Department of Mathematics
Minutes of the meeting of the Academic Committee
Friday, 29 April 2022 (02:30 PM)

A meeting of the Academic Committee was convened in the department at 02:30 PM. The following members were present:

1. Prof. Sunder Lal, Ex. VC, Purvanchal University, Jaunpur
2. Prof. S.P. Singh, Dept. of Mathematics, DEI, Agra
3. Dr. Rajesh Johri (Internal Expert), Agra College, Agra
4. Prof. Sanjay Chaudhary (Member), Department of Mathematics, IBS, Agra
5. Sanjeev Kumar (Convener), Head, Department of Mathematics, IBS, Agra

A. The Committee confirmed the minutes of its meeting held on 12.04.2017.

B. The Course Structure of **PGDR (Mathematics)**, one semester only, from the session 2022-23 is as per NEP-2020: (30 seats)

First Semester	**Credit/ Marks**
C1: Mathematical Modeling	06/100
C2: Computational Software	06/100
C3: Research Methodology	04/100

Research Project

1. Each course will be of 06/04 Credit (25% Internal Examination and 75% Semester Examination). There will be 3 internal tests of 12.5 marks each and best of two will be considered.
2. Seminar will be given by the student.
3. Research Project work (Review of Literature) will be qualifying (satisfactory/ unsatisfactory) only.
4. The total credit for **PGDR (Mathematics)** will be of 16 Credit.

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4. The total credit for **PGDR (Mathematics)** will be of 16 Credit.

C. The Course Structure M. **Sc. (Mathematics)** for all semesters for session 2022-23 is as per NEP-2020 (along with soft electives)(40 seats)

I/ VII Semester

C-1: Advanced Abstract Algebra (5)

C-2: Ordinary Differential Equations and Partial Differential Equations (5)

C-3: Probability and Statistics (5)

C-4: Computational Numerical Methods (5)

C-5: **Minor (4)**

II/VIII Semester

C-6: Real Analysis (4)

C-7: Functional Analysis (4)

C-8: Mathematical Modelling (4)

C-9: Inventory Theory and Queuing Theory (4)

C-10: Practical: 'C'/ 'C++'/ Python (4)

Research Project (8)

III/IX Semester

C-11: Topology (4)

C-12: Fuzzy Sets and Fuzzy Logics (4)

C-13: Mathematical Programming (4)

C-14: Elective-I (4)

Discrete Mathematics, Financial Mathematics, Reliability Theory, Coding Theory, Summability Theory.

C-15: Practical: MATLAB/Mathematica (4)

IV/X Semester

C-16: Complex Variables (5)

C-17: Fluid Dynamics (5)

C-18: Elective-II (5)

C-19: Elective-III (5)

Any two of the following: Number Theory and Cryptography, Soft Computing, Wavelet Analysis, Control Theory, Calculus of Variation & Integral Equation, Special Functions, Bio-mathematics, Measure Theory.

Research Project (8)

1. Each course will be of 05/04 Credit (25% Internal Examination and 75% Semester Examination). There will be 3 internal tests of 12.5 marks each and best of two will be considered. A seminar in each semester will be given by the student. A research project in each semester will be completed by the student but the evaluation of combined research project (I & II semesters/ III & IV semesters) will be done at the end of the year. It will be of 100 marks and of 8 credits in each year.
2. The total credit for **M.Sc. (Mathematics)** will be of 100 Credit.

C. **B.Sc. (Mathematics as subject): 6 semesters** (20 seats)

The details about B.Sc. program are as per NEP-2020 structure. State Govt./ University already framed the course structure, syllabus, ordinances etc, (Government Order No. 401/70-3-2022 dated 09.02.2022 National Education Policy 2020 (NEP-2020)). This GO with NEP-2020 syllabus and ordinance is accepted for Under-Graduate course in Mathematics as a subject, started from the session 2022-23.

Syllabus for these Courses is as per enclosure.

(Prof. Sunder Lal) (Prof. S.P. Singh) (Dr. Rajesh Johri)

(Prof. Sanjay Chaudhary) (Prof. Sanjeev Kumar) 29/09/2022

PLAN FOR CREDIT DISTRIBUTION FOR COURSES M.SC./ PGDR IN MATHEMATICS

YEAR	NAME OF DEGREE	SEM.	PAPER	MAX MARKS			CREDITS	TOTAL CREDITS/ SEMISTER	TOTAL CREDITS
				EXT.	INT.				
4	M.Sc. Mathematics (or BACHELOR (RESEARCH) If leave in IV year) (40 seats)	VII	C1: Advanced Abstract Algebra	75	25	100	5	24	52
			C2: ODE & PDE	75	25	100	5		
			C3: Probability and Statistics	75	25	100	5		
			C4: Computational Numerical Methods	75	25	100	5		
			C-5: MINOR	75	25	100	4		
		VIII	C6: Real Analysis	75	25	100	4	28	
			C7: Functional Analysis	75	25	100	4		
			C8: Mathematical Modelling	75	25	100	4		
			C9: Inventory Theory and Queuing Th.	75	25	100	4		
			C10: Practical in 'C'/ 'C++/ Python			100	4		
			RESEARCH PROJECT			100	8		
5	M.Sc. Mathematics (40 seats)	IX	C11: Topology	75	25	100	4	20	48
			C12: Fuzzy Sets and Fuzzy Logics	75	25	100	4		
			C13: Mathematical Programming	75	25	100	4		
			C14: Elective-I	75	25	100	4		
			C15: Practical in MATLAB/ Mathematica			100	4		
		X	C16: Complex Variables	75	25	100	5	28	
			C17: Fluid Dynamics	75	25	100	5		
			C18: Elective-II	75	25	100	5		
			C19: Elective-III	75	25	100	5		
			RESEARCH PROJECT			100	8		
6	P.G.D.R in Mathematics (30 seats)	XI	C1: Mathematical Modelling	75	25	100	6	16	16
			C2: Computer & Mathematical Software	75	25	100	6		
			C3: Research Methodology	75	25	100	4		
			RESEARCH PROJECT				QUALIFYING		