

MINUTES OF THE 34TH MEETING OF THE SCHOOL BOARD OF THE SCHOOL OF SCIENCES HELD ON 26TH FEBRUARY, 2007

The following members were present:

1. Prof. Parvin Sinclair, Chairperson
2. Prof. V.B. Bhatia (Retd.), University of Delhi, Delhi
3. Prof. N.K. Jha (Retd.), IIT, Delhi
4. Prof. S. Kumaresan, University of Mumbai, Mumbai
5. Prof. A.K. Agarwal, SOHS, IGNOU
6. Dr. M.K. Bhardwaj, SOET, IGNOU
7. Prof. A.R. Khan, SOSS, IGNOU
8. Dr. Sanjay Mishra, STRIDE, IGNOU
9. Prof. S.C. Garg, SOS, IGNOU
10. Dr. Lalita S. Kumar, SOS, IGNOU
11. Dr. Subhalakshmi Lamba, SOS, IGNOU
12. Prof. Sunita Malhotra, SOS, IGNOU
13. Dr. Jaswant Sokhi, SOS, IGNOU
14. Dr. Pushplata Tripathi, SOS, IGNOU
15. Dr. Sujatha Varma, SOS, IGNOU
16. Prof. Vijayshri, SOS, IGNOU

Prof. S. Ramachandran, IGIB, Delhi and Prof. Satya Deo Tripathi, HRI, Allahabad could not attend the meeting.

The meeting began with the Chairperson welcoming all the members. Thereafter, the following items on the agenda were deliberated upon:

ITEM NO. 1: TO CONFIRM THE MINUTES OF THE 33rd MEETING OF THE SCHOOL BOARD OF THE SCHOOL OF SCIENCES.

- 34.1.1 Since no comments were received, the minutes were treated as confirmed.
- 34.1.2 Following this, the Chairperson informed the School Board members of the action taken on the items as given below.
- i) The progress report of Ms. Arundhati Mishra during the period January-June, 2006, had been forwarded to the Research Council after incorporating the changes suggested.
 - ii) Dr. Subhalakshmi Lamba's application for recognition as Ph.D. supervisor had been forwarded to the Research Council.

- iii) Mr. Xavier Santan Gama's application had been forwarded to the Research Council after including the documents that the members had suggested be included.
- iv) Prof. R.L. Patil's curriculum vitae had been forwarded to the Research Council with the recommendations of the School Board.
- v) The list of paper-setters, evaluators and moderators approved by the School Board had been forwarded to the SR&E Division for necessary action.
- vi) The revision of the Foundation Course in Science and Technology (FST) is placed for discussion in the following item.

The members noted the action taken.

- 34.1.3 A member suggested that, as per the usual practice, an Action Taken Report should be sent to all the members with the agenda items. It was agreed that this would be done in future.

ITEM NO. 2: MATTERS ARISING FROM THE MINUTES

- 34.2.1 Regarding Item no. 2 of the 33rd meeting of the School Board, a member raised a query regarding the status of the Diploma in Aquaculture, since only four students had applied for the programme, and the University is not encouraging low enrolment programmes. The Chairperson informed the members that the matter had been brought to the notice of the Vice-Chancellor by the programme team, which had proposed a certain course of action for the future. Advice from the Vice-Chancellor was awaited.

- 34.2.2 Regarding Item no. 8 of the 33rd meeting of the School Board, the course coordinator of the Foundation Course in Science and Technology (FST) informed the members about the progress in the revision process of the course.

Some members suggested that a review of the structure of the Bachelor's Degree Programme was long overdue. The Board recommended that this review be undertaken by the University before finalising the design of the revised FST.

ITEM NO. 3: REPORTING ITEMS

- 34.3.1 The Chairperson informed the members that the University had instituted six Chairs, as given below:

- i) The Tagore Chair for Indian Literature – School of Humanities
- ii) The Raman Chair for Science Education – School of Sciences
- iii) The Chair for Technology - Enabled Education – School of Education
- iv) The Chair for Industry - Academy Interfacing – School of Management
- v) The Chair for Sustainable Development – University level coordination
- vi) The MHRD Rajiv Gandhi Chair for Contemporary Studies – University level coordination

She also informed the members that Prof. M. S. Swaminathan had accepted the Chair for Sustainable Development, on an honorary basis, for 5 years.

34.3.2

The Chairperson informed the members that the 18th convocation would be held on 17th March, 2007. However, the number of students getting the B.Sc. degree at this convocation had not been communicated to the School as yet, and therefore could not be informed to the members. This information would be communicated as and when made available to the School.

ITEM NO. 4: TO CONSIDER THE OUTLINE OF THE COMPULSORY COURSE ON PEDAGOGY, SCIENCE AND TECHNOLOGY OF OPEN AND DISTANCE LEARNING.

34.4.1

The Chairperson informed the members about the compulsory course on the theory, practice and technology of open and distance learning for learners of IGNOU. This had been proposed in the 37th meeting of the Academic Council, by the Vice-Chancellor, and the proposal had been approved by the members, subject to the following:

- i) a Committee of experts in the ODL Pedagogy and Technology would deliberate on the matter, and its recommendations would be placed before the School Boards for integrating this compulsory course following the existing procedure;
- ii) the focus of the course should be study skill oriented in the use of educational and media technologies; and
- iii) as the programmes are offered at certificate, diploma, undergraduate degree, post-graduate degree and doctoral level, there cannot be uniformity of content of the proposed course as the requirement of each category of learners would be different.

Further to this, an outline of the course had been designed by the faculty of STRIDE, and placed in an Advisory Committee consisting of all the Directors of Schools/Heads of Divisions, the Vice-Chancellors of two state open universities and the members of STRIDE, and chaired by the Vice-Chancellor. The minutes of that meeting, approved by the Vice-Chancellor, were now being placed before the School Board members for comments and suggestions for improvement of the course/module.

34.4.2

The members gave the following comments:

- i) The recommendations of the Academic Council do not seem to have been kept in mind while finalising the module being placed before the School Board.
- ii) The course given in the minutes is too heavy, and certainly inappropriate for all students. Such course material would be more useful if given to new faculty, academic counsellors, and prospective course writers/editors of the course material.

- iii) The purpose of the course, mentioned in the introduction, is, "In order to make best use of the provisions and opportunities provided by open and distance education, it is necessary to orient the distance learners into the instructional science and technology that characterizes distance education". For this, **rather than a course, it would be better to give an enhanced study guide**, something that would be interesting to the students and digestible by them. The content needs to be presented in an extremely student-friendly manner, and in about 20 pages, maybe with a CD. Further, this matter could form a core that could be suitably modified by the programme team for the learners of the programme concerned. For instance, for a science programme it would include some component related to best utilisation of the laboratory courses, etc.

ITEM NO. 5: TO CONSIDER AND APPROVE THE RECOMMENDATIONS OF THE CHEMISTRY FACULTY FOR THE NORMS FOR APPOINTMENT OF THE EXTERNAL EXAMINERS FOR THE LABORATORY COURSES OF CHEMISTRY ELECTIVES.

34.5.1 The norms suggested by the Chemistry faculty were placed before the members of the School Board. The Chairperson informed the members that some different norms had been suggested in Item no. 7 by the Life Sciences faculty for their laboratory courses, and the Physics faculty had not presented any norms as yet.

34.5.2 The members decided that the School should have common broad norms for all laboratory courses, and a sub-committee was formed for working out these norms. The members of the sub-committee are Prof. S.C. Garg, Prof. N.K. Jha, Prof. Sunita Malhotra, Dr. Sanjay Mishra and Dr. Jaswant Sokhi. The Convenor will be Prof. S.C. Garg. The committee would place its recommendations in the next School Board meeting.

ITEM NO. 6: TO CONSIDER AND APPROVE THE LIST OF PAPER-SETTERS AND EVALUATORS FOR THE CHEMISTRY COURSES CHE-01 (ATOMS AND MOLECULES), CHE-02 (INORGANIC CHEMISTRY), CHE-04 (PHYSICAL CHEMISTRY), CHE-05 (ORGANIC CHEMISTRY), CHE-06 (ORGANIC REACTION MECHANISM), CHE-09 (BIOCHEMISTRY) AND CHE-10 (SPECTROSCOPY).

34.6.1 The list of paper-setters and evaluators were placed before the members of the School Board.

34.6.2 The members approved the names, subject to the following recommendations.

- i) Paper-setters from other parts of the country should also be recommended by the faculty, not just from Delhi.
- ii) The lists of paper-setters and of evaluators should be separate
- iii) Only persons who are familiar with the courses at this level should be included. Accordingly, the names of persons from NCERT should be deleted from these lists.

The revised lists are given in Appendix 1.

ITEM NO. 7: TO CONSIDER AND APPROVE THE NORMS FOR APPOINTMENT OF EXTERNAL EXAMINERS FOR THE LABORATORY COURSES OF THE LIFE SCIENCES DISCIPLINE, VIZ., LSE-04(L) (LABORATORY COURSE-I), LSE-08(L) (LABORATORY COURSE-II), LSE-11(L) (ANIMAL DIVERSITY LAB) AND LSE-14(L) (PLANT DIVERSITY LAB).

34.7.1 As noted under Item no. 5.

ITEM NO. 8: TO APPROVE THE LIST OF MODERATORS, PAPER-SETTERS AND EVALUATORS FOR THE COURSES MTE-11 (PROBABILITY AND STATISTICS) AND MTE-13 (DISCRETE MATHEMATICS), AND PAPER-SETTERS OF AMT-01 (TEACHING OF SCHOOL MATHEMATICS) AND LMT-01 (LEARNING MATHEMATICS).

34.8.1 The names given in the lists were considered and approved by the members of the School Board.

ITEM NO. 9: TO CONSIDER THE APPLICATION OF MS. ARTI KAUSHIK FOR THE PH.D PROGRAMME IN MATHEMATICS FOR RECOMMENDATION TO THE RESEARCH COUNCIL, AND THE BIO-DATA OF DR. D.K. KHATTAR FOR APPROVAL AS CO-SUPERVISOR.

34.9.1 The application of Ms. Arti Kaushik and the bio-data of Dr. D.K. Khattar, Reader, Deptt. of Mathematics, Kirori Mal College, University of Delhi, for consideration as external supervisor were placed before the School Board for consideration.

34.9.2 The members recommended that Ms. Arti Kaushik's application for the Ph.D. Programme in Mathematics be forwarded to the Research Council for approval.

34.9.3 The bio-data of the external supervisor in this case, Dr. D.K. Khattar, Reader, Deptt. of Mathematics, Kirori Mal College, University of Delhi, was recommended by the School Board for approval by the Research Council as a recognised supervisor by the University.

ITEM NO. 10: TO CONSIDER AND APPROVE THE RECOMMENDATIONS OF THE EXPERT COMMITTEE MEETING REGARDING THE COURSEWORK FOR THE PH.D PROGRAMME IN MATHEMATICS.

34.10.1 The minutes of the Expert Committee for the Ph.D. Programme in Mathematics were placed before the School Board members. The following specific recommendations were considered by the members of the Board.

i) The course work for the Ph.D. Programme should be as given in Appendices – A, B and C.

Regarding the course on Mathematical Research Methodology:

a) it was decided that as part of this the learner would be sent some material regarding how to write research proposals, rules for fair usage of material

that is already available in print or on the internet, tips on presentation and communication skills.

- b) the members very strongly rejected the suggestion of the Sub-Committee of the Research Council that the Research Methodology course should have a component of history and philosophy of Science.

Further, the course on computing given in Appendix C should be audited, and not formally examined, since the various components would necessarily be used and tested by the learners while they are studying for their Ph.D.

- ii) Regarding the relaxation of coursework for persons having a *Master's degree in a relevant discipline with at least 55 per cent marks (50 per cent marks for SC/ST/PH candidates) or an equivalent grade from any University or a recognized institution of higher learning and five years of teaching/industry/administration/professional experience at senior level*, the members recommended that any such candidate must successfully complete the coursework. Therefore, **no relaxation should be allowed** for such persons who enrol for a Ph.D. in Mathematics.

- iii) The format for research proposals given in the prospectus for Ph.D. applicants should be replaced by the one given in Appendix D.

34.10.2 The members accepted the content and strategy of the course on Research Methodology. However, some members suggested that this be slightly reworded, giving the broad stages through which the students would be expected to pass, as given in Appendix 2.

34.10.3 The School Board members accepted the recommendations of the Expert Committee regarding the course on computing being audited.

34.10.4 Regarding Point (ii) in 34.10.1, the School Board members accepted the recommendation of the Expert Committee that any such candidate must successfully complete the coursework. Therefore, **no relaxation should be allowed for such persons who enrol for a Ph.D. in Mathematics.**

34.10.5 Regarding Point (iii) in 34.10.1, the School Board members recommended the format given in Appendix D for Ph.D. in Mathematics.

ITEM NO. 11: TO CONSIDER THE PROGRESS REPORT OF MS. ARUNDHATI MISHRA, PH.D SCHOLAR.

34.11.1 The progress report of Ms. Arundhati Mishra, for the period July- December, 2006, was placed before the School Board. The members suggested some minor improvements in the presentation regarding the statistical table and suggested some corrections in the references.

34.11.2 Subject to the suggestions given above being incorporated, the Progress Report was approved and recommended for forwarding to the Research Council (Appendix 3).

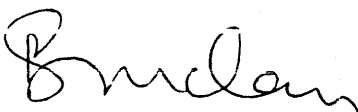
ITEM NO. 12: TO CONSIDER THE APPLICATION FORM OF SH. UMAPATI PATTAR FOR THE PH.D PROGRAMME IN PHYSICS, AND THE BIO-DATA OF DR. VIJAY HANUMANTRAO RAYBAGKAR FOR APPROVAL AS EXTERNAL SUPERVISOR.

- 34.12.1 The application of Sh. Umapati Pattar and the bio-data of Dr. Vijay Hanumantrao Raybagkar, Reader, Deptt. of Physics, N. Wadia College, Pune, were placed before the School Board for consideration.
- 34.12.2 The members recommended that Sh. Umapati Pattar's application for the Ph.D. Programme in Physics be forwarded to the Research Council for approval.
- 34.12.3 The bio-data of the external supervisor in this case, Dr. Vijay Hanumantrao Raybagkar, Reader, Deptt. of Physics, N. Wadia College, Pune, was recommended by the School Board for approval by the Research Council as a recognised supervisor by the University.

ITEM NO. 13: TO CONSIDER AND APPROVE THE SYLLABUS OF THE REVISED VERSION OF PHE-01 (ELEMENTARY MECHANICS).

- 34.13.1 The Phase Zero form for the revision of PHE-01 (Elementary Mechanics) was placed before the School Board members for consideration. The course coordinator presented the rationale for revising the course and the methodology used for gathering feedback from students, counsellors and other university/college teachers.
- 34.13.2 The School Board members suggested that
- i) the syllabus of the earlier version of PHE-01 should also be attached before forwarding the Phase Zero form to the Academic Council so that the members can gauge changes made in the revised version;
 - ii) an appendix on Calculus should also be included in the syllabus; and
 - iii) it should be clarified in the syllabus that the appendices are optional.
- 34.13.3 Subject to the suggestions in Point 34.13.2 being incorporated, the members approved the Phase Zero form (Appendix 4).

At this point, due to time considerations, the Chairperson suggested that the rest of the items be deferred to the next School Board meeting, which would be held in about a months time. The members agreed to this suggestion, and the meeting ended.


(Parvin Sinclair)

