

MINUTES OF THE 44th MEETING OF THE SCHOOL BOARD OF THE SCHOOL OF SCIENCES HELD ON 02nd and 30th MARCH, 2012 AT 11:00 A.M IN THE CONFERENCE ROOM, BLOCK-C, NEW ACADEMIC COMPLEX, IGNOU CAMPUS, MAIDAN GARHI, NEW DELHI-110068

The following members were present on 2nd March 2012:

1. Prof. Geeta Kaicker, Director (SOS), Chairperson
2. Prof. V.B. Bhatia (Retd.), University of Delhi
3. Prof. Anupam Dikshit, University of Allahabad
4. Dr. Hriday Kant Dewan, Vidya Bhawan Society
5. Prof. M.H. Qureshi, Jamia Milia Islamia University (Special Invitee)
6. Prof. Jaya Prakash Shrivastava, University of Delhi (Special Invitee)
7. Dr. Lalit Garg, National Institute of Immunology (Special Invitee)
8. Prof. Vibha Joshi, SOE, IGNOU,
9. Prof. E. Vayunanadan, SOSS, IGNOU
10. Dr. Neera Singh, SOH, IGNOU
11. Dr. Naveen Kumar, SOCIS, IGNOU
12. Prof. S.C. Garg, SOS, IGNOU
13. Prof. B.S. Saraswat, SOS, IGNOU,
14. Prof. S.S. Hasan, SOS, IGNOU
15. Prof. Vijayshri, SOS, IGNOU
16. Prof. Sunita Malhotra, SOS, IGNOU
17. Prof. Poornima Mital, SOS, IGNOU
18. Prof. Sujatha Varma, SOS, IGNOU
19. Prof. Jaswant Sokhi, SOS, IGNOU
20. Prof. Neera Kapoor, SOS, IGNOU
21. Prof. B.I. Fozdar, SOS, IGNOU
22. Prof. S.R. Jha, SOS, IGNOU
23. Prof. Javed A. Farooqi, SOS, IGNOU
24. Prof. Amrita Nigam, SOS, IGNOU
25. Prof M.S. Nathawat, SOS, IGNOU
26. Dr. Lalita S. Kumar, SOS, IGNOU
27. Dr. Meenal Mishra, SOS, IGNOU
28. Dr. Deepika, SOS, IGNOU
29. Dr. Kamalika Banerjee, SOS, IGNOU
30. Dr Parvesh Babbar, SOS, IGNOU
31. Dr. Shubhalakshmi Lamba, SOS, IGNOU
32. Mr. Rajesh Kaliraman, SOS, IGNOU
33. Dr. Vishal Warpa, SOS, IGNOU

Prof. R. Balasubramanian (The Institute of Mathematical Sciences, Chennai), Prof. H.S.P. Rao (Pondicherry University) could not attend the meeting.

The following members were present on 30th March 2012:

1. Prof. Geeta Kaicker, Director (SOS), Chairperson
2. Prof. V.B. Bhatia (Retd.), University of Delhi
3. Prof. Anupam Dikshit, University of Allahabad

4. Dr. Hriday Kant Dewan, Vidya Bhawan Society
5. Prof. Jaya Prakash Shrivastava, University of Delhi (Special Invitee)
6. Dr. Lalit Garg, National Institute of Immunology (Special Invitee)
7. Prof. Vibha Joshi, SOE, IGNOU,
8. Dr. Neera Singh, SOH, IGNOU
9. Prof. S.C. Garg, SOS, IGNOU
10. Prof. B.S. Saraswat, SOS, IGNOU,
11. Prof. S.S. Hasan, SOS, IGNOU
12. Prof. Vijayshri, SOS, IGNOU
13. Prof. Sunita Malhotra, SOS, IGNOU
14. Prof. Poornima Mital, SOS, IGNOU
15. Prof. Sujatha Varma, SOS, IGNOU
16. Prof. Neera Kapoor, SOS, IGNOU
17. Prof. B.I. Fozdar, SOS, IGNOU
18. Prof. Javed A. Farooqi, SOS, IGNOU
19. Prof. Amrita Nigam, SOS, IGNOU
20. Prof M.S. Nathawat, SOS, IGNOU
21. Dr. Lalita S. Kumar, SOS, IGNOU
22. Dr. Meenal Mishra, SOS, IGNOU
23. Dr. Deepika, SOS, IGNOU
24. Dr. Kamalika Banerjee, SOS, IGNOU
25. Dr Parvesh Babbar, SOS, IGNOU
26. Dr. Shubhalakshmi Lamba, SOS, IGNOU
27. Mr. Rajesh Kaliraman, SOS, IGNOU
28. Dr. Vishal Warpa, SOS, IGNOU

Prof. R. Balasubramanian (The Institute of Mathematical Sciences, Chennai), Prof. H.S.P. Rao (Pondicherry University), Special Invitee Prof. M.H. Qureshi (Jamia Milia Islamia University) , Prof. E. Vayunanadan (SOSS, IGNOU), Dr. Naveen Kumar (SOCIS, IGNOU), Prof. S.R. Jha (SOS, IGNOU), Prof. Jaswant Sokhi (SOS, IGNOU) could not attend the meeting.

The Chairperson welcomed all the members and introduced external members and special invitees Prof H M Qureshi, Prof J P Srivastava and Dr Lalit Garg to the School Board. Thereafter, deliberations started on the set agendas (Item no. 1 to 34).

At the end of the day the School Board meeting was adjourned due to large number of agenda items and the adjourned meeting was resumed on 30th March 2012 to deliberate upon rest of the item numbers (Item no. 35 to 49) and the related issues. The minutes and recommendations of the School Board on the agenda items taken up on both days are given below:

Item No. 1: Confirmation of the minutes of the 43rd meeting of the School Board of the School of Sciences held on 16th September, 2011 and to note the action taken thereon.

SB 44.1.1 Comments were received on the action taken report of item no 6, 12,13,14,15 and 18 of the minutes of the 43rd meeting of the School Board. One of the members pointed out that the action taken regarding the above items did not

reflect the decisions of the School Board. It was also mentioned that the list of the name of external guides as well as internal supervisors for the Ph.D. programme of Chemistry (Item no 18 subsections i and iv) should have been circulated to all the members of the School Board. The Chairperson informed that the complete minutes of the Doctoral Committee of Chemistry with the names of external and internal supervisors was attached to the hard copy of minutes that were circulated to all the members as Annexure-5.

SB 44.1.2 The Chairperson agreed to circulate the action taken report with the necessary corrections along with the minutes of the 44th School Board (see as Annexure-1).

Item No. 2: Matters arising from the minutes

SB 44.2.1 No other matter except the above listed items from the minutes of the 43rd meeting of the School Board was raised.

Item No. 3: Reporting items

- i) To report the approval of list of the course writers of the Undergraduate programme in Biochemistry by the School Board members through circulation (Nov 11, 2011).
- ii) To report the work distribution among the course writers for B.Sc. Biochemistry programme in the course writers meeting held on 15th December, 2011.
- iii) To report the approval of list of the paper setters evaluators and the members of the moderation Boards of the first semester courses of the M.Sc. Bioinformatics and Biotechnology Regular programme at IBAB Bengaluru by the School Board through circulation.
- iv) To report the approval of list of the paper setters evaluators and the members of the moderation Boards for the courses of 3rd Semester M.Sc. Life Sciences on Campus programme by the School Board through circulation (Nov 11,2011).
- v) To report the approval of names of Expert Committee Members of BDP Geography; Doctoral Committee for Ph.D. in Geography and PG Diploma in GIS and GeoSpatial Modelling by School Board through circulation (Nov 1, 2011).

SB 44.3.1 All the reporting agenda items were noted and confirmed by the School Board.

Item no. 4: To ratify the action of the chairperson in getting the list of Expert Committee members; Course Writers and Editors for the PG Diploma in Applied Statistics (with specialization in Industrial/Bio-statistics) courses approved by the Vice Chancellor.

SB 44.4.1 The issue of following statutory provisions regarding all the matters placed before the School Board was raised and it was pointed out that the School Board has taken a decision in the past to follow the Statutory procedures rigorously and that it should adhere to its past decisions. There was a discussion regarding

the names of unit writers and editors. Most of the School Board members were of the opinion that the autonomy of discipline must be honored by the Board members. The merits of a single editor for a course were discussed. However, the Statistics discipline explained that depending on the situation, it might be necessary to have different editors for each Block in cases where experts are not willing to edit the entire course.

To expedite the routine matters the Chairperson suggested that as per Statute 16 (1) & (2) a Standing Committee can be constituted to consider and approve the names of expert committee members, course writers, paper setters, evaluators and moderators. Besides these, this Standing Committee can also consider several other issues that have already been deliberated in Doctoral Committees of disciplines such as progress reports of students, approvals of names of external supervisors etc.

SB 44.4.1 The School Board decided to constitute a Standing Committee of the School Board of the School of Sciences. It was decided that henceforth, all such matters will first be deliberated in the School Board Standing Committee (SBSC) meeting and become part of the reporting items for the School Board. The Standing Committee will be chaired by the Chairperson of the School Board and will consist of one member from each discipline. The Standing committee is authorized to include subject experts as Special Invitees as and when required. The term of the committee will be for two years. The first standing committee was constituted with the following members:

- | | | |
|---------------------------|---|--------------------------|
| 1. Director of the School | - | Chairperson |
| 2. Prof. S C Garg | - | Physics Discipline |
| 3. Prof. B S Saraswat | - | Chemistry Discipline |
| 4. Prof. S S Hasan | - | Life Sciences Discipline |
| 5. Prof. Poornima Mital | - | Mathematics Discipline |
| 6. Prof. M S Nathawat | - | Geography Discipline |
| 7. Dr. Meenal Mishra | - | Geology Discipline |
| 8. Dr. Parvesh Bubbar | - | Biochemistry Discipline |
| 9. Mr. Rajesh Kaliraman | - | Statistics Discipline |

Item no. 5: To ratify the action of the Chairperson in getting the list of Course Writers and Editors for PGCGI programme (Postgraduate Certificate in Geoinformatics) approved by the Vice Chancellor.

SB 44.5.1 The issue of workload of faculty before starting several programmes was raised. The external experts in the School Board suggested that the interdisciplinary expertise should be availed amongst the related disciplines of the School. Dr. Meenal Mishra informed the members that the practice is being followed by their discipline by involving the faculty of Geography Discipline of the School in course writing in their programme.

SB 44.5.2 The School Board ratified the action taken by the Chairperson.

Item no. 6: To ratify the action of the Chairperson in getting the names of Doctoral and B.Sc. Geology Expert committee members approved by the Vice Chancellor.

SB 44.6.1 Members of the School Board advised that the discipline should realistically consider their priorities before launching several programmes. Board Members inquired if the Expert committee was constituted only for the BSc programme or for the overall development of the discipline's programmes. Geology Discipline member explained that the present expert committee was constituted for BDP programme only. A separate subject expert committee will be constituted to advise for the overall development of programmes offered by the Geology Discipline shortly.

SB 44.6.2 The School Board ratified the action of the Chairperson.

Item no. 7: To consider and approve additional names of course writers for the lab course of PGCGI as proposed by the discipline of Geology.

SB 44.7.1 The Geology Discipline was asked to provide the details related to the lab courses of PGCGI. Dr. Meenal Mishra apprised the School Board members that the lab course will be of four credits and will be completed in two weeks time (14 + 1 exam) as per University norms for a 04 credit lab course. The additional names are being put up for approval in case some unit writers do not deliver the units in time or refuse the assignment.

SB 44.7.2 The School Board approved the names of course writers for the lab course of PGCGI.

Item no. 8: To consider and approve the names of Editors for 2 courses in the B.Sc. Biochemistry Programme.

SB 44.8.1 Members of the School Board wanted to know about the logic for having multiple course editors for the course (Metabolism) of the B.Sc. programme offered by the discipline. Dr Parvesh Bubbar explained that multiple editors have been taken as per their specialization for the topics covered in the different blocks of the course as well as time constraint of the editors.

SB 44.8.2 The School Board approved the names of editors for the 2 Biochemistry courses (i) Biomolecules and Biochemical Techniques and (ii) Metabolism offered in the B.Sc. programme

Item no. 9: To consider and approve the name of Course Writers for PHE-08(L).

SB 44.9.1 The School Board approved the name of Dr. B. Chakravorty, City College, Kolkatta as course writer for PHE-08(L).

Item No. 10: To consider and approve the lists of Course Writers and Editor for the revised courses Analytical Geometry, Advanced Calculus, Differential Equation-I and Differential Equation-II of BDP programme.

SB 44.10.1 The School Board members were informed that some new topics have been added to the existing ones in the revised courses and new course writers have been added in the present list. The members suggested that in-house faculty's names should also be included in the lists.

SB 44.10.2 The School Board members approved the names of course writers and editors for the revised courses Analytical Geometry, Advanced Calculus, Differential Equation-I and Differential Equation-II of BDP programme and decided that all internal members in a discipline should be considered approved for being included as course writers or editors for courses being developed by the discipline.

Item no. 11: To consider and approve the name of Prof. Kripamoy Aguan as a Course Writer for the Genetics course (LSE-03) presently under revision.

SB 44.11.1 The name of Prof. Kripamoy Aguan from NEHU Department of Biosciences was approved as course writer for LSE-03 by the Board members.

Item no. 12: To consider and approve the names of Expert Committee members for Bachelor's Degree Programme in Statistics.

SB 44.12.1 One of the School Board members advised that since IGNOU is a Central University the list should include experts from Central Universities as well. The Statistics discipline members assured the same to the Board members. Prof. Anupam Dixit suggested the inclusion of two names Prof. Anup Chaturvedi and Prof Lalita both from Department of Statistics, Allahabad University, as expert committee members.

SB 44.12.2 The Board members suggested that only one person may be included from the same department and to reduce the number of experts to 8-10 names. The School Board authorized the discipline to reconstitute the expert committee in consultation with the Chairperson. It was agreed to circulate the revised list with the minutes (see as Annexure-2).

Item no. 13: To consider and approve the list of additional names of paper setters for the course FST-01.

SB 44.13.1 Members of School Board stressed the need for mentioning the affiliation of the paper setters in the presented list. The Board members approved the additional names of paper setters for the course FST-01.

Item no. 14: To consider and approve the list of paper setters, evaluators and moderators for B.Sc. Physics elective courses PHE-01, PHE-02, PHE-04, PHE-05, PHE-06, PHE-07, PHE-09, PHE-10, PHE-11, PHE-13, PHE-14, PHE-15, PHE-16 and LT-04 of CPLT.

SB 44.14.1 The names of paper setters, evaluators and moderators for B.Sc. Physics electives courses PHE-01, PHE-02, PHE-04, PHE-05, PHE-06, PHE-07, PHE-09, PHE-10, PHE-11, PHE-13, PHE-14, PHE-15, PHE-16 and LT-04 of CPLT were approved by the Board members with the inclusion of the contact numbers in the list.

Item No. 15: To consider and approve the list of paper setters, evaluators, for the courses **MMT-003 (Algebra), MMTE-005 (Coding Theory), MMTE-006 (Cryptography) and Moderators for the course MMTE-006 (Cryptography) of the M.Sc. (MACS) programme.**

SB 44.15.1 The names of paper setters, evaluators and moderators for the courses MMT-003 (Algebra), MMTE-005 (Coding Theory), MMTE-006 (Cryptography) and Moderators for the course MMTE-006 (Cryptography) of the M.Sc. (MACS) programme were approved by the Board members with the inclusion of their affiliations.

Item No. 16: To consider and approve the list of paper setters, evaluators, moderators for the courses **MMT-001, MMT-007, MMT-009 and the paper setters for the course MMT-005 of the M.Sc. (MACS) programme.**

SB 44.16.1 The names of paper setters, evaluators and moderators for the courses MMT-001, MMT-007, MMT-009 and the paper setters for the course MMT-005 of the M.Sc. (MACS) programme were approved by the Board members.

Item no. 17: To consider and approve the list of paper setters, evaluators, moderators for the courses **MTE-01, MTE-10 and MTE-14 of the BDP programme.**

SB 44.17.1 The names of paper setters, evaluators, moderators for the courses MTE-01, MTE-10 and MTE-14 of the BDP programme were approved by the Board members.

Item no. 18: To consider and approve the list of examiners for practical exam for the courses **MMT-008 (P), MMTE-003 (P) and MMTE-007 (P) of the M.Sc. (MACS) programme for Delhi centre.**

SB 44.18.1 The names of examiners for practical exam for the courses MMT-008 (P), MMTE-003 (P) and MMTE-007 (P) of the M.Sc. (MACS) programme for Delhi centre were approved by the Board members.

Item no. 19: To consider and approve the list of evaluators and paper setters for the course MTE-02 (Linear Algebra), list of evaluators for the courses MTE-04 (Elementary Algebra) and MTE-06 (Abstract Algebra), list of moderators, evaluators and paper setters for the course MTE-13 (Discrete Mathematics) and MTE-05 (Analytical Geometry) of the BDP programme.

SB 44.19.1 The names evaluators and paper setters for the course MTE-02 (Linear Algebra), list of evaluators for the courses MTE-04 (Elementary Algebra) and MTE-06 (Abstract Algebra), list of moderators, evaluators and paper setters for the course MTE-13 (Discrete Mathematics) and MTE-05 (Analytical Geometry) of the BDP programme were approved by the Board members.

Item no. 20: To consider and approve the additional list of paper setters for the courses MTE-04 (Elementary Algebra) and MTE-06 (Abstract Algebra) of the BDP programme.

SB 44.20.1 The names of additional paper setters for the courses MTE-04 (Elementary Algebra) and MTE-06 (Abstract Algebra) of the BDP programme were approved by the Board members.

Item no. 21: To consider and approve the paper setters, evaluators and examiners for the different courses of M.Sc. Chemistry on campus full time programme

SB 44.21.1 The names of paper setters, evaluators and examiners for M.Sc. Chemistry courses were approved by the Board members.

Item no. 22: To consider and approve the list of paper setters, evaluators and moderators for Post Graduate Diploma in Applied Statistics (PGDAST) (with specializations in Industrial/Bio-Statistics) courses MST-001, MST-002, MST-003, MST-004, MST-005, MSTE-001, MSTE-002, MSTE-003, MSTE-004 and MSTL-001.

SB 44.22.1 The names paper setters, evaluators and moderators for Post Graduate Diploma in Applied Statistics (PGDAST) (with specializations in Industrial/Bio-Statistics) courses MST-001, MST-002, MST-003, MST-004, MST-005, MSTE-001, MSTE-002, MSTE-003, MSTE-004 and MSTL-001 were approved by the Board members.

Item no. 23: To consider and approve the paper setters, moderators and evaluators for the courses of 4th Semester M.Sc. Life Sciences on campus programme.

SB 44.23.1 The paper setters, moderators and evaluators for 4th semester courses of M.Sc. Life Sciences were approved by the Board members.

Item no. 24: To consider and approve the paper setters, moderators and evaluators for the courses of 2nd Semester M.Sc. Bioinformatics and Biotechnology Programme at IBAB Bengaluru.

SB 44.24.1 The members of the School Board enquired about the mode of collaboration of the IBAB institute with IGNOU. Chairperson informed the members that as per

the MoU with IBAB Bangalore admission and examinations are being conducted by IGNOU. However, a High Power Committee constituted for the purpose is examining the issues related to collaboration with external institutes. The members suggested that the names of internal faculty members of IGNOU should also be included in the submitted lists of paper setters and evaluators. The Chairperson informed the members that the programme is in face-to-face mode and IGNOU faculty is not involved in teaching in the Institute, hence the names of internal IGNOU faculty members were not included as paper setters and evaluators. The members suggested that in order to ensure objectivity names of IGNOU faculty should be incorporated in the submitted list.

SB 44.24.2 The names of paper setters moderators and evaluators for the courses of 2nd semester M.Sc. Bioinformatics and Biotechnology Programme at IBAB Bengaluru were approved with the addition of internal IGNOU faculty members wherever required.

Item no. 25: To consider and approve the additional paper setters, moderators and evaluators for the B.Sc. electives in Life Sciences.

SB 44.25.1 The additional names of paper setters, moderators and evaluators for B.Sc. Life science electives were approved by the Board members.

Item no. 26: To consider and approve the names of evaluators received from SED and recommended by the faculty members of the School of Sciences for different Programmes/Courses(s) of the School of Sciences.

SB 44.26.1 The School Board member reiterated that the names of evaluators should be thoroughly verified and sent by the concerned disciplines only. The name of Mr. Junka Das should be removed from the list of evaluators as he is not suitably qualified to evaluate the course.

SB 44.26.2 Except Mr Junka Das, all the other names of evaluators for FST-01, LSE-01, LSE-02, LSE-12 and LSE-13; AHE-01 were approved by the Board members.

Item no. 27: To consider and approve the minutes of the Doctoral Committee of Physics held on 15/11/2011 and 24/01/2012.

SB 44.27.1 Dr. V B Bhatia suggested that the field of research of Ph.D. candidates should be mentioned in the minutes. Prof. S C Garg from the Physics discipline appraised the members about the areas of research of the Ph.D. candidates.

SB 44.27.2 The Board members approved the minutes of the Doctoral Committees for placement in the Research Council.

Item no. 28: To consider and approve names of the Doctoral Committee of Physics.

SB 44.28.1 Chairperson suggested that the submitted panel of Doctoral committee members should also include their area of expertise.

SB 44.28.1 The Board members agreed that the areas of expertise be also mentioned in the panel of names for Doctoral Committee and approved the names for the Doctoral Committee in Physics. The list of names with the areas of specialization is circulated with the minutes as Annexure-3.

Item no. 29: To consider and approve the names of the Experts for Doctoral Committee for Ph.D. in Chemistry.

SB 44.29.1 The Board members suggested that the names of three experts (serial no 17, 19 and 24) be excluded from the submitted panel of names.

SB 44.29.2 The members of the School Board approved the names in the panel and the corrected list is circulated with the minutes as Annexure-4.

Item no. 30: To consider and approve the minutes of the Doctoral committee meeting for the Ph.D. programme in Chemistry for July, 2011 session; and to consider and approve the External Supervisors of the candidates for Ph.D. in Chemistry.

SB 44.30.1 Dr. Qureshi, external expert asked whether IGNOU is following UGC Gazette notification and guidelines for PhD programmes by exempting candidates without M.Phil from doing coursework. He was informed that as per the current Research Guidelines all candidates with 5 years or more research/teaching experience are exempted from coursework till such time as the university modifies its research policy.

The School Board advised that the progress reports of the PhD students should be presented in proper format and members suggested that henceforth the progress reports of students should be referred to the Standing Committee and then placed in the School Board.

Members of Board were of the opinion that in case of external supervisor, Dr. Krishnaiah Pendem the affiliation should be examined and full details of CV should be attached along with the application.

SB 44.30.2 The minutes of the Doctoral Committee held on November 28th 2011 were approved. However, the name of the external supervisor Dr. Krishnaiah Pendem was referred to the Standing Committee for ascertaining the affiliation of the institute he is attached to. The School Board members recommended the first progress reports of the PhD candidates mentioned below for placement in the next Research Council.

1. Chandra Prakash Narani
2. Y Srinivas Rao
3. S Krishnaraj
4. Ramil Kumar Bhardwaj
5. Sonia Tyagi
6. Swati pal
7. Rajiv Rattan
8. Md. Ashraf

Item no. 31: To consider and approve the admission of candidates for Ph.D. in Chemistry once in year January cycle and through entrance test from January, 2013 session.

SB 44.31.1 The Board members approved the item unanimously.

Item no. 32: To consider and approve the recommendations of Doctoral Committee in Life Sciences in its meeting held on 23rd – 25th January, 2012.

SB 44.32.1 One of the members of the School Board suggested that progress report of the Ph.D. candidates should be submitted in a proper format. The Ph.D. coordinator for Life sciences informed the members that the progress reports are submitted as per the template provided by the Research Unit, which corresponds to the required format for the Research Council. She also informed that all the details of the reports and Biodata of the external supervisors are available with her in the meeting for the School Board members to scrutinize if they wish to do so. Prof Amrita Nigam reminded the Board members that the School Board had agreed in an earlier meeting that if the supervisor and the Doctoral Committee approve the progress reports it should come as a reporting item to the School Board.

The recommendation of the Doctoral Committee that IGNOU should hold patent rights for any patent that arises from a thesis submitted at IGNOU was discussed at length.

SB 44.32.2 The School Board members approved the recommendations of the Doctoral Committee of Life Sciences and directed that to ensure consistency in the presentation of progress reports of Ph.D. candidates henceforth, all Doctoral committee recommendations will be placed in the Standing Committee of the School Board for approval and then placed as reporting items in the School Board.

SB 44.32.3 Members of the School Board also recommended that the ***'Patent Performa'*** should be routed through the proper channel via Director of the School. Patent will be issued in the inventors name and the University authorities must process the application.

Item no. 33: To consider and approve the names of the Experts for Doctoral Committee for Ph.D. in Life Sciences.

SB 44.33.1 Members of the School Board suggested that the areas of specialization should be mentioned in the submitted list of experts. Names of the experts from regions all over India as well as internal faculty experts should be included in the submitted list.

SB 44.33.2 The names in the panel of Experts for the Doctoral committee were approved with incorporation of the suggestions of the School Board members and the modified list will be circulated with the minutes. (Appendix-5)

Item no. 34: To consider and approve minutes of the Doctoral committee of Geology held on 24th Oct. 2011 and the syllabus for course work for the Ph.D (Geology).

SB 44.34.1 The members of the School Board were concerned about the number of programmes proposed and the workload taken up by the Geology discipline. Prof. S C Garg informed that the workload to be taken up by a faculty member is only 02 credits in a year. He also suggested that the discipline should proceed gradually rather than propose large number of programmes. Dr. Meenal Mishra from the discipline apprised the members that the discipline is not developing the course work for the Ph.D. Geology, but course work would be centered on recommended reading lists and books. The Ph.D. Geology programme would be multi-disciplinary in nature and candidates will be drawn from well-established government as well as private organizations with adequate library and laboratory facilities.

It was pointed out that exemption from entrance test for class one officers as recommended in the minutes is not in consonance with the Ph.D. ordinances of the University. The Geology Discipline was asked to fill Phase-03 form for the Ph.D. course work along with the examination and evaluation pattern of the proposed course.

Prof J P Srivastava special invitee for Geology Discipline suggested that at present the areas open for research should be limited to the areas of expertise of the internal supervisors. He also suggested that initially only category 'A' students who do not require course work can be enrolled and later as the mode of delivery of course work is decided in the University, candidates for Category B can also be enrolled. He also suggested that collaborative arrangements can be explored with universities/ research institutes for delivery of M Phil course work.

It was also pointed out that as per present research policy a Ph.D. candidate has to publish only one research paper before submitting the thesis, therefore, the recommendation of the doctoral committee for publishing 2 research papers as a condition before pre-submission seminar cannot be considered.

SB 44.34.2 The School Board decided to approve the minutes of the Doctoral Committee of Geology held on 24/10/2011 with certain recommendations in the light of the discussion held in the School Board: (a) Class one officers would not be exempted from entrance examination (b) initially the course work need not be offered to candidates eligible under category A and (c) the areas of research be limited to the expertise of the internal faculty members; (d) as per the university research policy a Ph.D. candidate has to publish only one research paper before submitting the thesis.

SB 44.34.3 It was also decided that Phase III form should be filled for the approval of the syllabus for coursework for Ph.D. candidates and the modalities of its delivery would be decided according to the University research policy which is being modified and will be notified. The Chairperson agreed to recommend to

Research Unit to explore the possibilities of interuniversity arrangements for doing course work for candidates who have five years experience.

Item no. 35: To consider and approve additional names of Experts for Doctoral Committee of Geography.

SB 44.35.1 The names of professor Amitabh Kundu, Professor CSRD, JNU and Prof. Aslam Mehmood Retd. Professor, CSRD, JNU were approved as Experts for the Doctoral Committee of Geography.

Item no. 36: To consider and approve the minutes of the Doctoral Committee Meeting of Geography held on 16th December, 2011.

SB 44.36.1 It was suggested that the 'interdisciplinary mode' of Doctoral programme should be replaced with 'interdisciplinary nature' which was accepted. The Board members were of the opinion that initially the Ph.D. programme in Geography be offered only for category 'A' candidates. However, the Geography discipline can start work towards developing the syllabus for pre Ph.D. course work

SB 44.36.2 The School Board members approved the minutes of the Doctoral Committee and unanimously agreed that the Ph.D. Programme be on offer for category A candidates only. They decided that Ph.D. for Category B can also be enrolled as and when the syllabus of the pre-Ph.D. course work is designed by the discipline and presented to the Board for approval. The Phase III form should be filled for approval of the syllabus for the PhD course work and the modalities of its delivery will be decided according to the University research policy.

Item no. 37: To consider and approve the minutes of the Doctoral Committee of Ms. Hemalatha Maurya for the Ph.D. in Math Education held on 10th August, 2011.

SB 44.37.1 The Chairperson informed the School Board members that the candidate Ms Hemlata Maurya wished to change her focus in the Ph.D. research topic. She now she wants to focus on female students of UP. The Board members were of the opinion that connotation in the shift of focus essentially is change in topic of research. There was an extensive discussion on the progress report of the candidate and how the pre-Ph.D. course work is to be delivered. The chairperson apprised the members of School Board that the delivery of pre Ph.D. course had been discussed in the last Research Council and the minutes are awaited.

SB 44.37.2 The School Board approved the Doctoral Committee minutes and approved the change in research topic from "Study to identify the factors responsible for selection of model of learning by middle School teachers in teaching of linear equations in one variable" to "**The Effect of Continuous and comprehensive Evaluation of Performance in Mathematics by Secondary School Female Students of UP**" which can be communicated to the Research Unit for further course of action. They also advised that regular progress reports of the candidate should be submitted in the prescribed format. It was also agreed upon that the issues related to Ph.D. Course work should be discussed further in the SBSC and a

special School Board Meeting may be called for discussing the relevant issues of the Ph.D. programmes.

Item no. 38: To consider and approve the Syllabus of Science Education designed by Expert group constituted by Raman Chair.

SB 44.38.1 Prof Bhatia inquired whether a separate discipline of Science Education exists in the School. The other members also were of the opinion that the Ph.D. programmes in a discipline should be launched only where in- house expertise is available, and if the School wants to offer Science Education as a separate area of research there should be at least 3 in- house faculty members for the same. It was also noted that Physics Education already exists as an area of specialization in the Physics Discipline and Mathematics Education has been approved as an area of specialization under Mathematics Doctoral programme. Dr. Bhatia was of the opinion that that broadly the syllabus was well formulated, however, the theoretical topics should also take into account the effects on children in the Indian context. It was pointed out by the Physics Discipline members of the Board that the section on Physics in the syllabus of the related pre-PhD course was grossly inadequate

SB 44.38.2 In the light of the discussions held the School Board decided to defer the Ph.D. programme in Science Education until such time when there is adequate in-house faculty in the discipline of Science Education.

Item no.39: To consider and approve the recommendations of the selection committee held on 19th December, 2011 for NET/GATE/more than 5 years experience and post M.Phil candidates in Mathematics.

SB 44.39.1 The recommendations of the selection committee held on 19th December, 2011 for NET/GATE/more than 5 years experience and post M.Phil candidates in Mathematics had been placed in The RCSC meeting held on December 19th, 2011, and advised that these be placed in the School Board too.

SB 44.39.2 The School Board approved the recommendation of the selection committee for admitting two candidates Ms. Deeba Ruqauya Naqvi and Mrs Shalu Kapoor who would be registered in the Ph.D. programme subject to their clearing the course work of 32 credits.

Item no. 40: To consider and approve the recommendations of the Expert Committee meeting for the overall review of the mathematics elective courses of the Bachelor's Degree Programme.

SB 44.40.1 Prof. Sujatha Verma from the Mathematicss discipline apprised the members about the rationale for review of the Bachelors Degree Programme and gave a brief summary about the feedback taken before developing the revised syllabus for the math courses. The School Board sought clarification regarding the nomenclature of core and electives and different levels indicated in the submitted appendix that was circulated. It was also suggested that Level 0 as

given in the appendix should be removed and the Mathematics discipline should follow the prevalent format. The Math discipline members agreed to remove the column indicating levels against the courses as these were notional and for the guidance of the faculty and not to be communicated to the students.

SB 44.40.2 The School Board members approved the revised structure of the B.Sc. Major in Mathematics (48 credits) with the advice that the guidelines provided in the new prospectus explain the programme structure clearly to the students

Item no. 41: To consider and approve the Phase 1 Form for Ph.D (Biochemistry) Programme for Category 'A' and 'B'.

SB 44.41.1 Dr. Parvesh Bubber apprised the members of School Board about the details of the Ph.D programme in Biochemistry. School Board members had queries about the eligibility criteria for admission in the Ph.D. programme. Dr Lalit Garg special invitee for Biochemistry Discipline advised that keeping 5 years of experience for entry for Category 'A' candidates should be reduced to attract good candidates. Also eligibility qualifications should be expanded to include more allied sciences.

Other School Board members suggested that the qualifications of the Assistant Professors mentioned in the Phase 1 form should be provided as they have to be approved as Ph D. supervisors in the School Board. The names of the Doctoral Committee members would be approved in the next Standing Committee of School Board.

SB 44.41.2 Phase-1 form was approved with the addition of more allied disciplines in the eligibility criterion by the School Board unanimously and the CVs of Dr Kalra and Dr Pandey would be circulated with the minutes (Appendix-6)

Item no. 42: To consider and approve the Phase-I Form of M.Sc. GeoInformatics and Phase-I form for PG Diploma in GIS and GeoSpatial Modelling Programmes for launching in Face to Face Mode at the IGNOU main campus from July 2012 as approved by the Vice-Chancellor, IGNOU.

SB 44.42.1 The School Board discussed the proposal at length. They raised the issue of existing workload of the faculty of Geography discipline; requirement of additional faculty ; and infrastructure needed to launch a PG programme in Geoinformatics in the face to face mode. The members were of the view that in the light of existing situation where the university has constituted a High Power Committee to look into the mandate of the university for Face to Face programmes; and considering the much needed infrastructure for M.Sc and PG Diploma, the discipline should rethink about launching the programme hence the date of launch of the programmes should be deferred.

SB 44.42.2 The School Board noted that the Vice Chancellor had approved the proposal of the Discipline at the time. However, it recommends (i) that the programmes cannot be launched in July 2012 as there are some preconditions needed for starting the two programmes, which have been mentioned in the note put up to

the honorable Vice Chancellor by the discipline of Geography. (ii) The faculty should develop a comprehensive list of requirements including faculty positions needed, laboratory space and equipment required and come up with a concrete proposal, which can be discussed in the Standing Committee and shared in the School Board. (iii) The Geography Discipline can start the process of setting up the Expert committee and other activities to initiate the syllabus formation for MSc Geoinformatics and bring it for discussion in the Standing Committee.

Item no. 43: To consider and approve the syllabus for B.Sc. Geology (Major) Programme proposed by the discipline of Geology and to consider and approve the Phase-0 forms for the three electives viz. Course 1- GEOL-001 Planet Earth, Course 2- GEOL-002 Strata and Prehistoric life, and Course 3- GEOL-03 Geology Lab-I.

SB 44.43.1 One of the School Board members inquired whether the submitted syllabus is at par with those of other universities. Prof J P Srivastava special invitee for Geology discipline informed that the syllabus is comprehensive and at par with the syllabi of other universities that offer undergraduate degree in Geology.

SB 44.43.2 The syllabus of the B.Sc. Geology programme and Phase-0 forms of first level Geology electives Planet earth; Strata and Prehistoric Life; and Geology Lab -1 along with the names of course writers were approved by the School Board unanimously.

Item no. 44: To consider and approve the Syllabus, Course Editors and Writers of BDP Geography and PG Diploma in GIS and GeoSpatial Modeling programmes.

SB 44.44.1 Prof Vijayshri raised the issue that The School Board of SOS can only consider B.Sc. Geography. Consideration and approval for the BA Geography programme can only be taken up in the School Board of School of Social Sciences. Members also suggested minor modifications in the submitted item such as (i) clubbing of courses with two credits, (ii) removal of 1st, 2nd and 3rd year in the submitted Table of BDP programme on page no 1; (iii) the optional courses should be specified and (iv) the eligibility for the BSc Geography should be specified as 'open to students having passes 10+2 in **any science stream**' (v) names of courses coordinators are not required in the submitted item.

It was suggested that the discipline conduct another expert committee meeting for detailing the syllabus of PG Diploma and should fill Phase 2 and 3 for the same.

SB 44.44.2 The B.Sc. Syllabus and course writers including the names of the internal faculty members were approved by the School Board unanimously with the suggested minor corrections. The Chairperson was asked to write to the Director of School of Social Sciences to examine the proposal for BA Geography (Major) The Discipline was directed to submit the Phase-2 and 3 forms of the PG Diploma in GIS and Geospatial Modeling programme.

Item no. 45: To seek the recommendation of the School Board for implementation of the decision of the Board of Management taken in its meeting held on August, 23, 2011 regarding the relocation of Integrated M.Sc. – Ph.D. in Physics and Astrophysics Programme from SOITS to School of Sciences.

SB 44.45.1 Prof. S.C. Garg from the Physics Discipline apprised the Board members about the genesis of the programme and gave the background for the agenda item in detail. He informed that the Physics Discipline is already developing a master's programme in Physics and is not involved in the launch of the **Integrated M.Sc. – Ph.D. in Physics and Astrophysics** programme in any manner; also the faculty in the School does not have specialization in the area of Astrophysics. It was also categorically stated that the physics discipline believes that no professional gain could be attained by the collaboration envisaged in the programme and therefore it should not be imposed on the discipline.

SB 44.45.2 The School Board noted the decision of the 109th meeting of Board of Management that the integrated M.Sc.-Ph.D. in Physics and Astrophysics be attached to the School of Sciences. However, the Physics Discipline and the School of Sciences has given valid reasons why it is not feasible to house the programme in SOS. The views of the faculty of Physics have also been communicated to the Academic Council. Keeping these facts in view the School Board recommended that the Board of Management may review its decision for housing the Programme in the School of Sciences.

Item no. 46: To consider and approve the revised Evaluation Methodology for the M.Sc. (Life Sciences) and M.Sc. (chemistry) on Campus Programmes.

SB 44.46.1 One of the School Board members wanted to know the rationale for adopting 40% comprehensive score as a requirement for passing the course as proposed in the evaluation methodology. The Chairperson explained the background of the decision taken and about the notification issued by the Nodal Officer for Face-to-Face Programmes for implementation of the comprehensive evaluation policy. Dr. Fozdar, Chemistry discipline apprised the members about the results of first two batches and informed that students perform low in internal assignments and it is not possible to allow them multiple chances to reappear in the internal assessment if they fail. Dr. Saraswat informed that comprehensive scores for passing the programme is a policy in many conventional universities. External experts also informed that agricultural universities are following similar pattern of comprehensive evaluation. The Chairperson informed the Board members that as per the notification of the then Nodal Officer for all face to face programmes, the students had been informed of this evaluation pattern and it would not be possible now to rescind on this decision.

SB 44.46.2 Since the notification for the comprehensive evaluation mythology had been communicated to the students, the School Board recommended that as an exception, the proposed evaluation methodology be followed for students of 2009-11; 2010-12; and 2011-13 batches in the M.Sc. Chemistry and M.Sc. Life Sciences programmes.

SB 44.46.2 Regarding the evaluation policy recommended by the Expert Committee of Chemistry in their review meeting of the M.Sc. programme, the School Board decided to defer the item till a clear University policy emerges for Face to Face programmes.

Item no. 47: To consider and approve the transfer of the Certificate Programme in Solid Waste Management from SOVET to School of Sciences.

SB 44.47.1 Dr. Lalita Kumar from Chemistry Discipline apprised the members about the background for the decision of transferring the programmes from SOVET to School of sciences. The proposal was discussed at length. Members were of the view that the content of programme is of a higher level than what is required for the level of the clientele envisaged for the programme. It was suggested that the syllabus should be relooked into and instructional methodology as well as the practical training intended in the programme needs redesigning. They opined that the programme would be more useful if it is offered in Hindi and other regional languages so that it addresses the envisaged clientele more appropriately.

SB 44.47.2 The school Board considered and approved in principle the transfer of the Certificate Programme in Solid Waste Management from SOVET to School of Sciences. However, the Board advised that the proposal of the programme may be relooked into and modified incorporating the suggestions of the School Board regarding clientele, syllabus, mode of delivery etc.

Item no. 48: To consider and approve the transfer of the Certificate Programme in Waste Water Management from SOVET to School of Sciences.

SB 44.48.1 The proposal was discussed and the School Board members had similar observations about Item 48. They agreed in principal to approve the transfer of the Certificate Programme in Waste Water Management from SOVET to School of Sciences with the advice that the clientele, syllabus, mode of delivery etc be relooked into and modified incorporating the suggestion of the School Board.

Item no. 49: Any other items, with the permission of the Chair.

Item no. 49 (i) To consider and approve the syllabus for new courses of Biochemistry for the BDP programme as identified in the subject expert committee.

SB 44.49(i).1 Dr. Parvesh Bubber informed the members that the Biochemistry Expert Committee members looked into all the existing courses of Chemistry and Life Sciences and then recommended the inclusion of courses from Chemistry and Life Sciences with the new Biochemistry courses as given in the proposed structure for B.Sc. Biochemistry (Major) in the BDP programme. There were queries from the Board members whether the combination of courses is in consonance with what is offered at other universities. Special invitee for Biochemistry Dr. Lalit Garg also apprised

the members that the Syllabus as proposed in the Expert Committee is at the par with other universities that offer BSc Biochemistry.

SB 44.49(i).2

After discussion it was agreed that BSc major in Biochemistry can be offered with 48 credits including the combination of existing Chemistry and Life Sciences (28 credits) and new Biochemistry courses worth 20 credits. The existing course framework can be reviewed 3-4 years after launching the programme.

(Geeta Kaicker)
Director