



DEPARTMENT OF NANOTECHNOLOGY UNIVERSITY OF KASHMIR

Notes :

SUBJECT: APPROVAL FOR MINUTES OF MEETING ALONG WITH THE ITEMS ON AGENDA PASSED IN BOARD OF POSTGRADUATE STUDIES (BPGS) IN NANOTECHNOLOGY, HELD ON OCTOBER 17, 2018.

Board of Post-Graduate Studies in Nanotechnology was held on 17th October 2018 under the chairmanship of the undersigned. Prior information in this regard was sent to the concerned Chairs, including your goodself.

Minutes of Meeting, Items on Agenda (M.Sc. Nanotechnology Syllabus 2018-19 onwards/ List of Examiners/ Fee structure for M. Sc. Nanotechnology/ Entrance Test Syllabus for admission to M. Sc. Nanotechnology), passed unanimously by members of the said Board of Post-Graduate Studies in Nanotechnology, and recommendations thereof are enclosed herewith.

The undersigned submits the above said Minutes of Meeting along with Items on Agenda unanimously passed and recommendations thereof to your goodself for final approval. It is requested to issue necessary approval in this regard for the teaching program, M.Sc. Nanotechnology, which for the current academic session is starting in November 2018.

A handwritten signature in blue ink, appearing to read 'Rabia Hamid'.

Dr. Rabia Hamid
(Coordinator)

Dean School of Biological Sciences



DEPARTMENT OF NANOTECHNOLOGY UNIVERSITY OF KASHMIR

Notes :

MINUTES OF BOARD OF POSTGRADUATE STUDIES (BPGS) MEETING DEPARTMENT OF NANOTECHNOLOGY HELD ON 17TH OCTOBER 2018

First Board of Post Graduate Studies Meeting in Nanotechnology was held in the seminar room of Department of Biochemistry at 11am onwards on October 17, 2018. Following items were placed on the agenda for the Board of Post Graduate Studies Meeting in Nanotechnology, University of Kashmir held on 17-10-2018.

S. NO	ITEMS PLACED ON AGENDA
01.	Approval for M.Sc. Nanotechnology Syllabus 2018-19 onwards along with Syllabus for OE/GE Courses offered by the Department of Nanotechnology
02.	Approval for list of Examiners for courses taught in M.Sc. Nanotechnology, 2018-19 onwards.
03.	Approval for Fee structure for M.Sc. Nanotechnology program 2018-19 onwards.
04.	Approval for Entrance Test Syllabus for admission to M.Sc. Nanotechnology, 2018-19 onwards, along with the Eligibility.

FOLLOWING ARE THE MINUTES OF THE MEETING HELD ON 17TH OCTOBER 2018:

The proceedings of 1st Board of Post Graduate Studies Meeting in Nanotechnology started with the welcome of the members and introduction of the Department of Nanotechnology, contributions made by faculty / Committee members of the M.Sc. Curriculum/Syllabus development, and finally the description of items on agenda placed before the members of BPGS Meeting. From the state of J&K, six (06) Subject Experts (from University of Kashmir and Colleges) outside the Department of Nanotechnology, four (04) Faculty members of the Department of Nanotechnology and one (01) Research scholar, attended this meeting, besides the undersigned as Chairperson. Subject Experts from outside the state could not physically attend the meeting but participated online and through emails. Each of the items on agenda was discussed, deliberated upon and concluded with approvals/recommendations/suggestions that were recorded in the "minutes of meeting and, which are as follows:

PTO



DEPARTMENT OF NANOTECHNOLOGY

UNIVERSITY OF KASHMIR

Notes :

ITEM NO. 01: APPROVAL FOR M.Sc. NANOTECHNOLOGY SYLLABUS 2018-19 ONWARDS ALONG WITH OE/GE SYLLABUS FOR COURSES OFFERED BY THE DEPARTMENT OF NANOTECHNOLOGY.

The proposed syllabus and courses of study for interdisciplinary Post-Graduate Degree program- M.Sc. in Nanotechnology was placed before BPGS for discussion and suggestions for improvement of curriculum and its approval for 2018-19 onwards. "M.Sc. in Nanotechnology" programme will comprise of a total of 96-credits. Out of these, 56-credits will be earned by students from Compulsory Core Courses, 32-credits from Compulsory DCE Courses and remaining 8-credits from OE/GE offered by the Department of Nanotechnology/other Programs/Departments of University of Kashmir under CBCS scheme. All the 96-credits will be spread over 4 semesters and shall include 5 different components of "Teaching" viz., (i) Theory lectures (ii) Tutorials, (iii) Seminars, (iv) Two Laboratory Courses (one each in the second and third semester), and (v) Research Based -Project/Internship"(Annexure No.01).

Following observations/comments/changes/suggestions were put forth by the members of the First Board of Post Graduate Studies in Nanotechnology held on October 17, 2018.

1. Prof. S. S Islam suggested changes in courses and course content (email attached) that were incorporated in version-II presented in BPGS & also revised version-III.
2. Prof. M. A. Khuroo proposed adding a separate 2-credit course on Spectroscopy in version-II.
3. Prof. Farooq A Mir proposed rearranging contents of the 4-credit course "Concepts in Solid state and Nanophysics" into 4-credit Solid-state physics and additional 2-credit course on Nanophysics in version-II.
4. Prof. N. A. Shah also suggested some rearrangement of contents of the 4-credit course "Concepts in Solid state and Nanophysics" as the units seemed heavily loaded. Besides this, some other minor changes in topics/deletion of topics in some courses were suggested, so as to remain focused on the subject, in version-II.
5. Prof. Syed Ezaz Rizvi suggested adding the topic about "reference of scales" in the course "Essentials of Nanoscience and Nanotechnology". He also suggested adding topics on "Fourier Series & Laplace Transforms". He also suggested adding more credit hours/course to the course 'Nanomedicine', as the units are heavily loaded in version-II.
6. Dr. Shaida Andrabi suggested adding Mass spectroscopy to the course on "Advanced Techniques" in version-II.
7. Dr. Abrar Qureshi suggested adding more credit hours/course to the course 'Nanomedicine', as the units are heavily loaded in version-II.

PTO



DEPARTMENT OF NANOTECHNOLOGY

UNIVERSITY OF KASHMIR

Notes :

All the above observations/comments/changes/suggestions were discussed deliberated upon. Finally, unanimously agreed upon changes were made to the M.Sc. Nanotechnology Syllabus-version-II along with OE/GE courses Syllabus presented before the members of the BPGS, which resulted in the revised syllabus, i.e., version-III (with 04 additional courses of 2-credits each: total 8-credits). Therefore, students will earn 88-credits from courses in the Department and rest 8-credits worth of courses from OE/GE from other Departments. The Item No. 01 "Approval for M.Sc. Nanotechnology Syllabus 2018-19 onwards along with OE/GE Syllabus for Courses offered by the Department-Version-III" is unanimously passed and approved by all members of BPGS in Nanotechnology.

ITEM NO. 02: APPROVAL FOR LIST OF SUBJECT EXPERTS AS EXAMINERS FOR M.SC. NANOTECHNOLOGY- 2018-19 ONWARDS:

A list of subject experts as Examiners was proposed and placed before the members of the First Board of PG Studies in Nanotechnology held on Oct 17, 2018 (Annexure No. 02).

All members of BPGS examined the list of Examiners. Prof. Farooq A Mir (HOD Physics) proposed the name of Prof. Mushahid Hussain, Department of Physics, Jamia Millia Islamia University, New Delhi as an expert, which was unanimously agreed upon and the name included in the list thereupon.

The Item No. 02 "Approval for Examiners in M.Sc. Nanotechnology- 2018-19 onwards" is unanimously passed and approved by all members of BPGS in Nanotechnology.

ITEM NO. 03: APPROVAL FOR FEE STRUCTURE FOR M.SC. NANOTECHNOLOGY PROGRAMME- 2018-19 ONWARDS.

Fee structure for M.Sc. in Nanotechnology programme, which is interdisciplinary and research based, was proposed and placed before the members of the First Board of Studies in Nanotechnology held on Oct 17, 2018. (Annexure: No.3).

Following points were discussed:

1. Proposal for Fee for First, Second, Third and Fourth semesters be charged as applicable to any PG program in Science, except Part-B (the Departmental Component), which shall be Rs. 10,000/=.
2. Proposal for total Fee (all semesters) chargeable to students admitted on payment seats in M.Sc. Nanotechnology programme of Rs. 150000/= (One Lac and Fifty Thousand).
3. Proposal for 4th Semester Research Internship Fee of Rs 25,000/= in addition to the fee charged as mentioned above at point 1 and point 2, as applicable. "The Internship Fee of Rs. 25000/= shall be paid by the Department of Nanotechnology directly to the research

PTO



DEPARTMENT OF NANOTECHNOLOGY UNIVERSITY OF KASHMIR

Notes :

laboratory wherein the students undertake his/her Research Internship/Project. Therefore, it is further proposed that said Internship fee of Rs. 25000/= is directly credited by the candidates to the Departmental Local Fund account to be utilized for direct transfer to the host laboratory in the form of Bank-Cheque”.

4. Proposal for inviting Scientists/Faculty/Scholars of National/International repute from state/outside the state for delivering expert lectures in various courses/specialized topics relevant to the field/specialized topics in M.Sc. Nanotechnology programme. “It is proposed that in the interest of the students enrolled for M.Sc. Nanotechnology, Department of Nanotechnology be allowed to pay remunerations per lecture, as applicable under University statutes, to the Resource Persons/ Invited speakers for delivering the said lectures to students enrolled in M.Sc. Nanotechnology from the Fee amount collected by the Department from admissions in Payment-Seats category”.

The Item No. 03 “Approval for Fee structure for M.Sc. Nanotechnology- 2018-19 onwards” was discussed at length. It was felt by all the members of BPGS that Department of Nanotechnology being a newly established Department would require substantial funding for establishing research facilities, consumables, etc., for running a research based curriculum in the specialized field of Nanotechnology besides establishing a new Departmental library. Therefore considering all the requirements and needs to establish a Department that is as par with other good institutes of Nanotechnology at the National level, and in the interest of the admitted students, all the points mentioned above under Item No. 3 (Annexure-03) were considered *in toto* and is unanimously passed and approved by all members of BPGS.

ITEM NO. 04: APPROVAL FOR ENTRANCE TEST SYLLABUS FOR ADMISSION TO M.SC. NANOTECHNOLOGY 2018-19 ONWARDS.

The Item No. 04 “Approval for Entrance test Syllabus for admission to M.Sc. Nanotechnology 2018-19 onwards” (Annexure-04) along with the ‘Eligibility criteria’ was discussed.

All members of BPGS came to the conclusion that the proposed Entrance Test Syllabus for admission to M.Sc. Nanotechnology is balanced and contains all essential components that need to be tested in prospective candidates desirous of pursuing a M.Sc. in Nanotechnology. Item No. 4, is unanimously passed and approved by all members of the BPGS.

First Board of Post Graduate Studies Meeting in Nanotechnology concluded with incorporation of all the observations/comments/changes/ suggestions made by members, which resulted in the approval of all the items on agenda with following recommendation:

PTO



DEPARTMENT OF NANOTECHNOLOGY

UNIVERSITY OF KASHMIR

Notes :

RECOMMENDATIONS OF MEMBERS OF BOARD OF POSTGRADUATE STUDIES IN DEPARTMENT OF NANOTECHNOLOGY

- I. The Item No. 01 "Approval for M.Sc. Nanotechnology Syllabus 2018-19 onwards- along with OE/GE Syllabus for Courses offered by the Department of Nanotechnology-Revised Version-III" (Annexure-01) - is unanimously passed and approved by all members of BPGS. Therefore, "M.Sc. in Nanotechnology" programme will comprise of a total of 96-credits, out of which students will earn 88-credits from the courses in Department of Nanotechnology (56-credits from core courses and 32-credits from DCE courses), and rest 8-credits worth of courses from OE/GE from other Departments.
- II. The Item No. 02 "Approval for Examiners in M.Sc. Nanotechnology- 2018-19 onwards-Revised Version-III" (Annexure-02)- is unanimously passed and approved by all members of BPGS.
- III. The Item No. 03 "Approval for Fee structure for M.Sc. Nanotechnology- 2018-19 onwards-Revised Version-III" was discussed at length. Item No. 3 (Annexure-03) was considered *in toto* and is unanimously passed and approved by all members of BPGS.
 - 1) It is recommended that Fee for First, Second, Third and Fourth semesters be charged as applicable to any PG program in Science, except Part-B (the Departmental Component), which shall be Rs. 10,000/=.
 - 2) It is recommended that the Total Fee (all semesters) chargeable to students admitted on payment seats in M.Sc. Nanotechnology programme be Rs. 150000/= (One Lac and Fifty Thousand). It is further recommended that Department of Nanotechnology be paid full share of the payment seats fee of 04 available seats. This is important as the Department is new and needs substantial funds for establishing lab facilities and to meet research related expenditure.
 - 3) It is recommended that 4th- Semester Research Internship Fee of Rs 25,000/= be charged in addition to the fee charged as mentioned above at point 01 and point 02, as applicable. Further it is recommended that above said fee of Rs 25,000/= be directly credited to the Departmental Local Fund account by the candidates, to be utilized for direct transfer to the host laboratory in the form of Bank-Cheque.
 - 4) It is recommended that Department of Nanotechnology be allowed to pay remunerations per lecture, as applicable under University statutes to invite Scientists/Faculty/Scholars of National/International repute from state/outside the state, for delivering expert lectures in various specialized topics relevant to the field/ specialized topics in M.Sc. Nanotechnology curriculum, to students enrolled in

PTO



DEPARTMENT OF NANOTECHNOLOGY UNIVERSITY OF KASHMIR

Notes :

M.Sc. Nanotechnology, keeping in view faculty strength and workload (Annexure-01). Further, it is recommended that Fee amount collected by the Department of Nanotechnology from "Payment seats category" be utilized for paying the said remunerations. The same is recommended in the interest of the students enrolled in M.Sc. Nanotechnology programme.

IV. The Item No. 04 "Approval for Entrance test Syllabus for admission to M.Sc. Nanotechnology 2018-19 onwards" (Annexure-04) was discussed along with the Programme Eligibility. Item No. 4, is unanimously passed and approved by all members of the BPGS.

All the above recommendations are endorsed by the following members who participated in the First Board of Post Graduate Studies Meeting in Nanotechnology held in the University of Kashmir, on Oct 17, 2018:

Dr. Rabia Hamid

(Chairperson)

Coordinator, Department of Nanotechnology
University Of Kashmir, Srinagar

EXPERT MEMBERS FROM OUTSIDE J&K STATE

Prof. S. S. Islam (Approval via Email-Attached)

Director Centre for Nanoscience and Nanotechnology
Jamia Millia Islamia, New Delhi, India

EXPERT MEMBERS FROM ALLIED SUBJECTS, UNIVERSITY OF KASHMIR

Prof. Mohammad Akbar Khuroo

Head, Department of Chemistry
University of Kashmir, Srinagar

Prof Mohammad Farooq Mir

Head, Department of Physics
University of Kashmir, Srinagar

PTO



DEPARTMENT OF NANOTECHNOLOGY UNIVERSITY OF KASHMIR

Notes :

Dr. Shaida A Andrabi

Department of Biochemistry
University of Kashmir, Srinagar

Dr. Abrar Qureshi (Approval via Email-Attached)

Department of Biotechnology
University of Kashmir, Srinagar

EXPERT MEMBERS FROM DEPARTMENT OF NANOTECHNOLOGY, (DIFFERENT SPECIALTIES), UNIVERSITY OF KASHMIR

Dr. Mushtaq A Beigh

Department of Nanotechnology
University Of Kashmir, Srinagar

Dr. Faheem Arjamend

Department of Nanotechnology
University Of Kashmir, Srinagar

Dr. Shafquat Majeed

Department of Nanotechnology
University Of Kashmir, Srinagar

Dr. Tariq Maqbool

Department of Nanotechnology
University Of Kashmir, Srinagar

EXPERT MEMBERS FROM WITHIN THE STATE COLLEGES

Prof. Nazir Ahmad Shah

Principal, SSM College of Engineering and Technology,
Parihaspora, J&K

Syed Ezaz M Rizvi

Head, Department of Biochemistry
Govt. College for Women, M A Road, Srinagar, J&K

PTO