DEPARTMENT OF MATHEMATICS
UNIVERSITY OF DELHI
DELHI 110 007

PH.D. PROGRAMME 2013-2014

1.   ELIGIBILITY

i) A candidate must have obtained a Master's/M.Phil degree of the University of Delhi, or any other recognized University, or any degree recognized as equivalent to Master's/M.Phil degree Mathematics. She/he must have obtained either a minimum of 50% marks or equivalent grading in the M.Phil degree or a minimum of 55% marks or equivalent grading in the Master's degree.

ii) The following categories of candidates can be provisionally registered for the degree of Doctor of Philosophy in Mathematics.

   a. Candidates having fellowships/scholarships instituted by the University/national and international agencies under schemes approved/recognized by the University.

   b. Candidates who are otherwise eligible for admission to the Ph.D. Programme and do not have any financial assistance, will be awarded UGC (non-NET) Fellowship through an entrance examination to be conducted by the Department. The selection will be made on the basis of the relative merits considering 25% of marks obtained at the Undergraduate examinations, 25% of marks obtained at the Master's degree examinations, and 50% of marks scored in the entrance test. The minimum qualifying mark shall be 60%.

   c. Foreign students with their national or other fellowships recognized by the University of sponsored by their employers, may be given provisional admission, followed by confirmation through due process after a stipulated period of time.

   d. The University/College teachers holding a permanent, temporary or ad hoc positions and having completed two years of service as teacher in a Department/Constituent Colleges of the University of Delhi.

   e. Candidates sponsored by their employers shall be considered only if they get study leave for a period of two years to fulfill residency requirements of the University of Delhi. Provided however in order to advance research in strategic areas of national concern, scientist/professionals working at defense and space institutions/organizations of the Government of India/State Government and with whom the University has signed a Memorandum of Under, will be allowed to purse Ph.D. while working in their organizations provided that the DRC recommends that their work in their parent organization is relevant to their Ph.D. research. Such students may also be exempt from the requirement of course work under **amended Clause 4 E of Ordinance VI-B** (amended vide notification dated 29th November, 2013)

f.   Permanent teachers/ employees who are in service in any other recognized University/ College/ Research Institute in Indian and have a minimum of three years teaching/ research experience, will be considered if they get study leave for a period of two years to fulfill residency requirements of the University of Delhi.

2.   REGISTRATION

A candidate for Ph.D. Programme in the Department of Mathematics will be registered by the Board of Research Studies (Mathematical Sciences) on the recommendations of the Departmental Research Studies subject to the availability of a supervisor in the area of his/her interest.

3.   COURSE WORK

All candidates, except those who have been exempted from course work by the DRC, will be required to qualify Pre-Ph.D examination with three courses, selecting at most two from a group listed hereunder.

Group A

(i)   Distribution Theory & Calculus on Banach Spaces
(iii)   Operator Theory and Function Spaces
(iv)   Geometric Function Theory
(v)   Introduction to Operator Algebras
(vi)   Advanced Frame Theory

Group B

(i)   Rings and Modules
(ii)   Differential Manifolds
(iii)   Group Rings

Group C

(i)   Graph and Network Theory
(ii)   Convex and Non smooth Analysis
(iii)   Combinatorial Mathematics
(vii)   Advanced Compressible Flows

4.   SCHEME OF EVALUATION

The candidates will be evaluated in each course out of 75 marks. The evaluation in each course will be based on the student's performance in a written examination and internal assessment. Each paper will be of 50 marks and of 3 hrs. duration. 25 marks in each course are assigned for internal assessment which will be based on assignments, attendance, class-room performance and seminars.

(i)   50% marks in each course will be required to pass.

(ii)   Supplementary examination will be conducted for those who fail in the course work examination. Failed students can appear only in the supplementary examination of the same year which will be conducted within 3 months of the declaration of the result of course work.

(iii) No student shall be allowed to appear in course work examination more than twice.

5. CRITERION FOR RECOGNIZING SUPERVISORS FROM COLLEGES OF UNIVERSITY OF DELHI

(i)   A permanent college teacher with at least 3 years of teaching experience and 2 years of research experience after obtaining Ph.D. degree may be recognized as a supervisor for guiding Ph.D. students.

(iv)   For recognition, the teacher should be active in research; he/she should have published at least one research paper in journals listed in SCI/matscinet/scopus/any recognized Data Base from post-Ph.D. work during last five years.

(iii) The number candidates permitted to be registered may be as follows:

Associate Professor: 4   Assistant Professor: 2

iv)   The above guidelines shall be applicable for new registrations even if the supervisors have already registered students.

6. FUNCTIONING OF ADVISORY COMMITTEE

Every candidate shall have an Advisory Committee.

i)   Supervisors as convener of the Advisory Committee must ensure that a meeting of the committee takes place at least once in a year. The candidate may also be asked to make presentation before the committee. Minutes of the meetings should be submitted to the Department. This will be applicable to all registered students.

ii)   All the annual reports of the candidates to be sent to BRS should go through DRC to enable DRC to verify if the meetings of the advisory committees have taken place.

7. ATTENDANCE

The minimum percentage of lectures attended and seminar participated in is 2/3rd of the lectures delivered and seminars held separately.