FACULTY COUNCIL OF SCIENCE
JADAVPUR UNIVERSITY

NOTICE

It is to notify for information of all concerned that the classes of Ph.D. course Work for the session 2021 - 2022 in the Department of Mathematics under Faculty of Science will commence on **01.07.2022**. All registered candidates who are willing to attend Ph.D. course work under the said department are requested to submit Ph.D. Course Registration form duly forwarded by the concerned Supervisor(s) and HoD of the respective department, to the Office of the Dean & Secretary, Faculty of Science, TEQIP Building on any working days except Sundays, Saturdays and public holidays. The last date of such submission is **Thursday, the 30th of June, 2022**.

Candidates are further requested to contact the HoD of the respective department for the schedule in detail.

The course work registration form and the offered subjects / modules are appended in the consecutive pages.

Sd/-
(Prof. Subenoy Chakraborty)
Dean,
Faculty Council of Science

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যাদবপুর বিশ্ববিদ্যালয়

JADAVPUR UNIVERSITY
KOLKATA-700 032

FORM FOR COURSE REGISTRATION FOR PH.D.SCHOLARS
(UNDER ~~F.E.T.~~/F.SC./~~F.A.~~)

DEPARTMENT/~~SCHOOL~~/~~INSTITUTION~~ : MATHEMATICS
(in which registered for Ph.D.)

(ENROLMENT FOR SEMESTER: JULY/DECEMBER, JANUARY/JUNE)

1. Name in full (in Block letters) : _____
2. Sex(Male/Female) : _____
3. Address for Communication: _____

   _____
4. Phone No._____ Mobile No._____ Email:_____
5. Course Taken:

Sl.No.	Name of Subject/course	Subject Code	Department/~~School~~/~~Institution~~ under which subject offered
1.	Research Methodology	A	MATHEMATICS
2.	Review of Research Work	B	MATHEMATICS
3.			MATHEMATICS
4.			MATHEMATICS
5.			MATHEMATICS
6.			MATHEMATICS

Date: _____ Signature of the student in full

Head of the Department/~~Director of School~~ **Supervisor(s)**

Signature of the Dean, Faculty of Science

Registration No._____ of _____

Date of Registration_____

Superintendent, Ph.D. Cell, Faculty of Science

***Please enclose copy of registration letter and money receipt with this form.*

MODULES / SUBJECTS OFFERED FOR PH.D.COURSEWORKUNDERDEPARTMENTOF MATHEMATICS

FOR THE SESSION 2021 - 2022

Courses	Subject	Full Marks
Compulsory Units	A. Research Methodology	50
	B. Review of Research Work	50
Elective Units	1. Set Theory	25
	2. Control Theory and its Application in Disease Dynamics	25
	3. Impulsive Control & its Application in Production Management	25
	4. Biofluid Dynamics	25
	5. Boundary Layer Theory and Computation	25
	7. Ricci Flow	25
	8. Some Structures on Differentiable Manifolds	25
	9. Geometric notions in Banach space	25
	10. Orthogonality notions in Banach space	25
	11. Numerical range	25
	12. Banach algebra and Spectral theory	25
	13. Topological Groups	25
	14. Computation using Mathematica and MatLab	25
	15. Integral Equations	25
	16. Theory of Distribution	25
	17. Introduction to the Theory of Water Waves	25
	18. Modules, Rings, Groups and Categories	25
	19. Lattice Theory	25
	21. Theory of Semi groups	25
	22. Theory of Semirings	25
	23. Cosmology	25
	24. Lagrangian & Hamiltonian formulations of general relativity	25
	25. Rotating Black Holes	25
	26. Geodesic Congruence	25
	28. Fundamentals of Distributed Computing	25
	29. Paradigms of Distributed Computing	25
	33. Theory of Digraphs	25
	34. Theory of Intersection Graphs	25
	35. Value Distribution Theory of Nevanlinna	25
	36. Nonlinear Wave Structures in Plasma Dynamics	25
	37. Theory of Electrokinetic Flow	25
	40. Dynamic Games	
	41. Delay-Differential Equations in Mathematical Biology	
	42. Advanced Mathematical Ecology	
	45. Hydrodynamic Instabilities in thermal convection	
	46. Advanced Integral Transforms	
	47. Geometric Functions Theory	

N.B.: Students to opt elective units of 100 marks out of the elective units offered. 16 lectures to be attended for each 25marks.