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Indian Institute of Information Technology,
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Minutes of the SENATE/2010-11/ 1st Meeting of the Senate held on December 24, 2010 from 11:00 a.m. in the Conference Hall of PDPM IIITDM Jabalpur.

Following persons were present:

01. Prof. Aparajita Ojha	Director, PDPM IIITDM Jabalpur	Chairperson
02. Prof. H.P. Dikshit	Director General, SGG&PA Bhopal	Member
03. Prof. R. Chatterjee	IIT Delhi	Member
04. Prof. B.L. Misra	R.D. University, Jabalpur	Member
05. Prof. Laxman Pandey	R.D. University, Jabalpur	Member
06. Prof. P. Krishana Reddy	IIIT Hyderabad	Member
07. Prof. P.K. Jhing	Principal, JEC, Jabalpur	Member
08. Prof. Uday Khedkar	IIT Bombay	Member
09. Prof. Puneet Tandon	PDPM IIITDM Jabalpur	Member
10. Dr. Tanuja Sheorey	-do-	Member
11. Dr. V.K. Gupta	-do-	Member
12. Dr. Pritee Khanna	-do-	Member
13. Dr. Subir S Lamba	-do-	Member
14. Dr. Mukesh Roy	-do-	Member
15. Dr. Bhupendra Gupta	-do-	Member
(was not available during the discussions in agenda items 8, 9 and 10)		
16. Dr. M. Ravibabu	-do-	Member
(was absent after the lunch)		
17. Mr. Raghunath Bhattacharya		Actg. Secretary

Following special invitees were also present

1. Dr. Atul Gupta	PDPM IIITDM Jabalpur
2. Dr. Prabir Mukhopadhyay	-do-
3. Dr. H.Chelladurai	-do-
(was absent after the lunch)	
4. Dr. Ashutosh Shrivastava	-do-
5. Dr. Hari Voruganti	-do-
(was absent after the lunch)	
6. Mr. TVK Gupta	-do-
7. Mr. Saurav Saket	-do-
8. Mr. D.S. Ramteke	-do-
9. Mr. Bishwajeet Mukherjee	-do-

Following members expressed their inability to attend the meeting due to their prior commitments.

(i) Prof. S.K. Choudhary (ii) Prof. PC Das (ii) Prof. Phalguni Gupta (iv) Dr. Ashish Dutta, (v) Prof. Manoj Harbola and (vi) Prof. Amit Ray (vii) Prof. M. Adhikari.



After the initial welcome remarks by the Chairperson, Senate, the agenda items were taken up one by one.

Senate/ 2010-11/1.01

Overview Report of the Chairperson

The Chairperson, Senate presented a report on the activities of the Institute which included the following:

1. Admissions – Increase in intake of B. Tech. Programme from 183 to 261.
2. Institute becomes the examination centre for AIEEE online examination 2011.
3. Following projects have been submitted /under progress/under the process of submission.

International Collaborative Projects -

- (a) Development of a micro pump with NEMS sensing function for an automatic blood collecting and measurement system. It is a DST-JSPS joint collaboration project. Partners from Japan are Dr. Shinichi Warisawa, University of Tokyo, School of Engineering and Dr. Kazuyoshi, Tsuchiya, Tokai University.

Professor Puneet Tandon, Dr. Tanuja Sheorey and Dr. Vijay Gupta are collaborating on the project.

- (b) Application of nanoparticles in microbio-assay (funded by JSPS).
- (c) Development of rapid and high reliable diagnostic method for prevention of emerging and reemerging infectious disease (funded by Tokyo Govt and Tokyo Metropolitan University (2010-2015)).

Dr. Mukesh Kumar Roy is collaborating with Prof Ming Yang of Tokyo Metropolitan University (TMU) on the above two projects related to Nanotechnology applications in bio-medical sciences.

- (d) Evolution of nanophotonics from semiconductor photonic crystal device to metal plasmonic device.
- (e) Plasmonic Nanoantenna and their applications in Nanophotonics – to be submitted to JSPS (India) – DST (Japan) soon.

The above two projects are being handled by Dr. Dinesh Kumar Vishwakarma of the Institute and Prof. Kiyoshi Asakawa, University of Tsukuba, Japan.

- (f) Nano-Scale MOSFET's-Scalability Issues and Potential Dielectrics.

It is a DST-JSPS supported project with Prof. Hiroshi Iwai from Tokyo Institute of Technology, Japan and Dr. Asutosh Shrivastava from the Institute.

- (g) Motion control of mobile robot

Between Prabin Kumar Padhy of the Institute and Professor Hideki Hashimoto of University of Tokyo – The project submission is under process.

Projects of National Importance -



- (a) Development of virtual laboratory on Automated systems (Mechatronics)
- (b) Development of virtual laboratory on Manufacturing.

Dr. Tanuja Sheorey and Dr. Vijay Gupta are working on these projects on development of virtual labs supported by National Mission for Education through ICT (NMEICT). These projects are part of a larger project sanctioned to IIT Kanpur. Project was introduced by Dr. Sameer Khandekar, IIT Kanpur. These projects are of national importance and the prepared material will be uploaded in NMEICT webpage for the benefit of engineering students across India.

Apart from this the faculty members are also working on a number of sponsored research /development projects.

4. Financial support has been provided to all the thirteen members of the faculty / research engineers who have applied for participation in conferences/workshops/symposia.
5. The Institute is planning to participate in the Design Clinic Scheme of Ministry of Micro, Small and Medium Scale Enterprises. The scheme aims at building a common platform of interaction between MSME sector and design experts to provide expert advice and solutions on real time design problems, resulting in continuous improvement and value addition for existing products. A core group of four members has been constituted by the Director with following members – Prof. Amit Ray, Dr. P.K. Jain, Dr. Prabir Mukhopadhyay (Coordinator) and Mr. TVK Gupta. Initial discussions have been started with some of the local MSME representatives.
6. First Design Workshop – DeW 2010 was organized by the Institute during October 11-15, 2010. Workshop was well attended by industry people and academicians. 75 participants in the workshop including 23 resource persons. Technical lectures were delivered by eminent experts that included - Professor Ralph Bruder from Technical University of Darmstadt, Professor S.G. Dhande, IIT Kanpur, Professor Gurumoorthy, IISc Bangalore, Professor Imre Horvath and Dr. Zoltan Rusak from Technical University of Delft, Professor Karunakaran, IIT Bombay and seven experts from Universities and industries of Japan including Professor Y. Ito and Professor M. Kiuchi. Professor Puneet Tandon and Dr. Prashant Kumar Jain were the convener and as co-convener respectively of the workshop with organizing and technical support from many faculty members of the Institute.

Senate/ 2010-11/1.02	Confirmation of the minutes of 2009-10/2 nd meeting of the Senate held on July 10, 2010
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The Senate confirmed the minutes of 2009-10/ 2nd meeting of Senate held on July 10, 2010 by accepting the modifications as per the following comments received from members.

- (i) Professor P.K. Jhinge's name to be included in the list of members who were present.
- (ii) Item no. Senate/2009-10/2.07: Some amendments in the manual of procedures and guidelines of Students Prizes and Awards Committee of Senate (SPACS) of the Senate. The point No (4) should be written as "Read 4.5.3 as follows" instead of "Read 4.5.4 as follows"
- (iii) Item no. Senate/2009-10/2.05: Discussion on the curriculum structure. The



suggestion listed at (e) on a reading course of 2 credits from NPTEL was given by Dr. Sameer Khandekar.

Senate/ 2010-11/1.03	Reports of the UGCS, PGCS, SACS, LCS
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The Academic Coordinator (in charge) presented a report of the UGCS and PGCS. Following items were reported and discussed.

1. In the odd semester 2010-11 starting from August, 2010, 250 B.Tech. students had taken admission out of which 13 students have withdrawn from the programme. He also reported that 19 PG students had taken admission in the same semester, out of these 4 students have withdrawn and one student has taken a semester leave. Admissions for remaining seats of PG were recently held and result was declared on December 21, 2010.
2. Three PG students have completed their requirement for the degree after August 2010.

Some of the Senate members initiated discussion on the process of admission in Ph.D. programme and suggested the following –

- a. Prof. Reddy suggested that provisional admission be given in the programme so that the candidate's aptitude for research could be judged in a semester's time before the candidate is formally registered for the Ph.D. programme.
- b. Prof. R. Chatterjee suggested considering only NET/GATE qualified candidates for Ph.D. programme to ascertain only good quality candidates for possible admissions in Ph.D.
- c. Professor H.P. Dikshit suggested to keep the options open for candidates which are gifted and do not satisfy formal eligibility criterion.

It was clarified by the Coordinator Academic Affairs/ Chairperson, Senate that (i) A student enrolled for Ph.D. programme is required to do course work and has to clear all course work requirement alongwith passing a comprehensive examination before she/ he is confirmed as a Ph.D. student (ii) The Institute is presently running Ph.D. programme in engineering only and the eligibility criterion for admission to Ph.D. programme is at par with that in IITs. When the programme would be extended to natural sciences, the suggestion of the Senate member for NET/GATE as an essential requirement would also be considered by the Senate.

3. Academic Performance Evaluation report for the current semester was also placed on the table and approved by the Senate. Senate appreciated the general improvement on the academic performance of the students who were on academic probation/termination/warning and the efforts of the faculty in improvement of the students' performance were also appreciated. Suggestion of one of the members to make the academic report of the students, accessible to their parents online was also welcomed. It was informed to the Senate that presently the report is made available to the students online through the intranet.
4. Rescheduling of courses for 2008 and 2009 batches to include project based internship was presented by the Coordinator Academic Affairs. Prof. Khedkar, member of the CRC suggested postponing the discussion on the proposal until the discussion on the next item as the CRC had also made certain recommendations



on the implementation of project based internship in its report. The matter was decided to be discussed after the discussions on agenda item Senate/2010-11/1.04.

Senate/ 2010-11/1.04	Recommendations of the Curriculum Restructuring Committee (CRC)
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Recommendations of CRC were placed before the senate for discussion, as circulated earlier in the agenda notes. Prof. Tandon, Convener, CRC presented the recommendation report. Prof. Khedkar then initiated the discussion, giving details of the report. Dr. S.S. Lamba, member of the Senate raised the objection that the number of faculty having their reservations/concerns/recommendations on the project based internship has not been mentioned in the CRC recommendations. Prof. Khedkar however said that broadly the views of most of the faculty have been addressed and discussed at length by the CRC members and have also been reflected in the CRC recommendations in item no 3 on page 22 of the agenda notes. It was further suggested by Prof. Khedkar to include the feedback of the faculty, conveyed by the Coordinator, Faculty Affairs Dr. Mukesh Kumar Roy, as Appendix D to the CRC recommendations to make it complete, if the some of the faculty members so desire. The Senate accepted the suggestion.

Due to the concern of the faculty members, the Senate reviewed its decision of project based internship taken in its 2009-10/1st meeting held on February 23, 2010. Based on the recommendations of the CRC and keeping in view the growing importance of internships and projects, the Senate unanimously approved to continue with the previous decision of the senate to implement project based internship from 2010 batch.

Discussions were held to review the implementation of project based internship for the 2008 and 2009 batch. Two options were suggested by the CRC for implementing the project based internship for these batches as given in Appendix 'C' of the CRC report on page 25 of the agenda notes. Senate had long deliberations on the proposals. Following suggestions were given for implementing and evaluating the internship –

1. To evaluate the project based internship a model like in BITS can be implemented where a team of faculty continuously evaluates the progress of the projects.
2. Members also emphasized on the continuous weekly evaluation of the projects so as to maintain the quality of projects. Some of the faculty members raised the issue of the shortage of faculty to evaluate the projects. Some of the Senate members however expressed that this should not be considered as a hurdle, since in most of the growing and new institutes, there is shortage of faculty.
3. It was also suggested by Prof. Reddy that a team of faculty members other than those involved in guiding the projects be made responsible to evaluate the projects and award the grades. However, members felt that these aspects be dealt with at the Institute level.
4. Some faculty members raised questions on facilities like CC, library, load on faculty etc. The Senate suggested that these modalities to be worked out at Institute level.
5. Dr. S.S. Lamba remarked that in most of the Institutes, a change in the curriculum is brought in for the forthcoming batches only.



6. It was also suggested by Prof. Chatterjee that faculty members can offer projects where theory and practice can be combined. Students can visit other Institutes and do some experimental work whereas the theoretical studies and analysis can be performed at the Institute level. It will also increase collaboration of faculty members with other Institutes.

Prof. L. Pandey and Prof. Chatterjee further suggested developing or enhancing lab facilities by assigning projects which contribute to such developments. Prof. Pandey suggested that Institute can take up big projects and its module can be offered for undergraduate students. In view of great challenges and opportunities they suggested the Institute to take up some projects on solar cells or wind mill.

7. Prof Reddy suggested having bigger groups that includes B. Tech. and post graduate students for long term projects/ large size but time bound projects. However members cautioned that B. Tech. and post graduate projects should not be the same.
8. Dr. Roy raised the issue of financial support to the project based internships. Chairperson, Senate informed the members that the Institute is already supporting B. Tech. projects upto Rs. ten thousand per project and the same can be extended to such project based internships. Senate members also suggested at this point to the faculty to write project proposals and bring financial support by submitting the projects to funding agencies.

After long deliberations on the implementation issues, the Senate resolved to approve its earlier decision of implementing project based internship for all the students of 2008 and 2009 batches with the second option suggested by the CRC to offer internal projects with the modification that approximately 10% of the batch size may be permitted to work outside the Institute in industries / R&D organizations for project based internship. The percentage may vary depending on the number of students who might have got offers to do project based internships by other organizations, since this was already in force in view of Senate's earlier decision through its 2009-10/2nd meeting held on July 10, 2010. Four Senate members, namely Dr. S.S. Lamba, Dr. Mukesh Kumar Roy, Dr. Bhupendra Gupta and Dr. M. Ravibabu recorded their dissent on the decision. Further the Senate approved the proposed changes in the curriculum as suggested by UGCS to implement for 2008 and 2009 batches.

The meeting was adjourned for the lunch at around 2.00 pm after the above discussions and decisions. Members reassembled after the lunch at 2.45 to discuss the remaining agenda items.

Batch of 2010 and future batches –

Senate approved the recommendation of CRC for implementing new curriculum for 2010 and onwards batches with following changes /suggestions –

1. Contents of Physics II to be run in II Semester will be worked out by a Committee consisting of Prof. L. Pandey, Prof. R. Chatterjee and Dr. M.K. Roy and Chairperson, Senate was authorized to approve the course contents recommended by the Committee.



2. Learning objective and expected outcome of each course be clearly spelt out. This will help understand the philosophy behind choosing course content and the related text/reference books/ material.
3. It was also suggested that the name of III Sem course “Manufacturing Processes and Materials” be renamed as “Materials and Manufacturing Processes” and Materials should be given due emphasis. Some of introductory aspects about the materials and their importance may be introduced in Physics II course, since the course has been now changed to 3 lectures + 1 Tutorial mode in place of the current 2 lectures + 1 Tutorial mode.
4. It was also suggested that efforts should be made to encourage the use of open source software in place of proprietary softwares whenever possible without compromising on the standards. Accepting the suggestion, it was decided to write in the course contents the name of the software or its equivalent / equivalent opensource, whenever available.
5. It is also suggested that if numbers of credits are not changed professional course mode can be changed from 3L to 2L+2P or 1L+3P from V semester onwards with prior approval from Chairperson, Senate.
6. It is also suggested that a proper tree structure should be made for each stream of specialization in each discipline.
7. Depending on the learning objective and expected outcome for each course, to be recommended by the CRC, the faculty members of various disciplines will frame the course contents and the same will be placed in the Senate for discussion and approval.

The course structure recommended by the CRC for 2010 batch onwards was approved by the Senate.

At this time, the Coordinator, Academic Affairs proposed to authorize Chairperson, senate to take time to time decisions to approve changes in the curriculum structure and courses as the need arises. The same may be presented in Senate for ratification. Senate approved the proposal.

Senate/ 2010-11/1.05	Proposal of the Institute to participate as a founding member in an international consortium on ‘Ubiquitous and Mobile Technology for product design and design support’ with partners from PDPM IITDM Jabalpur, TU Delft, Purdue University, Vaal Institute of Technology and Columbia University – Named as World Wide Consortium on Design Services.
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Dr. Tanuja Sheory Coordinator International Affairs presented the proposal to participate as a founding member in world wide consortium of design services. Members appreciated the Institute’s efforts in strengthening its international relations and in particular expressed their satisfaction on participation of the Institute in a video conferencing based course on “artifact and service innovation with ubiquitous technologies”. The proposal was approved by the Senate. Prof Dikshit suggested the idea of giving a joint certificate by all participating Institute to the students successfully completing the course. He further suggested that this can be open to other Institutes also



so as to make the Institute a pioneer in providing such world class education for other Institutes as well. He also suggested to explore applications of ubiquitous technology in rural areas and offered to provide the support for field work and requirement analysis as the School of Good Governance and Policy Analysis, Bhopal has a wide area network in rural areas around Jabalpur district, as informed by him. His suggestions were welcomed by the members and the Institute would further explore implementing these ideas at the consortium level.

Senate/ 2010-11/1.06	Proposal to open the Ph.D programme for QIP and external candidates
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The Senate deliberated on the proposal for Ph.D. Admissions under the category of External and QIP candidates and accepted the proposal with the minor modifications in the certificate from the employing organization which was placed on page 58 of the agenda notes. The word "IITM" to be read as "IITDM".

Senate/ 2010-11/1.07	A Proposal for Ph.D programme in Design
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The senate deliberated on the proposal for Ph.D. programme in Design and accepted the proposal in principle with following modifications in the research areas. In place of "Interaction Design, Ergonomics, Product Design, Visual Communication, Animation, Art and Craft, Landscape Architecture, Environmental Design, Art & Design, Culture & Design, Design & Aesthetics, Emotion in Design, Space & Design, etc" the areas would be "Product, Space and Interaction". It is also approved that the minimum qualification for Ph.D. in Design will be M.Des. Faculty of Design discipline will work out on the course structure and contents accordingly along with the learning objectives and the same would be brought in the next Senate meeting for discussion and approval.

Senate/ 2010-11/1.08	Proposal for introducing specialization in master's programme: A proposal of M.Tech. Mechnatronics
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The senate deliberated on the proposal of M.Tech. in Mechatronics and same was accepted. Senate also discussed the proposal of Dr. Gautam Dutta to start an M.Tech. programme in Computational Science and Engineering with Mechatronics as its subset. Members however did not agree with the proposal given by Dr. Gautam Dutta. Keeping in view the growing importance of the field of computational engineering, some of the members suggested considering a separate programme in this area or a related area such as Computational Biology which is also an emerging field. If the expertise is available in the Institute in these areas and the faculty brings a detailed proposal, the same would be considered by the Senate in future.

Senate/ 2010-11/1.09	Appeal of students on suspension due to disciplinary action against them.
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The Senate deliberated on the appeal of students on suspension due to disciplinary action against them. Professor Dikshit was of the opinion that a decision on disciplinary action once taken should not be relaxed in general, as it would send wrong signal amongst the students and as a result students will keep creating the discipline. Prof. Chatterjee was of the opinion that the sentence may be relaxed keeping in view of the career of the students. Dr Lamba suggested the idea of one semester suspended sentence that amounts to allowing them to register for the courses for the next semester. During this period, a student would be under strict vigilance and in case of any misconduct, their programme would be terminated with immediate effect. Dr. Pritee Khanna suggested considering the

past performance of each individual student before taking a decision. After discussions, the Senate authorized the Chairperson senate to take appropriate decision, based on the past performance of the students. The Chairperson, Senate informed the members that she would seek the opinion of SACS (Students' Advisory Committee of the Senate) to take the decision on the matter.

Senate/ 2010-11/1.10	Ratification of the approvals accorded by the Chairperson
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The approvals accorded by the Chairperson of senate from time to time, as detailed below were ratified by the Senate.

S.No	Subject	Approval accorded on
1.	Minutes of the meeting of UGCS of changes in curriculum for 2008 and 2009 batch	July 16, 2010
2.	Approval of syllabus for different courses run in I Sem 2010-11	Different dates
3.	Replacement of MN201 by MN201 and MN202	August 18, 2010
4.	Approval of Syllabus of ES101	August 2, 2010
5.	Proposal for new course DS542	August 27, 2010
6.	Course content of CS416	July 30, 2010
7.	Approval for adding & dropping of courses to cover backlog or for academically deficient students	August 2, 2010
8.	Proposal for new course DS615	August 3, 2010
9.	Approval for EM672b & EM672a	July 3, 2010
10.	Approval of courses for UG & PG students	June 7, 2010
11.	Academic Calendar for the year 2011	
12	Approval for running courses in summer semester 2010.	May 13, 2010

Senate/ 2010-11/1.11	Any other item with the permission of the Chair
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The following matters were taken up with the permission of the Chairperson

Senate/ 2010-11/1.11.1. The Actg Co-ordinator Academic Affairs, Dr. Vijay Kumar Gupta, raised the issue of time given to the faculty for submission of grades after the end semester examinations. He emphasized that the 72 hours time given to the faculty is insufficient. He told that for evaluation work a faculty has to manage with practically no tutors even for classes having strength of approximately 250 or more. In view of the shortage of faculty, the Senate decided to extend the deadline of grade submission to five days (120 hours) after the date of last examination instead of existing three days (72 hours).

Senate/ 2010-11/1.11.2. A proposal for a course on "Professor English" submitted by Prof. Adhikari for PG students was placed before the senate, as per the decision of the Senate of making a course on "Professional Communication Skills" compulsory for PG students vide its meeting held on July 10, 2010. Some members expressed their opinion that it is not possible to teach a student about how to write a scientific research paper or proposal. The skill develops with experience after reading several research papers and by pursuing research. After deliberations, it was decided that preamble and content should be reframed as per the need for PG students. The Chairperson, Senate was authorized to

approve the same. It was also decided that QIP candidates be exempted from the course as they have enough experience of professional communication.

Senate/ 2010-11/1.11.3. Industrial Internship / Training for PG students. The proposal was postponed for consideration in the next Senate meeting since no details were presented.

Senate/ 2010-11/1.11.4. Dr. Dinesh Kumar Vishwakarma had placed a proposal to convert the professional course on "Application of Electromagnetics" from 3L to 1L+4P due to heavy practical nature of the course. Senate accepted the proposal.

Senate/ 2010-11/1.11.5. Another proposal submitted by Prof. Amit Ray for a course on "Industrial Product Development" for M.Des. was placed before the Senate. The proposal did not clearly indicate whether the course was an Elective in Modular Form or a full 4 credit course due to lack of some information. It was advised to reframe the course and the Chairperson, Senate was authorized to approve the proposal after modifications.

Senate/ 2010-11/1.11.6. Prof. Puneet Tandon, Chairman, Placement Cell, informed the Senate that all the 33 students who qualified the written examination (out of 52) were selected for final placements with Infosys on Saturday, 18th of December 2010, 2 students are selected in Capital IQ and 45 students have been shortlisted by the Indian Army in the first round. The Senate placed on record its appreciation on the efforts made by the Placement Cell.

Senate/ 2010-11/1.11.7. A proposal was put by the Coordinator, Academic Affairs to authorize the Chairperson, Senate to take decisions as and when necessary on matters related to academics. He expressed that although it is implicit that the Chairperson is authorized to take decisions based on the urgent need, the same may be placed on record. The decisions taken by the Chairperson would be later presented in Senate for ratification. Senate approved the proposal.

Senate/ 2010-11/1.11.8. A proposal was made to waive off GATE/CEED requirement for admission in M.Tech/M.Des. for the students having more than 8.0 CPI for the students of PDPM IITDM Jabalpur. Senate approved the same and authorized the Chairperson, Senate to approve this waiver on case to case basis.

Senate/ 2010-11/1.11.9. A decision was taken by the Chairperson, Senate to offer admissions to foreign citizens and NRI through DASA scheme of MHRD. Senate ratified the decision of the Chairperson.

Senate/ 2010-11/1.11.10. Dr. M.K. Roy expressed his concern about the poor performance of academically weak students and he suggested providing special attention to such students in the beginning of their programme. Senate members from IIT Delhi and IIT Bombay informed about the methods followed in their Institutes. The Senate advised to bring a formal proposal for such students.

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



Col (Retd.) P.S. Sandhu
Secretary