SHIVAJI UNIVERSITY KOLHAPUR

Circular No. (293) Exam of Oct/Nov.-2024 to be held in Oct/Nov.-2024.

Revised Draft Programme of the Mathematics Part-I (Sem.- I) NEP-2020 Course Code-2375 & Part-I & II (Sem.- I to Sem.-IV) Course Code- 2353 ,2341 & 205.

M.Sc. Mathematics with Computer Application Part-I (Sem.- I) NEP-2020 Course Code-2374 & M.Sc. Tech. (Industrial Mathematics with Computer Application) Part-I & II (Sem. To Sem.- III) Course Code- 2355 & 252. & course code 252 M.Sc. Tech. Part-II & III   (Sem.- III to V) Examination Oct/Nov -2024 to be held in Oct/Nov/Dec. -2024

INSTRUCTIONS-Common instruction as per Circular No. SU/Appointment/RVC/29

Dated 01/02/2020 and also available in University website www.unishivaji.ac.in

The Written Examination will be held at following center and Places declared:-

Sr. No	Exam	College Code	Places
1	M.Sc. Mathematics M.Sc. Tech. (Industrial Mathematics with Computer Application)	264	Department of Mathematics, Shivaji University Kolhapur
2	M.A./M.Sc. Mathematics		Department of Distance Education, Kolhapur
3	M.Sc. Physics, M.A./M.Sc. Mathematics	01	Vivekanand College, Kolhapur
4	M.A./M.Sc. Mathematics	50	Yashawantrao Chavan Warna Mahavidyalaya, WARNANAGAR
5	M. Sc Physics M.A./M.Sc. Mathematics	30	The New College Kolhapur
6	M.A./M.Sc. Mathematics M.A./M. Sc. Geography M.Sc. Information Technology	90	Karmveer Bhaurao Patil College, URUN –ISLAMPUR.
7	M.Sc. Physics, M.A./M.Sc. Mathematics	80	Willingdon College, SANGLI
8	M.A./M. Sc. Geography, Industrial Microbiology, M. Sc.. Statistics, M.A./M. Sc.. Mathematics,	156	Sadguru Gadage Maharaj College, KARAD
9	M.sc Physics, Statistics, M.A./M.Sc.. Mathematics	149	Yashwantrao Chavan Institute of Science, SATARA.

Note:- In case of any Query found in respective Question Paper, student shall communicate the same through Principal / Senior Supervisor within 03 days from the date of concerned Question paper to, Deputy Registrar, Appointment Section, Room No. 205 Exam Building No. 1 Shivaji Univeristy, Kolhapur- 416004.

M.A./M.Sc. Mathematics [NEP-2020] (Course Code -2375)

Branch Code- M.A/M.Sc. Mathematics [NEP-2020]				From Oct—2023]
		Part I :- Sem.-I		
PAPER NO.	PAPER CODE	PAPER NAME	DAY & DATE	Morning
Major Mandatory				
I	92492	Linear Algebra	Wednesday 04/12/2024	10:30 A.M. To 01:30 P.M.
II	92493	Real Analysis	Monday 09/12/2024	
III	92494	Ordinary Differential Equations	Saturday 07/12/2024	
IV	92495	Numerical Analysis-I	Friday 06/12/2024	10:30 A.M. To 12:00 P.M.
Research Methodology				
V	93744	Research Methodology	Wednesday 11/12/2024	10:30 A.M. To 01:30 P.M.
Major Elective Any One Of The Following Paper				
VI	92383	Differential Geometry	Friday 13/12/2024	
	92384	Integral Transforms		
	92385	Theory of Computation		
	92386	Graph Theory-I		
	92387	Lattice Theory-I		
	92388	Dynamical Systems- I		
	92496	Combinatorics		
	92389	Basics of Python		
	92390	Web Technology		
	92497	Linear Programming and Its Application		

M.A./M.Sc. Mathematics [NEP] (Course Code -2353)

Branch Code- M.A/M.Sc. Mathematics [NEP]				From Oct—2022
		Part I :- Sem.-I		
PAPER NO.	PAPER CODE	PAPER NAME	DAY & DATE	Morning
I	87751	Advanced Calculus	Saturday 14/12/2024	10:30 A.M. To 01:30 P.M.
II	87752	Linear Algebra	Wednesday 04/12/2024	
III	87753	Complex Analysis	Tuesday 10/12/2024	
IV	87754	Classical Mechanics	Monday 16/12/2024	
V	87755	Ordinary Differential Equations	Saturday 07/12/2024	
Choose Any One Of The Following Paper				
VI	87756	Number Theory	Wednesday 18/12/2024	
	87853	Mathematical Methods		

M.A/M.Sc. Mathematics [NEP]   **(Course Code -2375)**

Branch Code - M.A/M.Sc. Mathematics [NEP]				**From March-2024**
		Part I - Sem II		
PAPER NO.	**PAPER CODE**	**PAPER NAME**	**DAY & DATE**	**Morning**
VII	92524	Advanced Calculus	Saturday 14/12/2024	10:30 A.M. To 01:30 P.M.
VIII	92522	Algebra	Tuesday 17/12/2024	02:30 P.M. To 05:30 P.M.
XIX	92523	Topology	Thursday 19/12/2024	
X	92525	Numerical Analysis II	Friday 27/12/2024	10:30 A.M. To 12:00 P.M.
Major Elective Any One Of The Following Paper				
XII	92527	Quantitative Techniques in Operation Research	Tuesday 24/12/2024	02:30 P.M. To 05:30 P.M.
	92526	Number Theory		
	94547	Advanced Algebra		
	94549	Algebraic Automata Theory		
	94548	Difference Equations		
	94551	Lattice Theory-II		
	94554	PHP With MySQL		
	94553	Data Science with Python		
	94550	Graph Theory-II		
	94552	Dynamical Systems – II		

M.A/M.Sc. Mathematics [NEP]   **(Course Code -2353)**

Branch Code - M.A/M.Sc. Mathematics [NEP]				**From March-2023**
		Part I - Sem II		
PAPER NO.	**PAPER CODE**	**PAPER NAME**	**DAY & DATE**	**Morning**
VII	87757	Real Analysis	Monday 09/12/2024	10:30 A.M. To 01:30 P.M.
VIII	87758	Algebra	Tuesday 17/12/2024	02:30 P.M. To 05:30 P.M.
XIX	87759	Topology	Thursday 19/12/2024	
X	87760	Numerical Analysis	Friday 06/12/2024	
XI	87761	Partial Differential Equations	Wednesday 11/12/2024	
Choose Any One Of The Following Paper				02:30 P.M. To 05:30 P.M.
XII	87762	Operations Research	Friday 13/12/2024	
	90173	Integral Transforms		

Branch Code - M.A/M.Sc. Mathematics [NEP]				From March-2024
Part II - Sem III				
PAPER NO.	**PAPER CODE**	**PAPER NAME**	**DAY & DATE**	**Morning**
VII	95476	Functional Analysis	Thursday 05/12/2024	10:30 A.M. To 01:30 P.M.
VIII	92477	Complex Analysis	Tuesday 10/12/2024	
XIX	92478	Classical Mechanics	Monday 16/12/2024	
X	92479	Advanced Discrete Mathematics	Thursday 12/12/2024	10:30 A.M. To 12:00 P.M.
Major Elective Any One Of The Following Paper				
XII	95480	Fluid Dynamics	Saturday 21/12/2024	10:30 A.M. To 01:30 P.M.
	95481	Fuzzy Set Theory		
	95482	Fixed Point Theory & Applications		
	95483	Measure and Integration		
	95484	Introduction to Cryptography		
	95485	Automata, Languages and computations		
	95487	Theory of Ideals		
	96158	Algebraic Number Theory		
	96159	Dynamics Equation on Time Scales		
	96160	Coding Theory		
	97035	Software Engineering and Project Management		

M.A/M.Sc. Mathematics [NEP] (Course Code- 2353)

Branch Code - M.A/M.Sc. Mathematics (NEP)				From March-2022
		Part II - Sem III		
PAPER NO.	**PAPER CODE**	**PAPER NAME**	**DAY & DATE**	**Morning**
XI	90885	Functional Analysis	Thursday 05/12/2024	10:30 A.M. To 01:30 P.M.
Any one of the following				
XII	90886	Advanced Discrete Mathematics	Thursday 12/12/2024	
	92093	Topological Vector Spaces		
XIII, XIV & XV Any Three of the following Papers				
	92096	Lattice Theory – I	Friday 20/12/2024	
	92104	Algebraic Topology		
	92102	Space Dynamics- I	Friday 13/12/2024	
	92106	Coding Theory	Saturday 21/12/2024	
	90887	Non-linear Optimization Techniques		
	92098	Dynamical Systems – I	Monday 23/12/2024	10:30 A.M. To 01:30 P.M.
	92101	Commutative Algebra - I		
	90889	Fluid Dynamics		
	92105	Probability and Stochastic Processes		
	92095	General Relativity – I	Tuesday 24/12/2024	
	90890	Combinatorics		
	92094	Fractional Calculus	Thursday 26/12/2024	
	90888	Fuzzy Mathematics –I	Friday 27/12/2024	
	92097	Approximation Theory	Saturday 28/12/2024	
	92103	Theory of Computation	Thursday 26/12/2024	
	92100	Differential Geometry	Monday 30/12/2024	
	92099	Graph Theory-I	Tuesday 31/12/2024	

Branch Code- M.A/M.Sc. Mathematics   (C.B.C.S.)   **From March—2024**

PAPER NO.	PAPER CODE	PAPER NAME	DAY & DATE	Evening
		Part II :- Sem.-IV		
	90891	Field Theory	Tuesday 31/12/2024	
	90892	Integral Equations	Thursday 02/01/2025	
	92127	Measure and Integration		
		Paper No. – XVIII, XIX & XX – Choose any Three of the following		
	90896	Algebraic Number Theory	Friday 03/01/2024	
	92345	Algebraic Automata Theory		
	92347	Automatic Languages and computation		
	86715	Operations Research –II	Saturday 07/12/2024	
	90541	Automata Theory		
	90894	Fuzzy Mathematics-II	Monday 30/12/2024	
	92342	Theory of Distributions		
	90895	Computational Fluid Dynamics	Saturday 14/12/2024	
	92600	Analysis on Manifolds		
	92128	Fractional Differential Equations	Wednesday 18/12/2024	
	92599	Graph Theory-II		
	92597	Wavelet Analysis	Thursday 19/12/2024	
	92598	Dynamical Systems- II		
	92343	Commutative Algebra-II	Wednesday 01/01/2025	
	92344	Space Dynamics-II		
	92346	Dynamics Equation on Time Scales	Saturday 21/12/2024	
	92130	Lattice Theory-II		
	92129	General Relativity-II		
	90893	Quantitative Techniques In Operations Research	Tuesday 17/12/2024	02:30 P.M. To 05:30 P.M.

		Part II :- Sem.-IV		
Branch Code- M.A/M.Sc. Mathematics (C.B.C.S.)				**From March—2023**
PAPER NO.	**PAPER CODE**	**PAPER NAME**	**DAY & DATE**	**Evening**
	86711	Integral Equations	Thursday 02/01/2025	02:30 P.M. To 05:30 P.M.
	86712	Field Theory	Tuesday 31/12/2024	
Paper No. – XVIII, XIX & XX – Choose any Three of the following				
	86714	Algebraic Number Theory	Friday 03/01/2024	
	90542	Automatic Languages and computation		
	86715	Operations Research –II	Saturday 07/12/2024	
	90541	Automata Theory		
	86716	Fuzzy Mathematics-II	Monday 30/12/2024	
	90540	Theory of Distributions		
	86717	Computational Fluid Dynamics	Saturday 14/12/2024	
	90539	Analysis on Manifolds		
	86718	Fractional Differential Equations	Wednesday 18/12/2024	02:30 P.M. To 05:30 P.M.
	90538	Graph Theory-II		
	86719	Wavelet Analysis	Thursday 19/12/2024	
	90537	Dynamical Systems- II		
	86720	Commutative Algebra-II	Wednesday 01/01/2025	
	86721	Space Dynamics-II		
	86722	Dynamics Equation on Time Scales	Saturday 21/12/2024	
	90536	Lattice Theory-II		
	90535	General Relativity-II		

M.Sc. (Mathematics with Computer Application) [NEP-2020]   (Course Code- 2374)

Branch Code- M.Sc. (Mathematics with Computer Application)			From Oct—2023	
		Part I :- Sem.-I		
PAPER NO.	**PAPER CODE**	**PAPER NAME**	**DAY & DATE**	**Morning**
Major Mandatory				
I	91787	Linear Algebra	Wednesday 04/12/2024	10:30 A.M. To 01:30 P.M.
II	91788	Object Oriented Programming	Wednesday 18/12/2024	
III	91789	Database Management System	Friday 13/12/2024	
IV	91790	Numerical Analysis-I	Friday 06/12/2024	10:30 A.M. To 12:00 P.M.
Research Methodology				
V	91801	Research Methodology	Wednesday 11/12/2024	10:30 A.M. To 01:30 P.M.
Major Elective Any One Of The Following Paper				
VI	91791	Combinatorics	Monday 16/12/2024	
	91792	Differential Geometry		
	91793	Integral Transforms		
	91794	Theory of Computation		
	91795	Graph Theory-I		
	91796	Lattice Theory-I		
	91798	Dynamical Systems- I		
	91797	Linear Programming and Its Application		
	91799	Basics of Python		
	91800	Web Technology		

M.Sc. Tech. (Industrial Mathematics with Computer Application) [NEP]
(Course Code- 2355)

Branch Code- M.Sc. Tech. (Industrial Mathematics with Computer Application)				
				From Oct--2022
		Part I :- Sem.-I		
PAPER NO.	**PAPER CODE**	**PAPER NAME**	**DAY & DATE**	**Morning**
V	88608	Advanced Calculus	Saturday 14/12/2024	10:30 A.M. To 01:30 P.M.
III	88609	Linear Algebra	Wednesday 04/12/2024	
I	88610	Discrete Mathematical Structures-I	Saturday 07/12/2024	
IV	88611	Computer Architecture	Thursday 05/12/2024	
II	88612	Object Oriented Programming	Wednesday 18/12/2024	

M.Sc. (Mathematics with Computer Application) [NEP-2020]   (Course Code- 2374)

Branch Code- M.Sc. (Mathematics with Computer Application)   From March—2024

PAPER NO.	PAPER CODE	PAPER NAME	DAY & DATE	Morning
		Part I :- Sem.-II		
Major Mandatory				
I	94755	Algebra	Tuesday 17/12/2024	02:30 P.M. To 05:30 P.M.
II	94757	Java Programming	Thursday 19/12/2024	
III	94756	Advanced Calculus	Saturday 14/12/2024	10:30 A.M. To 01:30 P.M.
Major Elective Any One Of The Following Paper				
	94765	Quantitative Techniques in Operation Research	Saturday 21/12/2024	02:30 P.M. To 05:30 P.M.
	94759	Number Theory		
	94760	Advanced Algebra		
	94762	Algebraic Automata Theory		
	94761	Difference Equations		
	94764	Lattice Theory-II		
	94768	PHP With MySQL		
	94763	Graph Theory-II		
	94764	Lattice Theory-II		
	94766	Dynamical Systems- II		
	94767	Data Science with Python		

M.Sc. Tech. (Industrial Mathematics with Computer Application) [NEP]
(Course Code- 2355)

Branch -M.Sc. Tech. (Industrial Mathematics with Computer Application)
Revised From March-2023)

PAPER NO.	PAPER CODE	PAPER NAME	DAY & DATE	Morning
		Part I :- Sem.-II		
VI	88614	Numerical Analysis	Friday 06/12/2024	02:30 P.M. To 05:30 P.M.
VII	88615	Algebra	Tuesday 17/12/2024	
VIII	88616	Discrete Mathematical Structures-II	Wednesday 11/12/2024	
IX	88617	Data Structures	Monday 16/12/2024	
X	88618	Database Management System	Friday 13/12/2024	10:30 A.M. To 01:30 P.M.

M.Sc. (Mathematics with Computer Application) [NEP-2020]   (Course Code- 2374)

Branch Code- M.Sc. (Mathematics with Computer Application)   From March—2024

PAPER NO.	PAPER CODE	PAPER NAME	DAY & DATE	Morning
Part II:- Sem.-III				
Major Mandatory				
I	95948	Ordinary Differential Equations	Saturday 07/12/2024	10:30 A.M. To 01:30 P.M.
II	95949	Real Analysis	Thursday 12/12/2024	
III	95950	Front End Development	Monday 09/12/2024	
IV	95951	Field Theory	Thursday 05/12/2024	10:30 A.M. To 12:00 P.M.
Major Elective Any One Of The Following Paper				
	95952	Algebraic Number Theory	Wednesday 18/12/2024	10:30 A.M. To 01:30 P.M.
	95953	Advanced Discrete Mathematics		
	95954	Coding Theory		
	95955	Introduction to Cryptography		
	95956	Automata, Languages and computations		
	95957	Software Engineering and Project Management		
	95958	Android Development with Kotlin		
	95959	Cyber Security		

M.Sc. Tech. (Industrial Mathematics with Computer Application) [NEP]
    (Course Code- 2355)

Branch Code   -M.Sc. Tech. (Industrial Mathematics with Computer Application   (From Oct-2023)

PAPER NO.	PAPER CODE	PAPER NAME	DAY & DATE	Morning
Part II :- Sem.-III				
XI	91502	Complex Analysis	Thursday 12/12/2024	10:30 A.M. To 01:30 P.M.
XII	91503	Ordinary Differential Equations	Saturday 07/12/2024	
XIII	91504	Design and Analysis of Algorithms-I	Wednesday 18/12/2024	
V	91505	Operating System	Friday 20/12/2024	
III	91506	Python Programming	Saturday 21/12/2024	

M.Sc. Tech. (Industrial Mathematics with Computer Application) [NEP]
(Course Code- 2355)

Branch Code - M.Sc. Tech. (Industrial Mathematics with Computer Application)				
				From March-2024
		Part II :- Sem.-IV		
PAPER NO.	PAPER CODE	PAPER NAME	DAY & DATE	Evening
I	91509	Real Analysis	Monday 09/12/2024	10:30 A.M. To 01:30 P.M.
II	91510	Operation Research	Thursday 05/12/2024	02:30 P.M. To 05:30 P.M.
IV	91511	Software Engineering	Monday 23/12/2024	10:30 A.M. To 01:30 P.M.
V	91512	PHP With My SQL	Tuesday 24/12/2024	02:30 P.M. To 05:30 P.M.
VI	91513	Java Programming	Thursday 19/12/2024	

M.Sc. TECH (MATHEMATICS)   (C.B.C.S.)   (Course Code- 252)

Branch Code - M.Sc. TECH (MATHEMATICS) (C.B.C.S.) From Oct-2020				
		Part II :- Sem.-IV		
PAPER NO.	PAPER CODE	PAPER NAME	DAY & DATE	Evening
I	79483	Real Analysis	Monday 09/12/2024	10:30 A.M. To 01:30 P.M.
II	79884	Operation Research	Thursday 05/12/2024	02.30 P.M. To 05.30P.M.
IV	79485	DAA-II	Saturday 07/12/2024	
V	79486	PHP With My SQL	Tuesday 24/12/2024	
VI	79487	Java Programming	Thursday 19/12/2024	

M.Sc. Tech. (Industrial Mathematics with Computer Application) [NEP]
(Course Code- 2355)

Branch Code - M.Sc. Tech. (Industrial Mathematics with Computer Application)				
				From Oct-2024S
		Part III :- Sem.-V		
PAPER NO.	PAPER CODE	PAPER NAME	DAY & DATE	Morning
I	95972	Functional Analysis	Tuesday 10/12/2024	10:30 A.M. To 01:30 P.M.
II	95973	Web Programming	Wednesday 04/12/2024	
III	95974	Artificial Intelligence	Monday 23/12/2024	
IV	95975	Cyber Security	Wednesday 18/12/2024	
Paper No. V- Choose any One of the following				
	95976	Compiler Techniques	Friday 20/12/2024	
	95977	Computer Networks		
	95978	Cloud Computing		
	95979	Machine Learning		

M.Sc. TECH (MATHEMATICS)   (C.B.C.S.)   **(Course Code- 252)**

PAPER NO.	PAPER CODE	PAPER NAME	DAY & DATE	Morning
Branch Code - M.Sc. TECH (MATHEMATICS)   (C.B.C.S.)   From Oct-2020
Part III :- Sem.-V		
I	81119	Advanced Web Technology	Wednesday 04/12/2024	10:30 A.M. To 01:30 P.M.
II	81120	Software Engineering	Monday 23/12/2024	
III	81121	Computer Networks	Saturday 07/12/2024	
IV	81122	Cyber Security	Wednesday 18/12/2024	
Paper No. V- Choose any One of the following
	81123	Compiler Techniques	Friday 20/12/2024	
	81124	Linux Operating System		
	81125	Android Programming		
	81126	Machine Learning		

Sd/-

Dr. Ajitsinh. N. Jadhav

Vidyanagar,   **DIRECTOR**

Kolhapur – 416 004   **BOARD OF EXAMINATIONS AND EVALUATION**

Date :- 13/11/2024