

Proceedings of the 5th meeting of the Senate held on Wednesday, the 18th November 2015 at 3 P.M. in the Alumni Seminar Hall.

The following members were present on 18th November, 2015 at 3 P.M. in the Alumni Seminar Hall

1. Prof. Ajoy Kumar Ray, Director, IEST, Shibpur, & Chairman, Senate
2. Prof. Sujoy Kumar Mukherjea, Department of A.E. & A. M.
3. Prof. Salil Halder, Department of A.E. & A. M.
4. Prof. Koustuv Debnath, Department of A.E. & A.M.
5. Prof. Subhasis Bhounik, Department of A.E. & A.M.
6. Prof. Santanu Majumder, Department of A.E. & A. M.
7. Prof. Rana Roy, Department of A.E. & A. M.
8. Prof. Swati Saha, Dept. of Arch. T. & R.P.
9. Prof. Kalyan Kumar Chattopadhyay, Dept. of Civil Engg.
10. Prof. Kalyan Kumar Bhar, Dept. of Civil Engg.
11. Prof. Subrata Chakraborty, Dept. of Civil Engg.
12. Prof. Sudip Kumar Roy, Dept. of Civil Engg..
13. Prof. Ambarish Ghosh, Dept. of Civil Engg.
14. Prof. Chaitali Ray, Dept. of Civil Engg.
15. Prof. Aparna (Dey) Ghosh, Dept. of Civil Engg.
16. Prof. Debabrata Majumder, Dept. of Civil Engg.
17. Prof. Bibhutosh Adhikary, Dept. of Chemistry
18. Prof. Shyamal Kumar Chattopadhyay, Dept. of Chemistry
19. Prof. Prasanta Kumar Nandi, Dept. of Chemistry
20. Prof. Binay Krishna Ghorai, Dept. of Chemistry
21. Prof. Ajit Kumar Mahapatra, Dept. of Chemistry
22. Prof. Sudip Kumar Chattopadhyay, Dept. of Chemistry
23. Prof. Amit Kumar Das, Dept. of C.S.& T.
24. Prof. Susanta Chakraborty, Dept. of C.S.&T.
25. Prof. Sipra Das (Bit), Dept. of C.S.&T.
26. Prof. Biplab Kr. Sikdar, Dept. of C.S. & T
27. Prof. Sulata Mitra, Dept. of C. S. & T.
28. Prof. Gautam Bandyopadhyay, Dept. of Elec. Engg.
29. Prof. Biswarup Basak, Dept. of Elec. Engg.
30. Prof. Debasis Sarkar, Dept. of Elec. Engg.
31. Prof. Jagadish Pal, Dept. of Elec. Engg.
32. Prof. Ashoke Sutradhar Dept. of Elec. Engg.
33. Prof. Prasad Syam, Dept. of Elec. Engg.
34. Prof. Chandan Kumar Chanda, Dept. of Elec.Engg.
35. Prof. Aparajita Sengupta, Dept. of Elec. Engg.
36. Prof. Mainak Sengupta, Dept. of Elec. Engg.
37. Prof. Monojit Mitra, Dept. of E & T.C.
38. Prof. Santanu Das, Dept. of E. & T. C.
39. Prof. Madhumati Dutta, Dept. of Humanities & Social Sciences
40. Prof. Manas Kumar Sanyal, Dept. of Human Resource Management
41. Prof. Hafizur Rahaman, Dept. of Information Technology
42. Prof. Binayak Samaddar Choudhury, Dept. of Mathematics
43. Prof. Jagabandhu De, Dept.of Mathematics
44. Prof. Guruprasad Samanata, Dept.of Mathematics
45. Prof. Sanat Kumar Majumder, Dept. of Mathematics
46. Prof. Asoke Kumar Dhar, Dept. of Mathematics
47. Prof.Tapan Kr. Kar, Dept. of Mathematics
48. Prof. Parbati Saha, Dept. of Mathematics
49. Prof. Sisir Kumar Guha, Dept. of Mech. Engg.

50. Prof. Santanu Kumar Karmakar, Dept. of Mech. Engg.
51. Prof. Debasish Dutta, Dept. of Mech. Engg.
52. Prof. Sujoy Kumar Saha, Dept. of Mech. Engg.
53. Prof. Bijan Kumar Mandal, Dept. of Mech. Engg.
54. Prof. Shyamal Chatterjee, Dept. of Mech. Engg.
55. Prof. Amitava Basu Mallick, Dept. of Met. & Matls. Engg..
56. Prof. Swarup Kumar Ghosh, Dept. of Met. & Matls. Engg.
57. Prof. Prabir Kumar Paul, Dept. of Min. Engg.
58. Prof. Netai Chandra Dey, Dept. of Min. Engg.
59. Prof. Pratik Dutta, Dept. of Min. Engg.
60. Prof. Dipali Banerjee, Dept. of Physics
61. Prof. Bichitra Kumar Guha, Dept. of Physics
62. Prof. Sukhendu Sekhar Sarkar, Dept. of Physics
63. Prof. Mousumi Basu, Dept. of Physics
64. Prof. Nil Ratan Bandyopadhyay, School of Material Sciences and Engg.
65. Prof. Arindam Biswas, Associate Professor & Head, Dept. of Information Technology- Special Invitee
66. Prof. Tapas Kumar Gangopadhyay, Associate Professor & Head, Dept. of Earth Sciences - Special Invitee
67. Prof. Mallika Ghosh Sarbadhikary, Associate Prof. & Head, Dept. of Humanities & Social Science - Special Invitee
68. Prof. Amit Roy Chowdhury, Associate Professor, & Head, CHST - Special Invitee
69. Dr. Biman Bandyopadhyay, Registrar, IEST, Shibpur & Secretary, Senate

The leave of absence was granted in favour of the following members on 18th November, 2015:-

1. Prof. Aditya Bandyopadhyay, Department of Arch, T & R.P.
2. Prof. Souvanic Roy, Department of Arch. T. & R.P.
3. Prof. Arup Sarkar, Department of Arch. T. & R.P.
4. Prof. Keya Mitra, Department of Arch. T. & R.P.
5. Prof. Partha Sarathi Mukhopadhyay, Dept. of Arch. T. & R.P.
6. Prof. Anirban Gupta, Dept. of Civil Engineering
7. Prof. Anup Mondal, Dept. of Chemistry
8. Prof. Uma Bhattacharya, Dept. of C.S.&T.
9. Prof. Jaya Sil, Dept. of C.S. & T
10. Prof. B.P. Mukhopadhyay, Dept. of Earth Sciences
11. Prof. Avijit Chakraborty, Dept. of Electrical Engineering
12. Prof. Abdur Rouf, Dept. of Electrical Engineering
13. Prof. Debabrata Roy, Dept. of Elec. Engg.
14. Prof. Konika Das (Bhattacharya), Dept. of Elec. Engg..
15. Prof. Baidya Nath Ray, Dept. of E & T.C.
16. Prof. Santi Prasad Maity, Dept. of Information Technology
17. Prof. Basudeb Mukhopadhyay, Dept. of Mathematics
18. Prof. Murari Mitra, Dept. of Mathematics
19. Prof. Tapan Kr. Roy, Dept. of Mathematics
20. Prof. Apurba Kishore Dutta, Dept. of Mech. Engg
21. Prof. Somnath Chakrabarti, Dept. of Mech. Engg.
22. Prof. Subrata Chatterjee, Dept. of Met. & Materials Engg.
23. Prof. Indranath Sinha, Dept. of Mining Engg.
24. Prof. Suranjan Sinha, Dept. of Mining Engg.
25. Prof. Samar Jana, Dept. of Physics

At the outset, the Chairman extended a hearty welcome to the members of the Senate and reported that Hon'ble President of India convened a meeting in Rastrapati Bhavan on 4th November, 2015 with all the

Directors of Institutes of National Importance to discuss on Future of Higher Education in India. It was inaugurated by Shri Narendra Modi, Hon'ble Prime Minister of India and attended by the Hon'ble MIC, Higher Education, Government of India. In that meeting the Directors of IITs and NITs signed MOU with the leading industries and foreign universities for the research and development in the frontier technology. Indian Institute of Engineering Science and Technology, Shibpur signed following six MOUs.

- i) MoU on R&D Relevant to Energy, Transportation and Transmission Sectors with Bharat Heavy Electricals Ltd.
- ii) MoU on Collaborative Research & Green Roadway with Bitchem Asphalt Technologies.
- iii) MoU on collaborative Research, Faculty, Curriculum and Infrastructure Development with Garden Reach Ship Builders & Engineers Ltd.
- iv) MoU on Materials Science, Engineering and Technology with M. N. Dastur & Company (P) Ltd.
- v) MoU on joint Academic and Research Program in Analog & Mixed Signal VLSI Integrated Circuit Design and Fabrication with Sankalp Semiconductors.
- vi) MoU on Collaborative Research, Faculty Exchange, Curriculum and Infrastructure Development with SkyBits Technology Pvt. Ltd.

There after the Director placed the agenda before the members to proceed with the agenda one by one.

Item No.05.01

Confirmation of the Proceedings of the 4th Meeting of the Senate held on Wednesday, the 19th August, 2015 at 11.45 a.m. on Wednesday, the 26th August, 2015 at 3.30 p.m. and on the Saturday, the 29th August, 2015 at 11 a.m.

Resolution No.05.01

The Senate discussed the matters of the 4th meeting and confirmed the proceeding with the following modifications:

Resolution no. 04.11.M3.01 : The resolution will be replaced by the following:

The Senate approved in principle the introduction of 5-year integrated Dual Degree M.Sc course in the Departments of Physics, Chemistry, Mathematics and Earth Sciences from the academic session 2015-16. The agenda shall be further discussed in the next meeting of the Senate.

Matter Arising out of the proceedings of the 4th meeting of the senate:

1. The Senate further discussed in detail on the Resolution no. 04.11.M3.01 and resolved that a committee with the following members be constituted to formulate the course structure of the 5 year integrated M.Sc courses of the Departments of Physics, Chemistry, Mathematics and Earth Sciences:
 - (i) Dean, Academic Affairs – Chairman
 - (ii) Dean, Faculty Affairs – Member
 - (iii) Prof. Shyamal Kr. Chattopadhyay, Member, BOG – Member
 - (iv) HOD, Physics – Member
 - (v) HOD, Chemistry – Member
 - (vi) HOD, Mathematics – Member
 - (vii) HOD, Earth Sciences – Member
 - (viii) Prof. Sudip Kr. Chattopadhyay, Associate Dean, Academic Affairs - Convener

The committee will submit its report to the Senate at an early date.

2. The Senate discussed the recent orders of the MHRD (F. No. 17-2/2014-TS-1 dated 2.03.15 and F.NO.17-2/2014-T.S-1 dated 01.09.2015) regarding revision of rates of Ph.D. Scholarship for a duration of 5 years for payment of fellowship (JRF/SRF) to all research scholars irrespective of whether they are B. Tech/M.Sc. degree holders or M. Tech degree holders and resolved that this facility will be extended for all eligible research scholars of the institute. Date of effect of the revised fellowship and the tenure will be as per MHRD order issued in this regard time to time. Recent MHRD order will be followed by the institute in this regard.
3. The Senate further resolved that the scholars who are getting Institute fellowship, including TEQIP fellowship will also get such extension for a maximum period of 5 years, subject to satisfactory performance of the scholars.
4. The Senate further resolved that a screening process should be completed for the eligible students who have registered but not getting any scholarship till date so that the eligible scholars can get scholarship from the date of their registration.
5. The Senate further resolved that the screening process for awarding fellowships to the research scholars enrolled in the January cycle, 2015 will start at an early date and if selected, they shall be eligible for fellowship from the date of enrollment.
6. The Senate also resolved that scholars eligible for SRF scale should apply with relevant supporting documents to Dean (AC) for enhancement to SRF scale.
7. Dean Academic Affairs will complete the process of selection of such scholars mentioned above, after conducting appropriate selection procedure.

Item No.05.02

To note the action taken on the various agenda items of the 4th meeting of the Senate.

Resolution No.05.02

The Senate noted the actions which have been taken by the institute on the various agenda items of the 4th meeting of the Senate.

Item No.05.03

Discussion on Convocation-2016.

Resolution No.05.03

The matter was discussed in the Senate meeting. The Senate resolved that the 18th annual Convocation of the institute (2nd convocation after IEST, Shibpur) will be held on 4.03.2016 subject to ratification of the BOG. The senate also resolved that members will suggest the names for award of DSc (honoris causa) in Engineering Science and Basic Science and D Litt (honoris causa) in Humanities and Management, Distinguished Alumnus award and Distinguished Teachers Award along with their Bio Data to the Registrar at an early date for discussion in the next Senate meeting. Regarding the name of the Chief Guest of the Convocation the Director will finalize the name in consultation with the Chairman of BOG regarding.

Item No.05.04

To consider the note of the Dean (Academic Affairs) on Undergraduate/Post Graduate/Dual Degree Programme Evaluation and Review Committee.

Resolution No.05.04

The senate discussed the note of Dean (Academic Affairs) regarding formation of the Senate Standing committees as per the resolution of the 3rd Senate meeting. The senate resolved that the note prepared by

the Dean Academic Affairs be recast considering the following six standing committee as resolve in the 3rd Senate with suggested names and terms of reference:

1. Senate Undergraduate and Dual Degree Program Evaluation and Review Committee
2. Senate Postgraduate Program Evaluation and Review Committee
3. Senate Research Evaluation and Review Committee
4. Senate Committee for Training
5. Senate Disciplinary committee for the students and
6. Senate Committee for Convocation

It is also resolved that Senate members can also suggest the names of the standing committee members in the next Senate meeting:

Item No.05.05

To consider a request from Prof. Anup Mondal, Head, CGESS for formation of Department of Renewable Energy Science and Technology and starting of 5 year Dual Degree Program.

Resolution No. 05.05

The proposal by the Head of Centre of Excellence Green Energy and Sensor System (CGESS) for formation of Department of Renewable Energy Science and Technology and starting of 5 year Dual Degree Program in view of the National need for quality manpower in the field of Renewable Energy Science and Technology was discussed in detail. The Senate resolved that the viability for formation of such department and introduction of 5 year integrated (B.Tech-M.Tech) course in respect of the demand of such course, future employment opportunity for such course and present infrastructure of the institute in respect of already existing departments to be studied. Senate also resolved that a committee with the following members be formed for this purpose:

- 1) An eminent expert to be nominated by the Director - Chairman
- 2) Dean (Academic Affairs)
- 2) Three external experts to be nominated by the Director
- 3) One internal BOG member
- 4 Prof. Pratik Dutta, Professor, Department of Mining Engineering
- 5) Head, CEGESS - Convener

The committee will submit its report to the Director at an early date.

Item No.05.06

To consider the formula for calculating Normal Faculty strength of Departments/Schools/Centres as recommended by ACOFAR

Prof. B. K. Guha, Dean-Faculty Affairs explained in detail the formula for calculating Normal Faculty strength within the institution, i.e., Departments/Schools/Centres as recommended by the Institute Advisory Committee on Faculty Recruitment (ACOFAR) constituted as per MHRD memo F. No. 33-9/2011-TSIII dated 15.01.2014 given below:

Recommendation regarding Distribution of faculty posts amongst the department by the committee

“There is a prescribed table in page 18 of the aforementioned OM for calculating the Normal Faculty Strength in different Departments/Schools/Centres. It is categorically written that ‘The following table may be taken as a guide for computing the normal faculty strength in any Department’ and also that “ The normal strength of every department shall be computed based on the above scheme, additional factors taken into consideration, rounded and approved by the senate to serve as a guideline for all future recruitment”.

On examining the table, it is found that some of the courses do not conform to the programmes offered at present in our institution. Also, there is a problem regarding specializations in Dual degree or M. Tech. Degree. Some departments may have a large number of intakes in the Dual degree and M. Tech programme but have only a single specialization, whereas some departments may have a small intake in the M.Tech programme but may offer a number of specializations. Also some Departments offer common courses in 10 Departments or more and some offer common courses in 2 or 3 Departments only. So this additional factor is to be addressed properly. The Committee felt that the parameter n of the table prescribed in the M.O may be modified, keeping the spirit of the table intact. The following table is thus proposed for calculation of faculty strength in Department/School/Centre:

Dual Degree Programme(Annual intake at Entry level<50)	= x
Dual Degree Programme(Annual intake at Entry Level >50)	= 1.5x
Dual Degree Programme(Annual Intake >100)	= 2x
Dual Degree with M.Tech (per 20 students)	= 0.2x
M.Tech Programme(annual intake<20)	= 0.5x
M.Tech Programme(Annual intake between 20 and 40)	= x
M.Sc(2 year Programme, annual Intake<20)	= 0.5x
Do (2 year programme, annual intake between 20 and 40)	= x
Dual Degree (Annual intake at Entry level <50)	= x
Dual Degree programme(Annual Intake at entry level>50)	=1.5x
M.Sc Specialization (per 20 students)	= 0.2x
MBA(Annual Intake<50)	= x
MBA(Annual Intake>50)	= 1.5x
Common theory courses for 10 Departments or more (per subject)	= 0.2x
Common theory courses between 5 and 9 departments (per subject)	= 0.1x
Common theory courses between 1 and 4 departments (per subject)	= 0.05x
Common practical courses for 10 departments (per course)	= 0.1x
Common practical courses between 5 and 9 departments (per course)	= 0.05x
Common practical courses between 1 and 4 departments (per course)	= 0.025x
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Total = $n_i x$ (for the i^{th} Department/School/Centre), where $x = \frac{\text{sanctioned total strength}}{\sum n_i}$	

Prof. B. K. Guha discussed the formula with the Senate Members. He informed that we have 72 nos. of vacant teaching post at present. For filling up the said vacant posts advertisement is already published. He also said that we have to place the details of the projected student strength in the next few years in the next meeting of the BOG. On the basis of projected student strength the total number of faculty required will be decided.

Resolution No. 05.06 Based on the deliberation of the members, the Senate resolved that since PhD is a major program in our institute, the formula for deciding the number of faculty positions to be allotted to different Departments, Schools and Centres should have a component based on Ph.D Scholars enrolled and registered in those Departments/schools/Centres. Accordingly the ACOFAR would submit a revised formula to be placed in the Senate at an early date.

Item No.05.07	To consider a request from Prof. Amit Roy Chowdhury, Head, Centre for Healthcare Science and Technology for
05. 07.01	Establishment of Department of Biomedical Science and Engineering
05.07. 02	Introducing of a 2 Year M.Tech Course in Biomedical Engineering
05. 07.03	Introducing a course for Ph.D students working in biomedical related thesis problem

Resolution No.05.07

The proposal of the Head of Centre for Healthcare Science and Technology (CHST) for Establishment of Department of Biomedical Science and Engineering and introduction of a 2 Year M.Tech Course in Biomedical Engineering with intake of 15 students and a course for Ph.D students working in biomedical related thesis problem in view of the National need for quality manpower in this field was discussed in detail. The senate resolved that the viability for formation of such department and introduction of 2year M. Tech Course in respect of the demand of such course, future employment opportunity for such course and present infrastructure of the institute in respect of already existing departments to be studied. The Senate also resolved that a committee with the following members be formed for this purpose:

- 1) An eminent expert to be nominated by the Director - Chairman
- 2) Dean (Academic Affairs)
- 2) Three external experts to be nominated by the Director
- 4) Prof. Pratick Dutta, Professor, Department of Mining Engineering
- 5) Head, CHEST- Convener

The committee will submit its report to the Senate at an early date.

Item No.05.08 **To consider a proposal of 'ICCHE-A students outreach programme' at the Center for studies in Science Technology and Culture (CeSSTaC), Department of Humanities and Social Sciences.**

Resolution No. 05.08

Head of the Department of Humanities and Social Sciences explained the matter to the Senate Members and submitted the original proposal initiating a student outreach programme under the department.

After detail discussion the Senate resolved that the department will organize student outreach programme as an academic activity of the department involving non credit courses and research work with the name "Initiative for Cultural Commons in Heuristic Engagements (ICHHE)".

Item No. 05.09 **To consider the recommendation of the Doctoral Committee of Shri Rajsekhar Chakrabarti, a Ph.D. candidate enrolled at Mechanical Engineering Department for pre-registration.**

Resolution No. 05.09

The matter was discussed by the Senate Members. Since the student left the course long back without any registration, the Senate resolved that Shri Rajsekhar Chakrabarti should apply afresh for enrolled at Mechanical Engineering Department.

Item No. 05.10 **Misc. Item, if any.**

Item No. 05.10. M. 01 **To consider the proposal of Head, Electrical Engineering regarding engagement of Fire Protection and Emergency Evacuation consultant**

Resolution No. 05.10. M. 01

Prof. Jagadish Pal, HOD, E.E informed the Senate that Electrical Engineering Department has initiated the process of involving the services of fire prevention and emergency evacuation consultants with respect to Basic Electrical Laboratory up-gradation. Since the issue of fire prevention etc. is never restricted locally, i.e. within the administrative premises of a given department, it needs to be taken up at the institute level, involving all departments, keeping the safety of students and all faculty and staff members in mind. In the process, all laid down standards (IS and NFPS), National Building Code (NBC) and appropriate rulings from the judiciary are to be taken into account. The matter was discussed by the members and Senate resolved that a committee may be formed by the Director with HOD, EE, HOD, Chemistry, HOD, Metallurgy and Materials Science, Head, CGESS, Dean -IPM and University Engineer. The committee will submit a detail report to the Director for implementation of such proposal.

Item No. 05.10. M. 01

To consider the proposal of the Director regarding preparation of details of Laboratory equipments and their functions for each and every labs of the institute

Resolution No. 05.10. M. 01

The Director proposed that all the departments should prepare a comprehensive report of i) Existing laboratory equipments and their functions in each laboratory, ii) requirement of new laboratory and iii) academic research with these equipments as prepared by Electrical Engineering Department submitted to him. The Senate discussed this issue in detail and congratulated Electrical Engineering Department for such commendable work and resolved that each and every department including workshop will prepare such documents and placed before Dean Academic Affairs. A compilation of the report will be placed in the Senate for noting and necessary consideration. It was also resolved that HoD of Electrical Engineering Department will send their documents to all other departments so that departments will follow this as an example.

Item No. 05.01A

To consider the proposal from Kundu Charitable Trust for establishment of Biomedical School and Multi-speciality Research Hospital.

Resolution No. 05.01A

The proposal of Kundu Charitable Trust for establishment of a Biomedical School and Multi-speciality Research Hospital was discussed in the meeting. The Director explained that under the trust an alumnus of 1968 batch civil engineering graduate from BE College, Shibpur, Sri Mahadev Kundu, works as a consultant in the US has actually wanted to donate Rs 300 crore to set up a 100-bed hospital and Master level Medical Course on the campus. The condition of this donation was to acquire at least 10 acres of land and starting education and research programme in Biomedical Science and Technology.

The senate approved the proposal in principle. It is also resolved that the Director will approach the State Government for the required land for building the hospital.

Item No. 05.02A

To consider the note submitted by the Controller of Examinations(Acting) and Dean-Academic Affairs regarding list of successful candidates who have qualified for conferment or grant of degrees, diplomas and other academic distinctions or titles in the next convocation.

Resolution No. 05.02A

The senate considered the list of successful candidate who have qualified for award of various degrees of the institute in the next convocation. The Senate accepted the list and recommended the same for approval of the BOG. The Senate noted that the number of successful candidates in the last academic session as below:

Faculty	UG	PG	PhD
Faculty of Engineering & Technology	448	283	
Faculty of Basic & Applied Sciences		106	
Faculty of Social & Management Sciences		17	

The Senate also noted that provisional rank of a student may change if one or more student is qualified which will be placed separately in the Senate. The list of Ph.D students for award of degree in the convocation to be placed in the next Senate.


The Senate also accepted the list of awardees for various medallions and prizes placed before the senate for consideration.

Item No.05.03A Academic Calendar for next Even Semester (Starting from January 2016)


Resolution No. 05.03A

The Senate considered the Academic Calendar for the next Even Semester starting from January 2016) submitted by the Dean Academic Affairs and approved.

Since there was no other matter for discussion the meeting ended with vote of thanks to the chair.


(Biman Bandyopadhyay)
Registrar, IEST, Shibpur and
Secretary to the Senate

Approved


(Ajoy Kumar Ray)
Director, IEST, Shibpur and
Chairman to the Senate

Circulated to all members of the Senate for their perusal and suggestion for amendment, if any. This proceeding along with amendments, if any, received from the members will be placed before the next meeting of the senate for confirmation.