roorkee

22 जुलाई 2003

माध्यमिक तथा उच्च शिक्षा विभाग
(मानव संसाधन विकास मंत्रालय)

एवं

भारतीय प्रौद्योगिकी संस्थान, रुड़की
के मध्य

2003-2007 की समयावधि के लिए करार

प्रस्तावना

जबकि

भारतीय प्रौद्योगिकी संस्थान, रुड़की

एवं

भारत सरकार के प्रतिनिधि के रूप में माध्यमिक तथा उच्च शिक्षा विभाग (भारत सरकार),
मानव संसाधन विकास मंत्रालय

- देश में तकनीकी उत्कर्षता बढ़ाने के उद्देश्य में एक है, और जबकि
- वे समझते हैं कि इस उद्देश्य को मजबूत करना संस्थान और देश के हित में है, और जबकि
- वे देश में उच्च शिक्षा तथा विशेषकर भारतीय प्रौद्योगिकी संस्थानों में विभिन्न ढांचों तथा भारतीय प्रौद्योगिकी संस्थानों के राष्ट्रीय महत्व के स्वरूप को बनाए रखने की आवश्यकता से अवगत हैं।

अब से इस करार के भागीदार कहलायेंगे

अब, इन तथा अन्य श्रेष्ठ कारणों, जैसे भारत सरकार के सचिव द्वारा अपने पत्र क्र. एफ 28-7/2002 दिनांक 14 मार्च, 2002 से प्रेषित वित्त सुधार आयोग की अनुशंसाओं, से वे निम्नलिखित करार को मानने एवं बढ़ाने पर सहमत हुए हैं :

भाग-एक

ए. भारतीय प्रौद्योगिकी संस्थान, रुड़की का ध्येय वाक्य

राष्ट्र को पिछले 150 वर्षों की तेजस्वी परम्पराओं पर बने हुए तथा हर क्षेत्र में श्रेष्ठता हेतु पूर्ण समर्पण के द्वारा अध्यापन, शोध तथा अभियान्त्रिकी एवं प्रौद्योगिकी के उन्नत केन्द्रों में से एक बने रहने के लक्ष्य को प्राप्त करना। अपने छात्रों में चरित्र, आत्मविश्वास तथा तकनीकी प्रबंधन में नेतृत्व विकसित करने की परम्परा को बनाए रखना।

22 OCT 2003

करार का ध्येय

देश के सतत विकास एवं मानवता के लाभ हेतु, तकनीकी योग्यता, सामाजिक चरित्र, नेतृत्व क्षमता, आत्मविश्वास, सृजन और अन्वेषण के लिए आवश्यक मानवीय एवं सामाजिक मूल्य युक्त उत्कर्ष गुणवत्ता की मानव शक्ति तैयार करना।

बी. वृहद लक्ष्य

इस करार के साझीदार, संस्थान की शिक्षा, अध्यापन तथा शोध गतिविधियों के क्षेत्र को निम्नांकित के द्वारा बढ़ाने और उत्साहित करना चाहते हैं।

1. प्रवेश संख्या, पाठ्यक्रम तथा कार्यक्रमों में लचीलापन, छात्रों की वर्तमान संख्या को बढ़ाकर, विदेशी छात्रों की संख्या को निश्चित अवधि आधार पर बढ़ा कर, उद्योग के लिए प्रायोजित स्नातकोत्तर तथा सतत शिक्षा कार्यक्रम चला कर, अन्तर्राष्ट्रीय कार्यक्रम चलाते हुए पहुंच का दायरा बढ़ा कर तथा शैक्षिक कार्यक्रमों का आवधिक अवलोकन करके।
शैक्षिक कार्यक्रमों में मल्टी मीडिया तथा शिक्षण तकनीक उपकरणों के व्यापक प्रयोग से, नये कार्यक्रमों के प्रारम्भ के साथ अर्थहीन हो चुके कार्यक्रमों को समाप्त करके।
2. परस्पर लाभ तथा उन्नति के लिए विदेशी/भारतीय विश्वविद्यालयों तथा शोध संस्थानों के साथ करार करके, संकाय तथा छात्रों के आदान प्रदान से, तथा नीतिगत क्षेत्रों/ग्रामीण विकास इत्यादि में सरकारी गतिविधियों में भाग लेकर।
3. अन्तर्विषयक क्षेत्रों में लगातार कार्य बढ़ाते हुए बदलते समय के अनुसार शोध एवं परामर्श करके तथा उद्योग एवं सरकारी संगठनों से अर्थयुक्त संवाद स्थापित करके।
4. नवीन क्षेत्रों के अग्र मोर्चे पर शोध करके ज्ञान सृजन, विकास, उत्थान, विस्तार तथा उपयोग में योगदान देकर, प्रशिक्षण तथा गुणवत्ता उच्चीकरण कार्यक्रम, सम्मेलन, संगोष्ठी, आयोजित करके, तथा राष्ट्रीय एवं अन्तर्राष्ट्रीय स्तर के जर्नल्स में शोध पत्र, शोध आख्या तथा पुस्तकें प्रकाशित करके।
5. ढांचे, प्रशासनिक व्यवस्था तथा संसाधन आधार का, वैश्विक खोज से आकर्षित करते हुए, स्टाफ की गुणवत्ता में सुधार तथा, सक्षमता व श्रेष्ठ संकाय को बनाये रखना, शैक्षिक / शोध चेयर स्थापित करके, ऑटोमेशन, छात्रों को शामिल करके, तथा कुछ संस्थान सेवाओं को बाहरी संस्थाओं को देकर, उच्चीकरण एवं सुदृढीकरण।
6. छात्रों को जागृत करके तकनीक तथा समाज के समन्वय का भाव उत्पन्न करना।

सी. लक्ष्य :

1. तकनीकी एवं ज्ञान एवं अध्ययन के उच्च शिक्षा के क्षेत्र में अध्यापन एवं शोध के नये आयाम स्थापित करना।
2. अभियांत्रिकी, विज्ञान तथा सामाजिक विज्ञान के क्षेत्रों में अति योग्य मानवशक्ति तैयार करने में सतत एवं अर्थपूर्ण योगदान करना।



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3. छात्रों को सृजनपूर्ण विचार तथा अन्वेषण कार्यों को आदत के रूप में विकसित करने, शोध प्रकल्प तथा आत्म अध्ययन के द्वारा तकनीकी एवं वैज्ञानिक कार्यों में भागीदारी एवं समूह कार्य के मूल्यों को सीखने के लिए प्रेरित करना।
4. छात्रों एवं अन्य अव्यवों में मानवीय तथा सामाजिक कारणों के प्रति जवाब देही एवं अपनेपन के भाव को उत्पन्न करना।
5. प्रौद्योगिकी उच्चीकरण एवं प्रौद्योगिकी प्रबंधन, नीति योजना एवं क्रियान्वयन, अध्यापन तथा शोध के क्षेत्र में नेतृत्व प्रदान करना।
6. देश में फैले हुए अभियांत्रिकी एवं प्रौद्योगिकी संस्थानों तक इलेक्ट्रानिक, सैटेलाइट तथा यथासंभव उपलब्ध उत्तम तथा उपयुक्त माध्यम द्वारा पहुंचना।
7. शोध एवं पाठ्यक्रम योजना के अतिरिक्त तकनीकी शिक्षा एवं विकास की राष्ट्रीय नीति बनाने में नेतृत्व करना।

भाग-दो

डी. समर्पित कार्य

(I) मानव शक्ति निर्माण


जहां कि संस्थान का मुख्य कार्य उत्कर्ष गुणवत्ता की मानवशक्ति निर्माण करना है, भारत सरकार अपनी ओर से पूर्ण वित्तीय सहायता के द्वारा समुचित संसाधन उपलब्ध करायेगी जिससे देश की प्रौद्योगिकी आवश्यकतानुसार, अपनी ओर से सर्वश्रेष्ठ देने का भाव रखने वाली तथा देश के प्रति समर्पित, राष्ट्रीय स्तर पर विज्ञान एवं तकनीक नीति / योजना कार्यक्रम के अनुसार मानव शक्ति का निर्माण हो सके।

(II) शोध एवं विकास

(अ) जहां कि संस्थान समझता है कि विकास का कार्य सतत रूप से निम्नलिखित से सम्बन्धित है

- (i) अर्थपूर्ण तथा प्रभावपूर्ण परिवर्तन जो कि देश के सामाजिक - आर्थिक विकास में हो रहे हैं।
- (ii) विज्ञान एवं प्रौद्योगिकी के ज्ञान में विश्व स्तरीय द्रुत विस्फोट हो रहे हैं और जिसके लिए संस्थान को

1. अग्रपंक्ति के विशेषज्ञ कार्यों पर निर्भर करना है जो विषयों की सीमा लांघ सकता है।
2. समाज की आवश्यकताओं को ध्यान में रखते हुए उच्च तकनीकी विज्ञान के लिए मूल्य आधारित समझ और दृष्टि रखना है।
3. भविष्य आधारित प्रौद्योगिकी आवश्यकताओं में अपनी गतिविधियों की योजना बनाना है।
4. शिक्षा एवं शोध के अतिरिक्त विस्तार एवं जनसेवा को तीसरे सोपान के रूप में मानना है।
5. एक ऐसे स्तर को प्राप्त करना है जो विश्वसनीयता के साथ नेतृत्व दे सके। उन्हें उच्च तकनीकी शिक्षा के क्षेत्र में चिन्तननिकाय बनना है।


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6. सृजनकारी अभियन्ता, अन्वेषणकारी चिन्तक और नेतृत्व देने वाले अभियन्ताओं को तैयार करने का लक्ष्य रखना है।
7. ग्रामीण क्षेत्रों की समस्याओं के प्रौद्योगिकी आधारित निदान में भाग लेकर ग्रामीण विकास के साथ विशेष सम्पर्क विकसित करना है।
8. भारत और विदेशों में अग्रणी तकनीकी संस्थानों तथा शोध के केन्द्रों के साथ परस्पर सम्बन्धों को बनाये रखना है।

(ब) भारत सरकार इन सभी गतिविधियों यथा मानवशक्ति विकास, शोध एवं विकास तथा विस्तार गतिविधियों के समुचित धन देने के साथ-साथ अपनी ओर से अन्य प्रयास करेगी।

1. उद्योग शिक्षक सम्पर्क को बढ़ावा दिया जायेगा और इसके लिए सरकार के द्वारा जो भी लाभ दिये जाते हैं, दिये जायेंगे।
2. विषम परिस्थिति कार्यों में संस्थान के पूर्व छात्रों के योगदान को बढ़ाने के प्रयास करने में
3. विकास के चुने हुए प्रभावी क्षेत्रों में संस्थान का उपयोग करने में
4. संकाय के अग्रणी भूमिका के प्रयासों तथा देशीय तकनीक विकसित करने के प्रयासों को सहायता देने में

(III) कार्य व्यापकता

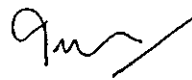
जबकि संस्थान ऊपर दिये गये वृद्ध लक्ष्यों को प्राप्त करने का यथासम्भव प्रयास करेगा, मानव संसाधन विकास मंत्रालय का प्रयास होगा कि -

1. उच्च स्तर की प्राप्तियां सुनिश्चित करने तथा संकाय एवं अन्य कर्मचारियों में श्रेष्ठता के सम्मान को सुनिश्चित करने के लिए संस्थान प्रबंधन को बाहरी मदद करना।
2. उत्कर्षता बढ़ाना
3. उच्च मानक बनाये रखने में संस्थान की मदद करना चाहे इसका अर्थ आरक्षण तथा औद्योगिक सम्बन्धों के क्षेत्र में सरकारी नीतियों में परिवर्तन से हो।
4. संस्थान को मानवशक्ति साहित वित्तीय अनुदान के अन्दर पूर्ण प्रशासनिक तथा वित्तीय स्वायत्ता प्रदान करना।

(IV) ईआरसी (5वीं + 9वीं) प्रतिवेदन के कार्य बिन्दुओं का क्रियान्वयन

(अ) भारत सरकार (मानव संसाधन विकास मंत्रालय) के पत्र संख्या एफ नं. 28-3/2002-टी0एस01 दिनांक 19 मार्च 2002 में दिये गये कार्य बिन्दुओं के अनुसार संस्थान 4 वर्ष के अन्तराल में करेगा।

1. गैर-योजना के खर्च में कमी।
2. संस्थापन सम्बन्धी खर्च में कमी।




3. ई.आर.सी. की संस्तुति के अनुसार शैक्षिक तथा गैर शैक्षिक 1:1.5 के अनुकूलतम स्तर तक लाना और उसी में कार्य चलाना, आवश्यकता पड़ने पर ठेके पर बाहरी संस्थाओं को कार्य देना
4. उपभोग प्रमाण पत्र तथा ऑडिट किये गये खातों को दिये गये 9 माह के समय के अन्दर भेजना सुनिश्चित करना।
5. धन के आन्तरिक स्रोत बढ़ाना।

(ब) जबकि भारत सरकार नीचे दिये सूत्रानुसार कार्य प्रगति आधारित अनुदान देगी गैर योजना अनुदान छात्रों की संख्या पर आधारित होगा। इसके अतिरिक्त भारत सरकार फीस आय को घटाकर छात्रवृत्ति, जी०पी०एफ०/सी०पी०एफ० से मिलने वाले ब्याज को घटाकर सेवानिवृत्ति लाभ तथा वार्षिक आय को घटा कर राष्ट्रीय सुविधाओं को जारी रखने के लिए धन देगी। प्रारम्भ में एक संक्रमण अनुदान भी दिया जायेगा जो स्वतः ही छात्रों की संख्या बढ़ने के साथ चरण बद्ध रूप में आने वाले वर्षों में समाप्त कर दिया जायेगा।

योजना अनुदान में ढांचागत अनुदान परिसर आकार, चलने वाले कार्यक्रम, विभागों की संख्या/संकाय, छात्र संख्या बढ़ाने की विस्तार योजना तथा कार्यक्रम विभिन्नता पर निर्भर करेगा, निष्पादन अनुदान गतिविधियों के आकार-शोध एवं परामर्श, सतत शिक्षा तथा तकनीकी शिक्षा तंत्र द्वारा वृहद एवं उद्योग को समर्थन पर निर्भर करेगा एवं विशेष अनुदान परिसर आकार, स्थान तथा अन्य कारणों पर निर्भर करेगा।

(स) जबकि संस्थान निम्नलिखित अनुसार अगले चार वर्षों में अनुकूलतम प्राप्त करने का प्रयास करेगा।

1. छात्र संख्या 5000 तक का लक्ष्य प्राप्त करना।
2. रुड़की विश्वविद्यालय के वर्षों में वर्तमान अनुमोदित संख्या की ई.आर.सी. द्वारा अनुशंसित 1:1.5 अनुपात में गैर-शैक्षिक कर्मचारियों की संख्या की पुनर्संरचना करके
3. भारतीय प्रौद्योगिकी संस्थानों के लिए कैनोनिकल स्टॉफ स्ट्रक्चर नामक दस्तावेज (समूह घ की संख्या में अधिक कमी के साथ) में अनुशंसित समूह क, ख, ग तथा घ सहित गैर शैक्षिक कर्मचारी, का परिवर्तनशील कर्मचारी तंत्र प्राप्त करके।

भाग-तृतीय

ई. एस तथा एच.ई. (मानव संसाधन विकास मंत्रालय) से सहायता।

1. बजट में दी गयी आर्थिक सहायता की समीक्षा करके अन्तिम रूप दिया जाना है।
2. जब भी आवश्यक हो, अन्य मंत्रालयों से समन्वय करके।
3. नीतिगत पहल या संगठनात्मक सहायता के द्वारा मा.स.वि.म. की इच्छानुसार।



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भाग-चतुर्थ

एफ. तंत्र तथा मॉनिटरिंग की बारम्बारता एवं लक्ष्यों की समीक्षा

1. यह करार 2003-2007 तक प्रभावी रहेगा।
2. परस्पर विचार विमर्श के बाद पत्रों के आदान प्रदान के द्वारा इस करार में परिवर्तन किया जा सकेगा।
3. वर्ष 2003-2004 के निर्धारित लक्ष्यों के अन्तर्गत किये गये कार्यों की समीक्षा अप्रैल 1 मई 2004 में की जायेगी।
4. एक वर्ष के अन्त में अनुभवों के आधार पर करार में आवश्यकतानुसार परिवर्तन किये जा सकते हैं।

प्रभावी होने वाली अन्तिम रूपेण धाराएं

1. यह करार अंग्रेजी तथा राष्ट्रभाषा हिन्दी में लिखा गया है। दोनों भाषाओं में लिखे गये करारों की बराबर वैधता है।
2. दोनों भागीदारों द्वारा स्वीकृति एवं अधिकार की आवश्यक कार्यवाही पूर्ण करने तथा हस्ताक्षरित करारों के आदान-प्रदान पश्चात यह करार प्रभावी माना जायेगा।

किया गया (अंग्रेजी तथा राष्ट्रभाषा हिन्दी दोनों में)

स्थान 2003 वर्ष के माह जुलाई दिनांक 27.7.03 को,

भारतीय प्रौद्योगिकी संस्थान, रुड़की
की ओर से

निदेशक

भारतीय प्रौद्योगिकी संस्थान, रुड़की
सरकार

भारत सरकार की ओर से

सचिव (माध्यमिक एवं उच्च शिक्षा)

मानव संसाधन विकास मंत्रालय, भारत

दिनांक 27-7-2003

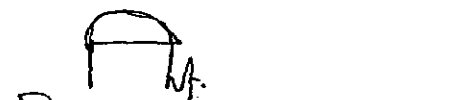
आह्वित



Dr. AK Srivastava
Registrar
IIT Roorkee

दिनांक

Witness


Prashant Garg
Dy. Registrar (Admin.)
IIT R
27.7.03

Memorandum of Understanding for the period 2003-2007

Between

**Department of Secondary & Higher Education
(Ministry of Human Resource Development)**

And

Indian Institute of Technology Roorkee, Roorkee

PREAMBLE

Whereas

The Indian Institute of Technology Roorkee

and

The Government of India represented by Ministry of Human Resource Development,
Department of Secondary & Higher Education [Government of India]

hereinafter referred to as the parties of this Memorandum,

- are united in the aim of promoting technological excellence in the country, and whereas
- they recognize that strengthening of this aim is in the interest of the Institute and the country and, whereas
- they are aware of the different structures of higher education in this country and particularly in IITs and the need to preserve IIT's character as an Institute of national importance.

Now, for these and other good reasons, such as recommendation of Expenditure Reforms Commission (ERC) as communicated by the Secretary to the Government of India vide his Letter No. F.28-7/2002 dated March 14, 2002, they engage to honour and promote the following understanding :

Part - I

A. Mission Statement of IITR

Build on the glorious traditions of the past 150 years of service to the nation and pursue the goal of remaining one of the leading centres of teaching, research and extension in Engineering and Technology through total commitment to excellence in every endeavour. Preserve the tradition of instilling our students with the strength of character, self confidence, and leadership in engineering management.

Mission of MoU

To produce excellent quality manpower equipped with human and social values required to provide integration of technical skills, social character, leadership, self confidence, creativity and innovation for the benefit of mankind and sustainable development of India.


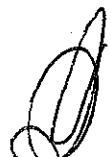
B. Broad Goals

The partners to this Memorandum intend to promote and further the areas of study, teaching and research activities of the Institute by :

1. Having flexibility in intake, courses and programmes; raising student strength from its present sub-optimal levels; increasing intake of foreign students on a regular basis; running sponsored postgraduate and continuing education programmes for the industry; increasing outreach offering international programmes and having a periodic review of all academic programmes.

Pervasive use of multi-media and educational technology tools in academic programmes. Phasing out obsolete programmes as new programmes are initiated in emerging areas.

2. Encouraging exchange of faculty and students and entering into MoUs with foreign/ Indian Universities and research establishments, and participating in Government activities in strategic sectors/ rural development etc. for mutual benefit and progress.
3. Making research and consultancy relevant to changing times by continually embarking on new interdisciplinary areas by carrying out extension activities, by establishing meaningful interaction with industry, and government organisations.
4. Contributing to knowledge creation, development, upgradation, dissemination and application by conducting research at the wave front of emerging disciplines, by organising training and academic improvement programmes, seminars, symposia and workshops, and by publishing books, research reports and research papers in journals of national and international standing.
5. Improving and consolidating the infrastructure, administrative set-up and resource base by enhancement of quality of staff and optimising its strength by global search to attract and retain outstanding faculty, by establishing academic/ research chairs, automation, student involvement, and outsourcing of some of the Institute services.
6. Educating the students to develop an integrated sense of technology and society.



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C. Objectives:

1. To set benchmarks for teaching and research in technological and higher areas of learning and knowledge.
2. To make a continuous and significant contribution toward the building of a critical mass of excellently qualified manpower in relevant areas of engineering, science and social science disciplines.
3. To inspire students to inculcate creative thought and innovative practice as a habit and to learn the value of sharing and teamwork in technological and scientific endeavour through participation in research projects and self learning.
4. To motivate students and other constituents to acquire a sense of ownership and belonging and culture of concern for human and social cause.
5. To play leadership role in technological advancement and management of technologies, policy planning and implementation, teaching and research.
6. To reach out widely—spread institutions of engineering and technical education in the country through electronic and satellite transmissions and other modes of communication as found suitable, efficient and effective.
7. Assuming a leadership role in the formulation of national policy in technical education and development besides research and curriculum planning.

Part - II

D. Commitments


I. Manpower Production

Whereas the basic function of the Institute is admittedly production of excellent quality technological manpower, the Government of India on its part shall endeavour to provide, besides adequate resources through full monetary support to produce manpower excellent in quality, relevant to technological need of the country, motivated to give its best and have a commitment to the country, vital space in the national level Science and Technology Policy/ Planning Programmes of the country for the Institute.

II. Research and Development

(a) Whereas the Institute recognizes that the process of development have to relate continuously to:

- (i) significant and notable changes that are taking place in the socio-economic development of the country; and
- (ii) rapidly exploding universe of knowledge in science and technology


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and for that purpose, the Institute has:

1. to survive on specialization work increasingly in front line areas that may transcend disciplines;
2. to have a perception and a value system appropriate to the pursuit of high engineering science to meet the needs of the society;
3. to programme its activities into emerging technological needs with a futuristic outlook;
4. to accept extension and public service as a third dimension to their role in addition to education and research;
5. to attain a stature that enables it to provide leadership with credibility. They should be the **think-tank** for higher technological education;
6. to aim at preparing creative engineers, innovative thinkers and engineer entrepreneurs;
7. to develop a special affinity with rural development mainly by way of involvement in technology- based solutions for problems in rural areas;
8. to maintain and foster interactive linkage with leading technological institutions and centres of research in India and abroad.

The Government of India on its part shall endeavor, besides providing adequate funding for all the above mentioned activities viz. manpower development, research & development and extension activities,

1. industry academia interaction will be encouraged and whatever incentives that are provided by the Government for such interactions will be availed;
2. to encourage measures necessary to create situations where the Institute alumni remains engaged with the country in challenging tasks,
3. engaging the Institute in the selective thrust areas of development;
4. support fully the entrepreneurship effort of faculty and their efforts for indigenous technology development;

Working Ambience

Whereas the Institute shall endeavour to meet the broad goals stated above, to the extent possible, the MHRD shall endeavour

1. to give external support to the Institute management for enforcing higher standards of achievement and reward merit both in faculty and other employees
2. to encourage excellence

3. helping the Institute to maintain high standards even if it means modifying some Government policies in the sphere of reservations and in industrial relations.
4. grant the Institute full administrative and financial autonomy within the budgeted allocation including manpower.

IV. Implementation of action points of ERC (5th + 9th) Report

(a) In consideration of the action points to be implemented by the Institute, as stipulated by GoI (MHRD) – vide letter F.No. 28-3/2002-TS.I dated 19th March 2002, the Institute in a time frame of 4 years shall undertake

1. to contain non-plan expenditure;
2. to reduce establishment related expenditure;
3. to optimize the staff strength level as recommended by ERC in the ratio of academic to non-academic staff as 1:1:5 and operate within that limit without failing to meet the aims of the Institute, by outsourcing resources as per need;
4. to exert to submit Utilization Certificates and audited statement of accounts within the stipulated time of nine months;
5. to increase the internal generation of funds.

(b) Whereas the Government of India shall undertake to provide grants in aids under the performance based funding formula as under:

Non Plan funding shall be based on Student Numbers. In addition, the Government of India shall provide funds for Scholarship in excess of fee income, Retirement benefits in excess of interest earning from GPF/ CPF and Annual running cost of National facilities in excess of annual income therefrom. A Transitional grant shall also be initially provided which will be automatically phased out in subsequent years when student numbers increase.

Plan Funding shall comprise infrastructure grant based on campus size, programs offered, number of departments/ faculties, expansion plan for increasing student numbers and program diversification; Performance grant on the basis of volume of activity – Research & consultancy, continuing education and support to technical education system at large and industry; and Special grant based on campus size, location and other factors.

- (c) Whereas the Institute shall endeavour to optimise as follows during the next four years
1. to attain student population of 5000
 2. to restructure the non-academic staff strength at the recommended ratio of 1:1.5 by ERC, from the existing sanctioned strength from the years of University of Roorkee.
 3. The Institute will attain a flexible staff structure with non-academic staff strength, inclusive of Groups A, B, C and D as proposed in the document *Canonical Staff Structure* for IITs (with a greater reduction in the strength of group D staff).

Part - III

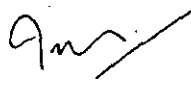

E. Assistance from Department of S & HE (MHRD)

1. Financial Assistance as indicated in the budget to be reviewed and finalised.
2. Coordination with other Ministries as and when necessary and required.
3. Any other manner in which MHRD wishes to assist the Institute through policy initiative or organizational facilitation.

Part - IV

F. System and frequency of monitoring and review of targets

1. This Memorandum shall be valid for the period 2003-2007.
2. Any amendments to this agreement shall be based upon an exchange of letters, after joint consultations.
3. Output and performance will be reviewed in April/ May 2004 against the targets set for the year 2003-04.
4. Based on the experiences, the Memorandum of Understanding may be suitably modified at the time of its renewal at the end of one year.



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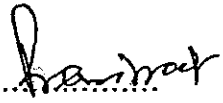
Final clauses, Entering into Force

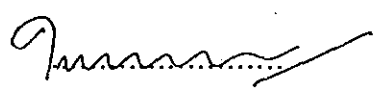
1. This agreement has been drawn up in English and Rajbhasha Hindi. Both versions have equal validity.
2. This agreement shall come into effect after both parties have completed the appropriate procedures of assent and authorization and after the duly signed texts of agreements have been exchanged.

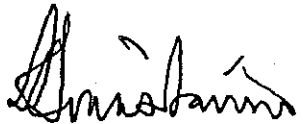
Done, in both the English and the Rajbhasha Hindi
at Roorkee, this the Twenty Seventh day of July Two Thousand
and Three.

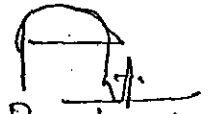
For the Indian Institute of Technology Roorkee

For the Government of India


27-7-2003
Director
Indian Institute of Technology, Roorkee


Secretary (Secondary & Higher Education)
MHRD, Government of India


AK Srinastava
Registrar, IIT Roorkee
WITNESS 1


Prashant Garg
Dy. Registrar (Admin.)
IIT R
WITNESS 1

Date: 27-7-2003

Date: 27.7.03



22 OCT 2003

MEMORANDUM OF UNDERSTANDING
BETWEEN THE
UNIVERSITY OF WATERLOO, CANADA
AND THE
INDIAN INSTITUTE OF TECHNOLOGY, ROORKEE, INDIA

Preamble

In accordance with the desire to promote higher education for mutual benefit and to promote cooperation in the areas of mutual interest, the University of Waterloo, Canada and the Indian Institute of Technology, Roorkee, India propose the following agreement.

1. Objective:

The University of Waterloo and the Indian Institute of Technology, Roorkee have engaged in areas of common interest and shall develop projects for

- 1.1 Academic development including academic programmes and student training.
- 1.2 Research project preferably of a collaborative nature involving scholars from University of Waterloo and Indian Institute of Technology Roorkee.
- 1.3 Exchange of scholars for such appropriate periods of time.
- 1.4 Development and exchange of publications, data and other teaching materials.

2. Activity Agreements:

It is further agreed between the University of Waterloo and the Indian Institute of Technology, Roorkee as follows:

- 2.1 The procedures will be adopted for carrying out each activity and will be referenced as statements entitled Activity Agreements.
- 2.2 The parties shall promote development of their respective staff through exchange of personnel, either unilateral or bilateral, between their institutions for periods of time and under terms of reference which will be established for each exchange.


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- 2.3 This memorandum of understanding will become effective from the date it is signed by both the parties. The activities for exchange and program development shall be discussed and agreed upon before the commencement of the specific program.
- 2.4 This memorandum of understanding shall not be construed as creating any legally binding financial relationship or other commitments between the parties. It will be construed as a statement of intent to foster genuine and mutually beneficial academic collaboration and shall not prejudice the right of the Indian Institute of Technology, Roorkee from establishing similar relationships with universities/Institutes other than the University of Waterloo, nor prevent the University of Waterloo from entering into similar relationships with universities/Institutes other than the Indian Institute of Technology, Roorkee.
- 2.5 Unless amended in writing, this Agreement, at the University of Waterloo, will apply to the Faculty of Environmental Studies and to the Faculty of Engineering. Faculties and activities other than those described above may be added under this Memorandum of Understanding if and when deemed appropriate; it may be also necessary to appoint additional co-ordinators.

3. Duration:

This memorandum of understanding will be effective for a period of 5 years from the date of signing of the Agreement. Renewal and/ or amendment of the Agreement will be decided by the consent in writing of both the University of Waterloo and the Indian Institute of Technology, Roorkee.

4. Coordinators:

The University of Waterloo and the Indian Institute of Technology, Roorkee will appoint one coordinator each for coordinating the interaction between the two Institutions.

5. Financial:

Both the University of Waterloo and the Indian Institute of Technology, Roorkee understands that any financial agreements must be negotiated separately.



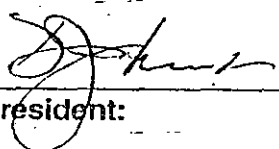
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6. **Termination of the Agreement:**

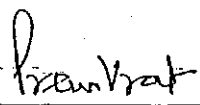
Either party may terminate this Agreement on written notification. Such notification must be given at least six months in advance from the effective date of termination.

UNIVERSITY OF WATERLOO
CANADA

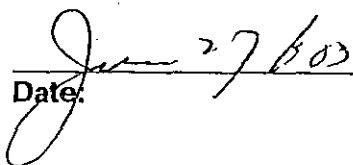
INDIAN INSTITUTE OF TECHNOLOGY
ROORKEE - 247 667 INDIA



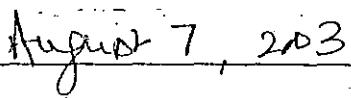
President:




Director:



Date:



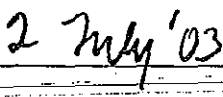
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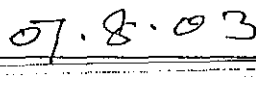
Vice-President University Research
Paul G. G. G.



Dean Academic Programmes

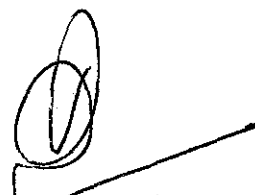


Date:



Date:

June 2003



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MEMORANDUM OF UNDERSTANDING (MOU)

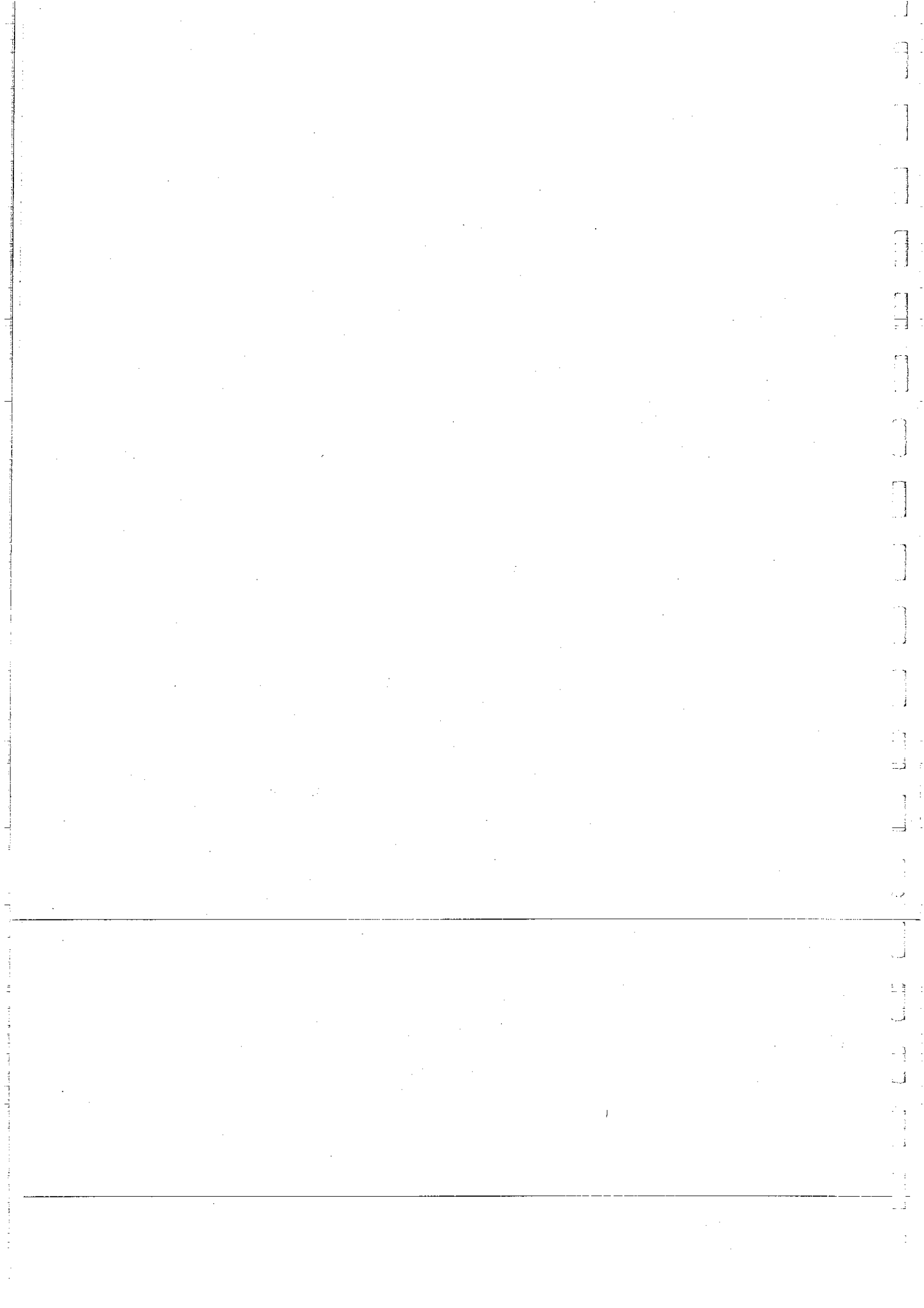
between

CENTRAL INSTITUTE OF ROAD TRANSPORT, PUNE

&

INDIAN INSTITUTE OF TECHNOLOGY ROORKEE,
ROORKEE


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MEMORANDUM OF UNDERSTANDING (MOU)

Between

Central Institute of Road Transport, Pune

&

Indian Institute of Technology Roorkee, Roorkee

This Memorandum of Understanding (MOU) is signed on^{09th} day of ~~September~~ month²⁰⁰³ year, between the Central Institute of Road Transport (CIRT), Pune and Indian Institute of Technology (IIT), Roorkee through their respective Directors. Under this MoU, both the Institutes agree to co-operate with each other in working together for excellence, mutual benefit, and growth. The Institutes may utilise the infrastructure facilities, expertise, faculty, data bank, labs, etc. on mutually agreeable terms and conditions. The Institutes agree to co-operate in the fields of Traffic Engineering, Bus Operation, Optimisation of Transport Systems, Vehicle Technology, Environmental Pollution and Transport Policy, etc.

I. Objectives

- To co-operate with each other in working together for excellence, mutual benefit, and growth in the area of Transport System.
- To optimally utilize the infrastructure facilities, faculty expertise, laboratory, computational facilities, data bank, etc.
- To jointly organize Short Term Management Development Programmes / Courses both at IIT Roorkee and CIRT Pune.
- To jointly undertake consultancy assignments in the mutually identified areas.
- ~~To carryout collaborative R&D Projects in the form of Sponsored Projects by Government/ other Agencies.~~
- To carryout joint guidance of M. Tech. /Ph. D. candidates, if any sponsored by CIRT.
- To get exposure of the organisations which are the integrated part of Association of State Road Transport Undertakings (ASRTU) by IIT Roorkee through CIRT Pune.
- Exposure of CIRT Pune to the intellectual inputs of the faculty and other infrastructural facilities of IIT Roorkee.
- Joint venture to yield in substantial resource generation at IIT Roorkee and CIRT Pune.


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- Joint venture to assist also in the policy formulation of Transportation System at National level.

II. RELATIONSHIP BETWEEN THE PARTIES

- Neither IITR nor CIRT is or will be an agent or legal representative or partner of the other. Neither of them is or shall be responsible for the debts incurred by the other or be bound by any contracts or representations made by the other or any obligations undertaken by the other. Neither of them is or shall be an employee or franchisee of the other nor does this MOU create a joint venture or any similar relationship between them.
- Neither party will make any representations pertaining to the other or its business or affairs without the prior written consent and approval of the other.

III. ACTIVITIES

1. Management Development Programmes

There is a scope for both the Institutes to jointly organise Management Development Programmes of one/two week duration both at CIRT and IIT Roorkee. The host Institute will provide all necessary infrastructures for conducting such programmes besides faculty inputs. CIRT with its established linkages with ASRTU will make efforts to sponsor Trainee Officers from different State Government Transport Undertakings/Organisations associated with ASRTU for MDP at IITR.

To conduct these programmes efficiently CIRT will undertake MDPS for Western, Southern and Central Point of India, while IITR will undertake these programs for the rest of the country.

The course material shall be jointly developed by CIRT and IIT Roorkee. Some of the areas where management development programmes may be considered are:

- (i) Highway Engineering
- (ii) Traffic Engineering
- (iii) Finite Element Method and its Applications in Auto Industry
- (iv) Supply Chain Management
- (v) Quantitative Methods for Management
- (vi) Computer Applications
- (vii) Urban Transportation Planning
- (viii) Any other area.



2. Consultancy Assignments

Consultancy assignments can be undertaken jointly in the areas of

- (i) Planning and Design of Highways
- (ii) Transportation Systems Management
- (iii) Transportation Planning
- (iv) Traffic Engineering
- (v) Industrial Engineering
- (vi) Environmental Engineering and Pollution Control and
- (vii) Any other field mutually agreed upon.

IIT Roorkee and CIRT, Pune would jointly carry out the design evaluation and execution of the project.

3. Research Collaboration

IIT Roorkee and CIRT Pune can carryout collaborative research projects in the form of :


- (i) Sponsored Research Project
- (ii) M.Tech. and Ph.D. Dissertations Guidance.

4. Sponsored Research Projects

Sponsored Research Project can be jointly submitted by faculty of IITR and CIRT for optimal utilisation of faculty, infrastructure and managing economy of scale. The scope of work in the research project for each of the participating institutes shall be identified in the research proposal. The project work shall be co-ordinated by an identified team leader from one of these institutions on mutually agreeable terms and conditions.

Following areas can be taken up for collaborative research:

- (i) Traffic & Transportation Planning
- (ii) Optimisation of Industrial System
- (iii) Environmental Engineering and Pollution Control
- (iv) Finite Element Analysis
- (v) Public Transport System
- (vi) Planning and Design of Highways
- (vii) Transportation System Management
- (viii) Rural Transportation
- (ix) Any other area mutually identified.


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5. M.Tech. and Ph.D. Guidance

M.Tech. /Ph.D. programmes under this MoU shall be subject to IITR – Regulations/Ordinances pertaining to the relevant programmes.

(i) IIT Roorkee Students

In each areas where infrastructure facilities are available at CIRT Pune, the IIT, Roorkee students can stay for some duration (say 3-6 months) at CIRT Campus. The above arrangement shall be operated having one relevant faculty from CIRT to get the guidance as well as to use the infrastructure facilities of CIRT. At least one guide will be from IIT Roorkee. The candidate has to submit the thesis in IIT Roorkee and examination will be conducted at IIT Roorkee. The degree will be awarded by IIT Roorkee. The CIRT Pune will extend the stay and facilities like Laboratory, Library etc. to the candidates. The candidates will pay the charges as per the norms of CIRT Pune.

(ii) CIRT, Pune Sponsored Candidates


The CIRT Pune will arrange to send persons from different transport undertakings associated with ASRTU for M. Tech. and Ph.D. programmes at IIT Roorkee. The selection process will be as per IIT Roorkee rules and regulations. The IIT Roorkee will extend stay on usual charges payable by research scholars/students and facilities like Laboratory, Library etc. The candidates will also pay the fees as per norms of IIT Roorkee.

IV. DURATION

- This MOU shall be effective from the date of its ratification by competent authorities at both ends.
- The duration of the MOU shall normally be for a period of 5 years from the effective date.
- Any clause or article of the MOU may be modified or amended by mutual agreement of IITR and CIRT Pune.

V. RENEWAL / EXTENSION / TERMINATION

- During its tenancy, the MOU may be renewed/extended or terminated by a prior notice of not less than six months by either party. However, termination of the MOU will not in any manner affect the interests of the candidates who have been admitted to pursue a programme under the MOU.


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- Any clause or article of the MOU may be modified or amended by mutual agreement of IITR and CIRT Pune.

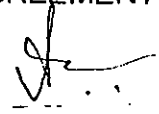
VI. INTELLECTUAL PROPERTY RIGHTS (IPR)

Rights regarding publications, patents, royalty, ownership of software/design/product developed etc. under the scope of this MOU, shall be decided by the two parties by mutual consent.

VII. CO-ORDINATORS OF THE PROGRAMME & FINANCIAL ARRANGEMENTS

- The Director of the Institute will appoint a Coordinator on each side.
- The collaborative programme between IITR and CIRT Pune shall be coordinated by the above Coordinators.
- The financial implications/issues arising under this MOU will be subject to the scope of the work to be undertaken by each Institute on mutually agreed terms keeping in view the relevant rules/regulations in force at both the places.

IN WITNESS WHEREOF PARTIES HERE TO HAVE ENTERED INTO THIS AGREEMENT EFFECTIVE AS OF THE DAY AND YEAR FIRST ABOVE WRITTEN.


(A.S. Lakra)
DIRECTOR
CIRT, PUNE


(Prem Vrat)
DIRECTOR
IIT, ROORKEE

Witness 1:
Date :

Witness 1:
Date :

Witness 2:
Date :

Witness 2:
Date :

(A.K. AWASTHI)
Dean (PGS & K)

(RAVI KUMAR)
PROF JIC PLANNING

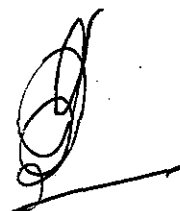
22 OCT 2003

ABOUT CENTRAL INSTITUTE OF ROAD TRANSPORT, PUNE

1. **Background :** The Central Institute of Road Transport (CIRT) was established in 1967 on the joint initiative of the then Ministry of Shipping and Transport, Government of India, and the Association of State Road Transport Undertakings (ASRTU). ASRTU represents State Transport Undertakings (STUs) which operate about 1.15,000 buses all over the country and employ nearly 7,20,000 workers. CIRT is administered by a Governing Council consisting of Chief Executives of the STUs and Officials of the Government. The Vice-President of ASRTU is the Ex-Officio Chairman of CIRT's Governing Council.
2. **Objectives :** The Objectives of CIRT are:
 - To promote and provide for the study of the principles and practices of organisation and management in various spheres of public transport;
 - To conduct research on critical issues in transport development as well as to undertake research for improvement and technological advances of vehicles used with their components and assemblies. To undertake consultancy assignments to improve organisational effectiveness and operational efficacy;
 - To impart training and education to all categories of managers and professionals engaged in furthering the cause of public transport.
 - To help the government and its agencies in evolving integrated policies and legislative framework to enable a balanced growth of the transport sector.
 - To be the clearing house of ideas, information and data pertaining to transport industry with specific reference to safety, environment and productivity.
 - To formulate safety standards for safety related automobile components as well as specifications for other automobile components.
 - To carry out the performance evaluation, material analysis and quality monitoring of automobile components.
 - To engage in any activity as may be conducive or incidental to the attainment of the above objectives.
3. **Faculty and Scientists :** The faculty of the Institute is organised in three groups - engineering, management and operations. The engineering research and testing activities are traditionally organised into four laboratories: automobile, electrical, chemical and metallurgical. To these has been added a new tyre laboratory, and a photometry laboratory. There are over thirty qualified engineers and scientists.
4. **Infrastructure Facilities :** The Campus of CIRT is located on a spacious stretch of greenery housing testing laboratories, class rooms, library, gymnasium, tennis and badminton courts, guest houses, hostels for participants and residential accommodation to the faculty, scientists and supporting staff. The Institute's library has over 10,000 titles, 90 professional journals and several educational films and video cassettes covering all aspects of transportation and management. CIRT has a well-equipped computer centre for imparting training and to process data on transport performance.

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5. **Activities :** The Institute conducts a wide range of management development programmes covering all functional areas of transport and general management. It also conducts programmes for senior Indian Administrative Service (IAS) and Indian Police Service (IPS) Officials. The duration of the programmes usually ranges from 1 week to 4 weeks. The Institute is a repository of data on all aspects of performance of STUs and a host of other related road transport parameters. The performance data of STUs are analysed and produced as an annual publication of the Institute. The data bank serves as an authentic source to government and other agencies like Planning Commission, World Bank, etc. The consultancy activities of CIRT have spread to almost every area of transport management and have been utilised not only by STUs but also by the Government of India and State Governments.



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ABOUT INDIAN INSTITUTE OF TECHNOLOGY ROORKEE, ROORKEE

The Indian Institute of Technology Roorkee formerly known as University of Roorkee, Roorkee has an illustrious history and a glorious past. It has its foundation in Roorkee College established in 1847. This college was the only Technical Institution in whole of the British Empire. It was raised to the level of University of Roorkee in 1949 and then converted to I.I.T. Roorkee in Sept. 2001.

The Department of Civil Engineering provide education at undergraduate level i.e. B.Tech. (Civil) degree of four years duration and higher education (M.Tech. programmes) and research in eight disciplines. It has six sections of specialization and six centers of research established by MHRD.

The Transportation Engg. Education and Research started first time in the country in 1957 at this Institute. The Transportation Engg. Group made significant contribution since then. Based on the strength and contribution made by the group, Ministry of Human Resource Development (MHRD), Govt. of India established "Centre of Transportation Engg." (COTE). At this Institute under Direct Central Assistance in Emerging Areas of Technology. The Transportation Engg. Group and COTE has made significant contribution and now it is equipped with excellent infrastructure and the faculty.

Since, Transportation System is the Life Line of the Nation, this requires concentrated efforts in a holistic manner with the input of multidisciplinary areas. Now, the Institute is planning to establish an Independent Centre i.e. "Centre of Transportation System".


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INDIAN INSTITUTE OF TECHNOLOGY, ROORKEE.

BALANCE SHEET AS AT 31ST MARCH 2002.

	SCH.	AMOUNT (Rs.)	AMOUNT (Rs.)
SOURCES OF FUNDS			
1. CORPUS FUND			4,600,098,504.74
a. Capital Fund (Balancing figure)		4,580,787,528.85	
b. Govt. of India/ MHRD Grant Account	1A	8,719,754.92	
c. Univ. Grant Commission Account	1B	10,591,220.97	
2. RESERVE & SURPLUS			254,541,925.15
Excess of Income over Expenditure (for current financial year) - As per Income & Expenditure Account			
3. OTHER FUNDS			557,117,389.01
a. Construction Division A/c	2A	11,211,265.97	
b. Alternate Hydro Energy Centre A/c	2B	12,469,997.99	
c. Water Resource Development Training Centre A/c	2C	2,932,714.75	
d. Earth Quake Deptt. Fund A/c	2D	27,666,009.50	
e. Bhawan R & P A/c	2E	1,417,113.76	
f. Continuing Education Deptt. A/c	2F	147,287.98	
g. Computer Center A/c	2G	969,046.45	
h. Foreign Student Scheme A/c	2H	59,740.03	
i. Consultancy Project (RUC) A/c	2I	5,628,335.38	
j. Audio Visual Research Centre A/c	2J	2,442,485.96	
k. National Service Scheme A/c	2K	20,491.49	
l. Council for Science and Industrial Research A/c	2L	2,800,589.95	
m. General Provident Fund A/c	2M	267,046,621.61	
n. Roorkee Entrance Examination A/c	2N	13,843,111.36	
o. Joint Entrance Examination A/c	2O	4,920,354.55	
p. P.G. Course A/c	2P	4,497,139.00	
q. Contributory Provident Fund A/c	2Q	2,382,977.50	
r. Auto Revolving Fund A/c	2R	69,569.09	
s. Institute Development Fund A/c	2S	138,471,369.47	
t. Student Affairs A/c	2T	8,223,110.39	
u. Trust Funds A/c	2U	38,986,170.50	
v. Security Fund A/c	2V	1,144,415.42	
w. Misc. Fund A/c. - Deptt. of Paper Technology	2W	6,943,824.51	
x. Misc. Fund A/c. - Others	2X	1,316,956.32	
y. Wheat Loan Fund	2Y	64,605.08	
z. M.-Tech. IT A/c	2Z	1,442,085.00	
4. CURRENT LIABILITIES & PROVISIONS			
A. Current Liabilities:			58,752,022.21
a. Expenses Payable	3A	20,118,241.56	
b. Letters of Credit	3B	33,491,278.00	
c. Payable for Pensioners	3C	4,244,391.75	
d. Security Deposits (Tender)	3D	898,110.90	
B. Provisions:			32,451,300.00
a. For Interest on Contributory Provident Fund A/c		6,820,087.00	
b. For Interest on General Provident Fund A/c		25,631,213.00	

Total (Rs.) **5,502,961,141.11**

Hemant K. Arora, FCA

Asst. Registrar (Finance)

Rajesh Vohra, FCA

Finance Controller

Yudhveer Singh, ACA

Registrar

INDIAN INSTITUTE OF TECHNOLOGY, ROORKEE.

BALANCE SHEET AS AT 31ST MARCH 2002.

	SCH.	AMOUNT (Rs.)	AMOUNT (Rs.)
APPLICATION OF FUNDS			
1. FIXED ASSETS	4		4,346,124,764.27
Gross Block :			
Land		2,711,000,000.00	
Building		814,822,943.83	
Machinery, Equipment & Electric Installations		233,928,136.72	
Computers		133,046,215.78	
Office Equipment		25,910,497.61	
Vehicles		7,746,970.37	
Furniture & Fixtures		6,808,432.43	
Books & Journals		93,065,235.03	
Other Fixed Assets		319,796,332.50	
2. INVESTMENTS			344,703,997.50
(Including interest accrued thereon)			
With Sheduled/Nationalised Banks	5A	264,239,683.00	
With Steel Authority of India	5B	45,096,752.00	
With Unit Trust of India	5C	29,307,562.50	
With HUDCO	5D	6,060,000.00	
3. CURRENT ASSETS, LOANS & ADVANCES			
A. Current Assets:			
a. Fee receivable (Continuing Education Deptt.)			18,000.00
b. Cash & Bank Balances:			708,362,564.54
Cash in Hand	6A	33,781.27	
Cash at Bank	6B	708,328,783.27	
B. Loans & Advances:			
i). Loans :			32,253,845.50
a. Loans out of Auto Revolving Fund		365,697.50	
(including interest due thereon)			
b. Loans to employees out of GPF		27,011,968.00	
c. Loans to employees out of CPF			
-Teaching Staff		1,766,725.00	
- Non Teaching Staff		3,109,455.00	
ii). Advances Recoverable in Cash or in Kind :			71,497,969.30
a. Advance against Foreign letters of credit		33,699,159.00	
Issued by banks (pending adjustment)	6C	30,589,985.30	
b. Advances/ Imprests	6D	7,208,825.00	
c. Securities			
Total (Rs.)			5,502,961,141.11

Significant Accounting Policies and Notes to Accounts.

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Hemant K. Arora, FCA

Rajesh Vohra, FCA

Yudhveer Singh, ACA

Asst. Registrar (Finance)

Finance Controller

Registrar

14/4/03

22 OCT 2003

MEMORANDUM OF UNDERSTANDING
BETWEEN
MACQUARIE UNIVERSITY
AND
THE INDIAN INSTITUTE OF TECHNOLOGY ROORKEE
ROORKEE – 247 667 (U.A.), INDIA

I. PREAMBLE

Macquarie University and the Indian Institute of Technology Roorkee (IITR) hereby agree to encourage academic cooperation through research and study in furtherance of the advancement of learning as stipulated below:

II. OBJECTIVE AND SCOPE

- (1) To promote academic cooperation which enhances the above mentioned goals.
- (2) To encourage visits by research student and faculty from one university to the other for the purpose of engaging in research.
- (3) To foster the exchange of academic publications and scholarly information.
- (4) Other forms of cooperation which the two institutions may jointly arrange. Prior to implementation, each initiative in this category will require a formal agreement between the parties outlining all detailed arrangements including the full financial responsibilities of each parties.
- (5) Initially, the broad areas of common interest have been identified as Security, Networking and distributed Applications and Intelligent Sensors.



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III. IMPLEMENTATION OF PROGRAMME

Both universities acknowledge that the visit by research student/ faculty from one University/ Institute to the other shall be subject to the entry and visa regulations of Australia and India and shall comply with the regulations and policies of Macquarie University, Australia and the Indian Institute of Technology Roorkee.

IV. FUNDING


Funds to be made available by Australian Government, Department of Education, Science and Training. Each visiting student will be supported to the extent of A\$ 8000/- to cover the cost of return airfare, visa fee, insurance and modest living expenses for the duration of stay (3 months to an year). Fee waiver to two students will be provided by the participating University/ Institute.

V. COMMENCEMENT AND TENURE

This Memorandum of Understanding shall become effective on the date of signing for three years and may be automatically renewed for successive five-year periods unless either University/ Institute gives the other written notice of its desire either to terminate or to revise the Memorandum of Understanding twelve months prior to its termination.

VI. PROGRAMME COORDINATORS

Each Institute will nominate its own representative within each field of cooperation and such representative will be responsible for all measures to be undertaken under this agreement. The representatives will provide advisory and other academic services to students participating under this agreement.


22 OCT 2003

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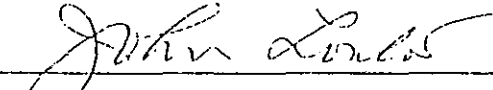
VII. AMENDMENTS

Amendments or changes to this agreement shall be made in writing and signed by the duly authorized representatives of the two Institutes.

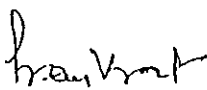
VIII. IPR

Rights regarding publications, patents, royalty, ownership of software/ design/ product developed, etc. shall be decided by two parties by mutual consent.

On behalf of Macquarie University


Emeritus Professor John Loxton,
Deputy Vice-Chancellor (Academic)


On behalf of the Indian Institute of
Technology Roorkee


Prof. Prem Vrat
Director, I.I.T. Roorkee

Date 16 July 2003

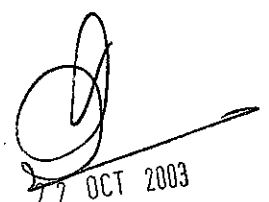
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Date 16th July 2003


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Proposed Guidelines for Appointment of Joint Professors

1. Joint Professorship will be limited to three years at a time.
2. Professorial Committee of the recipient Department/Centre will initiate and route through DOFA for Director's approval in principle.
3. The Professorial Committee of the Donor Department/Centre will give its no objection, after the concerned Faculty member gives his consent to the proposal.
4. The approval of the Chairman, BOG will be obtained through a U.O.Note and reported to BOG.
5. Joint Professor will be member of the Departmental Faculty Board and Professorial Committee, and can be made Chairman, DRC , in-charge of a laboratory etc.. However, they cannot have a claim on a sanctioned faculty position in the Cognate Department. They will be borne on the strength of their parent Department/Centre.
6. Office space may or may not be provided to a Joint Professor, depending upon the office accommodation position in the cognate Department/Centre.
7. Joint Professor will devote at least 70% time in the Parent Department. The time spent in the Cognate Department/Centre will not exceed 30% of the available time. His/her obligation and duties in the cognate department will not be at the cost of his/her obligation and duties in the parent department.
8. Joint Professor may teach a course in the Cognate Department/Centre with prior permission of Head of the Parent Department/Centre. The teaching load in the Parent and Cognate Departments should add up to the normal teaching load of a Faculty member.
9. Joint Professor may guide research, M.Tech. thesis and B.Tech. projects in the Cognate Department, independently or jointly as appropriate.
10. For all administrative purposes, he/she will be under the administrative control of the parent Department/Centre.


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