

### SHIVAJI UNIVERSITY, KOLHAPUR.

#### Circular No 66 Winter Session Online Exam of Oct 2021

Final Programme of M.Sc Part I and M.Sc Part II (Sem II To IV) C.B.C.S(Course Code 205,)Zoology,Organic,Inorganic,Physical,Analytical,Industrial,andAppliedChemistry, Botany,HorizontalMobility(Bio-Tech,Bio-Chemistry,Environmental-Biotech, Microbiology,Pharmaceutical,Microbiology),Agrochemical&pestManagement,Electronics, ComputerScience,Geology General Microbiology Examination of Oct/Nov 2021 to be held in February/March 2022.

<u>INSTRUCTION:</u>- Common instruction as per Circular No SU/Appointment /RVC/19 dated 14-01-2022 and also available on University Website <a href="https://www.unishivaji.ac.in">www.unishivaji.ac.in</a>

### 1) The Online examination will be conducted in the following order

#### M.Sc Zoology

	Branch :- M.Sc Part I :- Sem. II ZOOLOGY (C.B.C.S.)				
Paper No	Paper Code	Paper Name	Day and Date	Paper Session-II	
CC-201	77940	Physiological Chemistry	Monday 28-2-2022	From 12 20mm	
CC-202	79228	Bioinstrumentation and Biostatistics	Wednesday 2-3-2022	From 12.30pm to	
CC-203	79229	Anatomy and Physiology	Thursday 3-3-2022	1.30pm	
CC-204	79230	Biology of Parasites	Friday 4-3-2022		

M.Sc Zoology (C.B.C.S)

Branch –M.Sc Part II-Sem-III ZOOLOGY (C.B.C.S.)				
			New Revised From	m Oct. 2020
Paper No	Paper Code	Paper Name	Day and Date	Paper Session-IV
CC-301	80554	Genetics	Tuesday 22.2.2022	
CBE-302	80555	Enzymology	Wednesday 23-2-2022	
		THOOSE ANY ONE OF THE FOLLOWING	J	
	80556	Molecular Biology of the Gene		
CCS-303	80558	Animal Physiology		- 1.20
	80560	Basic Entomology	Thursday	From 4.30pm to 5.30pm
	80562	Fisheries Resources Inland and Marine fisheries	24-2-2022	
	80564	General Sericulture and management of Mulberry		2.2 op.ii
		CHOOSE ANY ONE OF THE FOLLOW	ING	
	80557	Development Biology		
CCS-304	80559	Applied Physiology	Friday	
	80561	Agricultural Entomology	•	
	80563	Fish Pathology & Reproductive Endocrinology	25-2-2022	
	80565	Silkworm Biology and Rearing Technology		

M.Sc Zoology (C.B.C.S)

Last chance upto	Oct 2021	Branch – M.Sc Part II	I-Sem-IV ZOOLOGY(	C.B.C.S.)
-			•	From April 2015
Paper No	Paper Code	Paper Name	Day and Date	Paper Session-II
XIII	65108	Animal Cells in	Tuesday	
		Biotechnology	22.2.2022	
XIV	65109	Toxicology and Immunology	Wednesday	
			23-2-2022	
		CHOOSE ANY ONE OF THE FOLLO	WING	
	65112	Cell in differentiation,		
Paper – NO		development and		
XV		specialization	Thursday	
12,	65113	Physiology of Health	24-2-2022	
	65114	Insect Anatomy and Physiology	24-2-2022	From 12.30pm
	65115	Aquaculture practices		to
	65181	Cytogenetic and breeding of		
		silkworm & Host Plants		1.30pm
	Paper No-XV	I CHOOSE ANY ONE OF THE FOLL	OWING	
	65116	Cell Pathology		
Paper – NO	65117	Clinical Physiology	Friday	
XVI	65118	Pest Management Concepts	,	
2111	65119	Fishery Technology	25-2-2022	
	65182	Grain age, Silk Technology		
		and Economics of Sericulture		
CBCS Elective			Saturday 26-2-2022	
Paper From	65762	Biology of Reproduction		
March. 2016				

M.Sc Zoology (C.B.C.S)

Branch – M.Sc Part II-Sem-IV ZOOLOGY (C.B.C.S.)				
New Revised From	March 2021	`	,	
Paper No	Paper Code	Paper Name	Day and Date	Paper Session -II
CC-401	81609	Animal Cell Culture	Tuesday	
			22.2.2022	
	CHOOSE ANY	ONE OF THE FOLLOWING	Wednesday	
CBE-402	81610	Toxicology	23-2-2022	
	81611	Evolution and Behavior		
		ONE OF THE FOLLOWING		
CCS-403	81612	Immunology		
	81614	Physiology of Health	Thursday	
	81616	Insect Anatomy and Physiology	24-2-2022	From 12.30pm
	81618	Aquaculture practices		to
	83076	Silkworm Biology & Rearing		1.30pm
		Technology		_
		Y ONE OF THE FOLLOWING		
CCS-404	81613	Cell Pathology	-	
	81615	Clinical Physiology	Friday	
	81617	Pest Management Concepts	25-2-2022	
	81619	Fishery Technology	ZJ-Z-ZUZZ	
	83177	Silkworm Seed, Silk		
		Production Technology and		
		Economics		

M.Sc Computer Science(C.B.C.S)

	Branch – M.Sc Part I-Sem-II Computer Science (C.B.C.S.)				
Paper No	Paper Code	Paper Name	Day and Date	Paper Session-II	
CC-201	79276	Web Technology	Tuesday 8-3-2022		
CC202	79277	Advanced Java	Wednesday 9-3-2022		
CC-203	79278	Android Fundamental Development	Thursday 10-3-2022		
*CC- 203	*83077	*Android Fundamental Development with Kotlin		From 12.30pm	
*From March	2021 For Sem-II F	resh students only		to	
	Cho	ose Any One of the Following	9	1.30pm	
	79279	Software Project Management	Friday	1.5 opin	
CC-	79280	Data Science Foundations	11-3-2022		
204	79281	Application Security Analyst			
	79282	Cloud computing			

M.Sc Computer Science(C.B.C.S)

	New Revised From Oct 2020				
Paper No	Paper Code	Paper Name	Day and Date	Paper Session-IV	
CC-302	80498	Advanced Web Technology	Monday 28-2-2022		
CC-303	80499	PHP	Wednesday 2-3-2022		
	Choose Any One of the Following				
				From 4.30pm	
	80500	Software Quality Assurance		to	
CE 204	80500 80501	Software Quality Assurance Advanced Data & Science	Thursday 3-3-2022	to	
CE-304		` ,	Thursday 3-3-2022	to 5.30pm	
CE-304	80501	Advanced Data & Science	Thursday 3-3-2022		

M.Sc Organic, Inorganic, Analytical, Physical, Industrial, Applied chemistry

M.Sc Part-I Ser		Organic Chemistry Inorganic Chemistry Analytical Chemistry Physical Chemistry Industrial Chemistry Applied Chemistry		New Revised From March 2020
Paper No	Paper Code	Paper Name	Day and Date	Paper Session-I
CC-201	79244	Inorganic Chemistry – II	Tuesday 8-3-2022	
CC-202	79245	Organic Chemistry – II	Wednesday 9-3-2022	From 10.30am
CC-203	79246	Physical Chemistry – II	Thursday 10-3-2022	to 11.30am
CC-204	79247	Analytical Chemistry – II	Friday 11-3-2022	

### M.Sc Physical Chemistry (C.B.C.S)

	M.Sc Part II :- Sem III PHYSICAL CHEMISTRY (C.B.C.S.)				
Paper No	Paper Code	Paper Session-III			
IX	80481	Advanced Quantum Chemistry	Monday 28-2-2022		
X	80482	Electrochemistry	Wednesday 23-2022	F 2 20	
XI	80483	Molecular structure	Thursday 3.3-2022	From 2.30pm to	
	PAPER NO. XII :- CHOOSE ANY ONE OF THE FOLLOWING PAPER				
	80484	Solid State Chemistry		3.30pm	
DADED NO	80485	Advanced Chemical Kinetics	Friday 4.3-2022		
PAPER NO. XII	80486	Radiation and Photochemistry	, in the second		

M.Sc Physical Chemistry (C.B.C.S)

Wi.Se I hysical chemistry (C.B.C.S)					
Last chance up	From March 2020 Exam				
Paper No	Paper Code	Paper Name	Day and Date	Paper Session-I	
XIII	79207	Thermodynamics and Molecular Modeling	Monday 28-2-2022		
XIV	79208	Chemical Kinetics	Wednesday 23-2022	F 10 20	
XV	79209	Molecular Structure – II	Thursday 3.3-2022	From 10.30am to	
	PAPER NO. XVI :- CHOOSE <u>ANY ONE</u> OF THE FOLLOWING PAPER				
	79210	Surface Chemistry		11.30am	
	79211	Chemistry of Materials	Friday 4.3-2022		
PAPER NO. XVI	79212	Biophysical chemistry	111000 2022		

### M.Sc Physical Chemistry (C.B.C.S)

	New Revised From March 2021 Exam				
Paper No	Paper Code	Paper Name	Day and Date	Paper session-I	
XIII	81571	Thermodynamics and Molecular Modeling	Monday 28-2-2022	From 10.30am	
XIV	81572	Chemical Kinetics	Wednesday 23-2022		
XV	81573	Molecular Structure – II	Thursday 3.3-2022	to 11.30am	
	PAPER NO. XVI :- CHOOSE <u>ANY ONE</u> OF THE FOLLOWING PAPER				
	81574	Surface Chemistry			
PAPER NO.	81575	Chemistry of Materials	Friday 4.3-2022		
XVI	81576	Biophysical chemistry	111day 1.3 2022		

### M.Sc Analytical Chemistry (C.B.C.S)

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	New Revised From Oct 2020 Exam				
Paper No	Paper	Paper Name	Day and Date	Paper Session-III	
1	Code	1		•	
IX	80489	Advanced Analytical Techniques	Monday 28-2-2022		
X	80490	Organo Analytical chemistry	Wednesday 23-2022		
XI	80491	Electro analytical Techniques in	Thursday 3.3-2022	Erom 2 20nm	
		chemical Analysis		From 2.30pm	
	PAPER	NO. XII :- CHOOSE ANY ONE OF THE FOI	LLOWING PAPER	to	
	80492	Environmental chemical Analysis and control	- Friday 4.3-2022	3.30pm	
PAPER	80493	Recent advances in Analytical	111uay 4.3-2022		
NO. XII		Chemistry			
	80494	Chemical Analysis in Agro Food			
		And Pharmaceutical Industries			

### M.Sc Analytical Chemistry (C.B.C.S)

	M.Sc Part II :- Sem IVAnalytical CHEMISTRY (C.B.C.S.)					
Paper No	Paper No Paper Code Paper Name Day and Date					
XIII	79215	Modern Separation method in Analysis	Monday 28-2-2022			
XIV	79216	Organic Industrial Analysis	Wednesday 23-2022	From 10.30am		
XV	79217	Advanced Methods in Chemical Analysis	Thursday 3.3-2022	to		
	PAPER NO	O. XVI :- CHOOSE <u>ANY ONE</u> OF THE FOLLO	WING PAPER	11.30am		
XVI	79218	Industrial Analytical Chemistry				
	79219	Quality Assurance and Accreditation	Friday 4.3-2022			

### M.Sc Analytical Chemistry (C.B.C.S)

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	M.Sc Part II :- Sem IVAnalytical CHEMISTRY (C.B.C.S.)						
Paper No	Paper No Paper Code Paper Name Day and Date						
XIII	81580	Modern Separation method in Analysis	Monday 28-2-2022	_			
XIV	81581	Organic Industrial Analysis	Wednesday 23-2022				
XV	81582	Advanced Methods in Chemical Analysis	Thursday 3.3-2022	From 10.30am			
	СНО	OSE <u>ANY ONE</u> OF THE FOLLOWING PAPER					
XVI	81583	Applied Analytical Chemistry		to 11.30am			
	81584	Quality Assurance and Accreditation	Friday 4.3-2022	11.30aiii			
	81585	Techniques in Forensic Science and Microbiological Analysis					

### M.Sc Inorganic Chemistry (C.B.C.S)

	M.Sc Part II :- Sem III Inorganic CHEMISTRY (C.B.C.S.)					
Paper No	Paper Code	Paper Name	Day and Date	Paper Session-III		
IX	80460	\$ Inorganic Chemical Spectroscopy	Monday 28-2-2022			
X	80461	\$ Co-Ordination Chemistry	Wednesday 23-2022	From 2.30pm		
XI	80462	\$ Nuclear Chemistry	Thursday 3.3-2022	to 3.30pm		
	PAPER	NO:-XII CHOOSE ANY ONE OF THE FOL	LOWING PAPER	o to opin		
XII	80463	\$ Organometallic and Bioinorganic Chemistry	Friday 4.3-2022			
	80464	\$ Selected Topics in Inorganic chemistry				

### M.Sc Inorganic Chemistry (C.B.C.S)

	M.Sc Part II :- Sem IV Inorganic CHEMISTRY (C.B.C.S.)				
Paper No	Paper Code	Paper Name	Day and Date	Paper Session-I	
XIII	79200	Instrumental Techniques	Monday 28-2-2022		
XIV	79201	Co-Ordination Chemistry	Wednesday 23-2022	From 10.30am	
XV	79202	Chemistry of Inorganic Materials	Thursday 3.3-2022	to	
	PAPER	NO:XVI CHOOSE ANY ONE OF THE FOLI	LOWING PAPER	11.30am	
XVI	79203	Energy and Environmental Chemistry	Friday 4.3-2022		
	79204	Radiation Chemistry			

### M.Sc Inorganic Chemistry (C.B.C.S)

		Wi.Se morganic chemistry	(С.В.С.В)		
	M.Sc Part II :- Sem IV Inorganic CHEMISTRY (C.B.C.S.)				
Paper No	Paper Code	Paper Name	Day and Date	Paper Session-I	
XIII	81554	Instrumental Techniques	Monday 28-2-2022		
XIV	81555	Co-Ordination Chemistry	Wednesday 23-2022	From 10.30am	
XV	81556	Chemistry of Inorganic Materials	Thursday 3.3-2022	to 11.30am	
	CHOOSE ANY ONE OF THE FOLLOWING PAPER				
XVI	81557	Energy and Environmental Chemistry	Friday 4.3-2022		
	81558	Radiation Chemistry			

M.Sc Organic Chemistry (C.B.C.S)

	M.Sc Part II :- Sem III Organic CHEMISTRY (C.B.C.S.)				
Paper No	Paper Code	Paper Name	Day and Date	Paper Session-III	
IX	80474	Organic Reaction Mechanism	Monday 28-2-2022		
X	80475	Advanced Spectroscopic Methods	Wednesday 23-2022	From 2.30pm	
XI	80476	Advanced Synthetic Method	Thursday 3.3-2022	to 3.30pm	
	CHOOSE ANY ONE OF THE FOLLOWING PAPER				
XII	80477	\$ Drugs and Heterocycles	- Friday 4.3-2022		
	80478	\$ Polymer chemistry	111day 1.3-2022		

M.Sc Organic Chemistry (C.B.C.S)

	M.Sc Part II :- Sem IV Organic CHEMISTRY (C.B.C.S.)				
Paper No	Paper Code	Paper Name	Day and Date	Paper session-I	
XIII	74454	Theoretical Organic Chemistry	Monday 28-2-2022		
XIV	74455	Stereochemistry	Wednesday 23-2022		
XV	74456	Chemistry of Natural Products	Thursday 3.3-2022	From 10.30am	
	(	CHOOSE ANY ONE OF THE FOLLOWING	PAPER	to	
	74457	Organic Industrial Chemistry		11.30am	
XVI	74458	Bio-organic Chemistry	Friday 4.3-2022		

M.Sc Organic Chemistry (C.B.C.S)

	M.Sc Part II :- Sem IV Organic CHEMISTRY (C.B.C.S.)				
Paper No	Paper Code	Paper Name	Day and Date	Paper Session-I	
XIII	81564	Theoretical Organic Chemistry	Monday 28-2-2022		
XIV	81565	Stereochemistry	Wednesday 23-2022		
XV	81566	Chemistry of Natural Products	Thursday 3.3-2022	From 10.30am	
	CHOOSE ANY ONE OF THE FOLLOWING PAPER				
373.71	81567	Applied Organic Chemistry		11.30am	
XVI	81568	Bio-organic Chemistry	Friday 4.3-2022		

M.Sc Applied Chemistry (C.B.C.S)

	M.Sc Part II :- Sem III Applied CHEMISTRY (C.B.C.S.)				
Paper No	Paper Code	Paper Name	Day and Date	Paper Session-III	
IX	80368	Applied Inorganic Chemistry-I	Monday 28-2-2022		
X	80369	Applied Organic chemistry-I	Wednesday 23-2022		
XI	80370	Applied Physical Chemistry-I	Thursday 3.3-2022	From 2.30pm to	
	Paper No XII CHOOSE ANY ONE OF THE FOLLOWING PAPER				
****	80371	Advanced Organic chemistry-I		3.30pm	
XII	80372	Applied Analytical Chemistry-I	Friday 4.3-2022		
	80373	Bioorganic Chemistry-I			

M.Sc Applied Chemistry (C.B.C.S)

	Revised From March 2020			
Paper No	Paper Code	Paper Name	Day and Date	Paper Session-I
XIII	74549	Applied Inorganic Chemistry	Monday 28-2-2022	
XIV	74550	Applied Organic Chemistry	Wednesday 23-2022	From 10.30am
XV	74551	Advance Organic Chemistry	Thursday 3.3-2022	to
	Paper No	XVI CHOOSE <u>ANY ONE</u> OF THE FOLI	LOWING PAPER	11.30am
	74552	Inorganic Chemical Industries	T:1 42 2022	
XVI	74553	Pollution Monitoring Control	Friday 4.3-2022	
	74554	Applied Analytical Chemistry-II		

M.Sc Applied Chemistry (C.B.C.S)

	M.Sc Part II: - Sem IV Applied CHEMISTRY (C.B.C.S.)				
Paper No	Paper Code	Paper Name	Day and Date	Paper Session-I	
XIII	80377	Applied Inorganic Chemistry -II	Monday 28-2-2022		
XIV	80378	Applied Organic Chemistry-II	Wednesday 23-2022		
XV	80379	Advance Organic Chemistry-II	Thursday 3.3-2022	From 10.30am	
	Paper No CHOOSE ANY ONE OF THE FOLLOWING PAPER				
	80380	Inorganic Chemical Industries	F:1 42 2022	to 11.30am	
XVI	80381	Pollution Monitoring Control	Friday 4.3-2022		
	80382	Applied Analytical Chemistry-II			

M.Sc. Botany (C.B.C.S)

		M.Sc Part I :- SemII Botany	,	Revised From Oct 2020 Exam
Paper No	Paper Code	Paper Name	Day and Date	Paper Session-II
CC-201	79269	Angiosperm systematic	Monday 28-2-2022	
CC-202	79270	Plant Pathology	Wednesday 23-2022	From 12.30pm
CC-203	79271	Plant Structure Development And Reproduction	Thursday 3.3-2022	to 1.30pm
CC-204	79272	Cell and Molecular Biology	Friday 4.3-2022	•

M.Sc. Botany (C.B.C.S)

	M.Sc Part II., :- Sem – III BOTANY					
Paper No	Paper Code	Paper Name	Day and Date	Paper Session-IV		
CCS-301	80536	Cytogenetic & Crop Improvement	Tuesday 22.2-2022			
DSE-304	80551	Biotechnology and Genetic	Wednesday 232-2022			
		Engineering		_		
	T	CHOOSE ANY ONE OF THE FOLLOWING	T	-		
	80537	Adv.Plant Physiology & Plant				
		Biochemistry				
	80538	Taxonomy of Fungi				
	80539	Cytogenetic	Thursday 24-2-2022			
CCS-302	80540	Environment & Its Aspects	1 Hursday 24-2-2022	F 4.20		
	80541	The evolution and Classification of		From 4.30pm		
		Angiosperm		to		
	80542	General Marine Botany		5.30pm		
	80543	Plant Tissue Culture				
	CHOOSE ANY ONE OF THE FOLLOWING					
	80544	Plant Growth & Development				
	80545	Integrated Disease Management				
	80546	Plant Breeding				
	80547	Population & Community				
		Ecology	Friday 25-2-2022			
CCS-303	80548	Modern Trends in Angiosperm				
005 303		Taxonomy				
	80549	Physiology & Biochemistry of				
		Marine Plants				
	80550	Molecular Biotechnology &				
		Genetic Engineering				

M.Sc. Botany (C.B.C.S)

		M.Sc Part II., :- Sem – IV BOTANY	,	Last Chance upto Oc2021
Paper No	Paper Code	Paper Name	Day and Date	Paper Session-II
XIII	63273	Plant Physiology and Metabolism	Tuesday 22.2-2022	
XIV	65121	Biodiversity, conservation and utilization	Wednesday 232-2022	
	PAPER NO 2	XV CHOOSE ANY ONE OF THE FOLLOWING		
	63275	Plant Physiology-III		
	63276	Mycology and Plant Pathology-III		
	63277	Cytogenetic and Plant Breeding-III		
	63278	Energy, Ecology and Environment-III	Thursday 24-2-2022	
	63279	Angiosperm Taxonomy-III		
XV	63280	Marine Botany-III		
	63281	Plant Biotechnology-III		From 12.30pm
	63299	Plant Protection-III		to
	63300	Plant Diversity –III		1.30pm
	PAPER NO X	XVI CHOOSE ANY ONE OF THE FOLLOWING		-
	63282	Plant Physiology-IV		
	63283	Mycology and Plant Pathology-IV		
	63284	Cytogenetic and Plant Breeding-IV		
	63285	Energy, Ecology and Environment- IV		
	63286	Angiosperm Taxonomy-IV	Friday 25-2-2022	
XVI	63287	Marine Botany-IV		
	63288	Plant Biotechnology-IV		
	63301	Plant Protection-IV		
	63302	Plant Diversity-IV		
Elective paper	65195	Plant A Biological Capital	Saturday 26-2-2022	

M.Sc. Botany (C.B.C.S)

	M.Sc Part II., :- Sem – IV BOTANY					
Paper No	Paper Code	Paper Name	Day and Date	Paper Session-II		
CC-401	82888	Plant Physiology and Metabolism	Tuesday 22.2-2022			
DSE-404	82889	Biodiversity, conservation and utilization	Wednesday 232-2022			
	СН	OOSE ANY ONE OF THE FOLLOWING				
	82893	Stress Physiology of Plants				
	82894	Industrial Mycology	T1 1 24 2 2022	From 12.30pm		
828	82895	Molecular Genetics	Thursday 24-2-2022	to		
	82896	Experimental Ecology and Energy studies				
	82897	Angiosperm Taxonomy Floristics & Biostematics		1.30pm		
	82898	Marine Ecology				
	82899	Application and Prospects of Plant Tissue culture				
		CHOOSE ANY ONE OF THE FOLLOWING				
	82900	Applied Plant Physiology				
	82901	Integrated Disease Management	F : 1 25 2 2022			
	82902	Special Approaches in Genetic Improvement of Crop Plants	Friday 25-2-2022			
	82903	Environmental issues assessment and Restoration				
CCS-403	82904	Phylogeny & floral Biology of Angiosperm				
	82905	Application, Regulation and Patenting Biotechnology				
	83011	Applied Marine Botany				

M.Sc. Electronics (C.B.C.S)

	Revised From Oct 2020 Exam			
Paper No	Paper Code	Paper Name	Day and Date	Paper Session -II
CC-201	79255	Digital Communication	Friday 11.3.2022	
CC-202	79256	Advanced Microwave Technology	Saturday 12.32022	From 12.30pm
CC-203	79257	Advanced Power Electronics	Monday 14.3-2022	to
				1.30pm
CC-204	79258	Optoelectronics	Tuesday 15.3.2022	1.5 opin

M.Sc. Electronics (C.B.C.S)

	M.Sc 1	Part I :- SemIII Electronics	,	New Revised From Oct 2020 Exam	
Paper No	Paper Code	Paper Name	Day and Date	Paper Session-IV	
CC-301	80507	Control Theory	Tuesday 22.2.2022		
CCS-302	80508	Computer Network	Wednesday 23.2.2022		
CCS-303	80509	Microcontroller System Design ARM Architecture	Thursday 24.2-2022	From 4.30pm to	
	CHOOSE ANY ONE OF PAPER FROM DSE-304				
	80510	Industrial Automation		5.30pm	
	80511	Biomedical Instrumentation			
PGE 204	80512	MATLAB Programming for Numerial Computation	Friday 25.2.2022		
DSE-304	80513	Hardware-Software Co-design			
	80514	Satellite Communication			
	80515	Soft Computing			
	80516	VHDL Programming			

# M.Sc. Electronics (C.B.C.S.)

Paper No	Paper Code	Paper Name	Day and Date	Paper Session-II
XIII	64906	Digital Signal Processing	Tuesday 22.2.2022	
XIV	64907	Analog and Digital Circuit Design	Wednesday 23.2.2022	
	PAPER NO XV	CHOOSE ANY TWO OF THE FOLLOWING	G	
	64909	ARM Programming and Embedded Communication	Thursday 24.2-2022	From 12.30pm
XV	64910	Advanced Microcontroller and RTOS	Friday 25.2.2022	to
	64911	Cellular Mobile Communications	Saturday 26-2-2022	1.30pm
	64912	Electronic Neural Networks	Monday 28-2-2022	
	64913	Advanced Drives	Wednesday 2-3.2022	
	64914	Antennas	Thursday 3-3-2022	
	64915	FPGA Based Systems	Friday 4-3-2022	

# M.Sc. Electronics (C.B.C.S.)

	N	1.sc Part II Sem-IV -ELECTRONICS (C	C.B.C.S.) New Revised Fro	m March 2021
Paper No	Paper Code	Paper Name	Day and Date	Paper Session-II
CC-401	81779	Digital Signal Processing	Tuesday 22.2.2022	
CCS-402	81780	Analog and Digital Circuit Design	Wednesday 23.2.2022	
CCS-403	81781	Real Time Embedded System	Thursday 24.2-2022	=
		- CHOOSE ANY One OF THE FOLLOWING		
	81782	Advanced Drives		From 12.30pm
DGE 404	81783	Artificial Intelligence & Machine		to
DSE-404	81784	Learning IOT & Data Analytics	Friday 25.2.2022	1.30pm
	81785	ARM Programming and Embedded Communication Protocols	111day 23.2.2022	
	81786	FPGA Based Systems	-	
	81787	Antennas		
	81788	Mechnatronics		
	81790	Cellular Mobile communication		

M.Sc Industrial Chemistry (C.B.C.S.)

	M.Sc Part-II Sem III INDUSTRIAL CHEMISTRY ( C.B.C.S.)					
Paper No	Paper Code	Paper Name	Day and Date	Paper Session-III		
IND-3.1	80387	Organic Chemical Industries	Monday 28-2- 2022			
IND-3.2	80388	Inorganic Chemical Industries	Wednesday 23- 2022			
IND-3.3	80389	Methods of Analysis in Industries	Thursday 3.3-2022	to		
		CHOOSE ANY One OF THE FOLLOWING		3.30pm		
	80390	General Chemical Technology	Friday 4-3-2022			
IND-1TO 3		Advanced Analytical Techniques in Industry				
		Chemical Analysis in Agro, Food and Pharmaceutical Industries				

M.Sc Industrial Chemistry (C.B.C.S.)

	Misc industrial Chemistry (C.B.C.S.)				
	M.S	c Part-II Sem IV INDUSTRIAL CHEMISTI	RY ( C.B.C.S.)	Last Chance upto Oct	
				2021	
Paper No	Paper Code	Paper Name	Day and Date	Paper Session-I	
XIII	74533	Drug and Pharmaceuticals	Monday 28-2-2022		
XIV	74534	Inorganic Chemical Industries	Wednesday 23-2022	From 10.30am	
XV	74535	Selected Topics in Industrial	Thursday 3.3-2022	To	
		Chemistry		11.30am	
		CHOOSE ANY One OF THE FOLLOWI	NG		
	74536	Environmental Chemistry			
XVI	74537	Pharmaceutical Chemistry	Friday 4-3-2022		
	74538	Chemistry of Industrially Important			
		Materials			

M.Sc Industrial Chemistry (C.B.C.S.)

	M.Sc Part-II Sem IV INDUSTRIAL CHEMISTRY ( C.B.C.S.)				
Paper No	Paper Code	Paper Name	Day and Date	Paper session-I	
XIII	80395	Drug and Pharmaceuticals	Monday 28-2-2022		
XIV	80396	Inorganic Chemical Industries	Wednesday 23-2022	From 10.30am	
XV	80397	Selected Topics in Industrial Chemistry	Thursday 3.3-2022	To 11.30am	
		CHOOSE ANY One OF THE FOLLOWING	G		
XVI	80398	Environmental Chemistry			
	80399	Pharmaceutical Chemistry	Friday 4-3-2022		
	80400	Chemistry of Industrially Important			
		Materials			

M.Sc. Horizontal Mobility

M.Sc Part-I	M.Sc Part-I Sem II - Biochemistry,Biotechnology,Environmental- Biotech,Microbiology,Pharmaceutical Microbiology				
Paper No	Paper Code	Paper Name	Day and Date	Paper Session-I	
CC-201	79262	Enzymology	Tuesday 8-3-2022		
CC-202	79263	Molecular Biology	Wednesday 9-3-2022	From 10.30am To	
CC-203	79264	Bioenergetics	Thursday 10-3-2022	11.30am	
CC-204	79265	Tools and Techniques in Bioscience	Friday 11-3-2022		

M.Sc. Biochemistry

Wise. Divenemistry					
	M.Sc Part-II Sem-III - BIOCHEMISTRY				
Paper No	Paper Code	Paper Name	Day and Date	Paper Session-III	
CC-301	80403	Genetic Engineering	Monday 28-2-2022		
CCS-302	80404	Biomembrances & Cytoskeleton	Wednesday 23-2022		
DSE-304	80408	Immunology	Thursday 3.3-2022	From 2.30pm	
		<b>Choose Any One Of the Following</b>		to	
CCS-303- A	80405	Fermentation Technology		3.30pm	
CCS-303- B	80406	Clinical Biochemistry	Friday 4-3-2022		
CCS-303- C	80407	Biochemical and Environmental Toxicology			

M.Sc. BIOCHEMISTRY [ C.B.C.S.]

	WI,SC. DIOCHEMISTRY [C.D.C.S.]					
	Last Chance upto Oct- 2021					
Paper No	Paper Code	Paper Name	Day and Date	Paper Session-I		
XIII	71009	Research Methodology, Entrepreneurship Development & Tissue Culture (New From April 2018)	Monday 28-2-2022			
	65085	Neurochemistry (Old)				
XIV	71118	Neurochemistry and Carcinogenesis(New From April 2018)	Wednesday 23-2022	From 10.30am		
	65086	Carcinogenesis & Cell Signaling(Old)				
XV	Microbiology 65088- Biochemistry	*Bioinformatics	Thursday 3.3-2022	to 11.30am		
		Paper No. XVI - Choose Any One of the Following				
XVI	65087	Medical and Environmental Biochemistry		1		
	65089- Biochemistry 65131Environmenta 1 Biotechnolgy	\$ Fermentation Technology – II	Friday 4-3-2022			
	65090	Clinical Biochemistry – II				
	65091	Biochemical and Environmental Toxicology – II				

M.Sc. BIOCHEMISTRY [ C.B.C.S.]

	M.sc Part II Sem- IV- BIOCHEMISTRY (C.B.C.S.)				
Paper No	Paper Code	Paper Name	Day and Date	Paper Session-I	
CC- 401	80413	Research Methodology, Entrepreneurship Development & Communication skill	Monday 28-2-2022	From 10.30am	
CCS- 402	80414	Neurochemistry and Carcinogenesis	Wednesday 23-2022	to 11.30am	
CCS- 403	80415	Bioinformatics	Thursday 3.3-2022	11.30aiii	
		<b>Choose Any One of the Following</b>			
DSE- 404A	80416	Fermentation Technology – II	Friday 4-3-2022		
DSE-404B	80417	Clinical Biochemistry – II	111day 1 3 2022		
DSE- 404C	80418	Biochemical and Environmental Toxicology- II			

### M.Sc. BIOTECHNOLOGY

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	M.sc Part-II Sem-III BIOTECHNOLOGY				
New Revised	l From Oct 2020	) exam			
Paper No	Paper Code	Paper Name	Day and Date	Paper session-III	
CC-301	80453	Genetic Engineering	Monday 28-2-2022		
DSE-304	80456	Immunology	Wednesday 23-2022	From 2.30pm to	
CC-303	80455	Fermentation Technology-I	Thursday 3.3-2022	3.30pm	
CCS-302	80454	Advances in Plant Biotechnology	Friday 4-3-2022		

### M.Sc. BIOTECHNOLOGY

	M.sc Part II Sem- IV- BIOTECHNOLOGY			
Last Chance	e upto Oct-2021	Table 1 and 11 som 17 bio 12		
Paper No	Paper Code	Paper Name	Day and Date	Paper Session-I
XIII	65769	Animal Tissue Culture (Revised)	Monday 28-2-2022	
XIV	65080	** Advances in Genomics and Proteomics	Wednesday 23-2022	
XV	65081	Advances in Plant Biotechnology	Saturday 5-3-2022	
	C	hoose Any One of the Following		From 10.30am
XVI	65082	Industrial Organization and Management		,
New( From	65773	Nanobiotechnology	Monday 7-3-2022	to 11.30am
XIV	65088- Biochemistry 63251- Microbiology 65197- Biotechnology 69590-	* Bioinformatics	Thursday 3.3-2022	- 11.3Vaiii
	65089- Biochemistry 65131Envirome ntal Biotechnology	\$ Fermentation Technology II	Friday 4-3-2022	

### M.Sc. BIOTECHNOLOGY

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	M.sc Part II Sem- IV- BIOTECHNOLOGY				
Paper No	Paper Code	Paper Name	Day and Date	Paper Session-I	
CC401	82847	Animal Tissue culture	Monday 28-2-2022	From 10.30am	
CCS403	82842	Bioinformatics	Thursday 3.3-2022	to	
	Choose Any One of the Following				
CCS402 A	82848	Advances in Genomics and Proteomics	Wednesday 23-2022		
CCS402B	82849	Microbial Fermentation Technology	Saturday 5-3-2022		
	C	hoose Any One of the Following			
DSE404A	82851	Nanobiotechnology	Monday 7-3-2022		
DSE404B	82852	Fermentation Technology-II	Friday 4-3-2022		

### M.Sc. ENV. BIOTECHNOLOGY

	M.Sc Part-II Sem-III - ENV. BIOTECHNOLOGY					
New Revised Fro	New Revised From Oct 2020 Exam					
Paper No	Paper Code	Paper Name	Day and Date	Paper Session -III		
CC-301	80436	Genetic Engineering	Monday 28-2-2022			
DSE-304	80440	Immunology	Wednesday 23-2022	From 2.30pm		
CCS-302	80437	Basics of Ecology, Ecotoxicology and Ecochemistry	Thursday 3.3-2022	to 3.30pm		
		Choose Any One Of the Following				
CCS-303 -A	80438	Fermentation Technology-I				
CCS-303-B	80439	Biochemical and environmental Toxicology -I	Friday 4-3-2022			

# M.Sc. ENV. BIOTECHNOLOGY [ C.B.C.S.]

	M.S	c Part-II Sem-IV- ENV. BIOTECHNOL	OGY (C.B.C.S.)	
Paper No	Paper Code	Paper Name	Day and Date	Paper Session-I
XIII	65128	Environmental Pollution and Control	Monday 28-2-2022	
XIV	65129	Environmental Biotechnology	Monday 7-3-2022	From 10.30am
XV	65130	Biodiversity, IPR Biosafety& Bioethics	Saturday 5-3-2022	to 11.30am
XVI	65131- Environmenta Biotechnology 65089-Biochemistry	\$ Fermentation Technology – II	Friday 4-3-2022	
	65080	** Advances in Genomics & Proteomics	Wednesday 23-2022	

# M.Sc. ENV. BIOTECHNOLOGY [ C.B.C.S.]

	N	A.Sc Part-II Sem-IV-ENV. BIOTECHNO	LOGY (C.B.C.S.)	
Paper No	Paper Code	Paper Name	Day and Date	Paper Session-I
CC-401	80444	Environmental Monitoring and Risk Assessment	Monday 28-2-2022	
CCS- 402	80445	Environmental Biotechnology	Monday 7-3-2022	From 10.30am
CCS- 403	80446	Bioinformatics	Thursday 3.3-2022	to 11.30am
•		<b>Choose Any One Of the Following</b>		
DSE- 404A	80447	Biodiversity, IPR Biosafety& Bioethics	Saturday 5-3-2022	
DSE- 404B	80448	Biochemical and Environmental Toxcicology		

# M.Sc. Microbiology [ C.B.C.S.]

M.Sc Part-II Sem-III- Microbiolgy (C.B.C.S.)			New Revised From Oct 2020 Exam	
Paper No	Paper Code	Paper Name	Day and Date	Paper Session-III
CC-301	80573	Genetic Engineering	Monday 28-2-2022	
CCS-302	80574	Microbial Diversity and Extremophils	Friday 4-3-2022	From 2.30pm to
CCS-303	80575	Fermentation Technology	Thursday 3.3-2022	3.30pm
DSE-304	80577	Immunology	Wednesday 23-2022	

# M.Sc. MICROBIOLOGY (C.B.C.S.)(Old)

	Branch-M.sc part-II Sem-IV MICROBIOLOGY (C.B.C.S.)				
				From April-2015	
Paper No	Paper Code	Paper Name	Day and Date	Paper session-I	
XIII	63249	Food and Dairy Microbiology	Monday 28-2-2022		
				From 10.30am	
XIV	65088-Biochemistry 63251-Microbiology 65197- Biotechnology 69590-	*Bioinformatics	Thursday 3.3-2022	to 11.30am	
XV	63250	Microbial Fermentation Technology	Wednesday 23-2022		
XVI	63252- Microbiology 69592-	# Medical Microbiology	Friday 4-3-2022		

# M.Sc. MICROBIOLOGY (C.B.C.S.)

	New Revised From March 2021			
Paper No	Paper Code	Paper Name	Day and Date	Paper Session-I
CC-401	82840	Food and Dairy Microbiology	Monday 28-2-2022	From 10.30am
CCS-402	82841	Microbial Fermentation Technology	Wednesday 23-2022	to
CCS-403	82842	Bioinformatics	Thursday 3.3-2022	11.30am
DSE-404	82843	Medical Microbiology	Friday 4-3-2022	

# M.Sc. Pharmaceutical Microbiology [ C.B.C.S.]

M.Sc	New Revised From Oct 2020 Exam			
Paper No	Paper Code	Paper Name	Day and Date	Paper Session -III
CC-301	80422	Genetic Engineering	Monday 28-2-2022	
CCS-302	80423	Microbial Diversity and Extremophils	Friday 4-3-2022	From 2.30pm to
CCS-303	80424	Pharmaceutical Microbiology	Thursday 3.3-2022	3.30pm
DSE-304	80425	Immunology	Wednesday 23-2022	

# M.Sc. Pharmaceutical Microbiology [ C.B.C.S.]

M.S	c Part-II Sem-IV- 1	Pharmaceutical Microbiology ( C.)	B.C.S.)	
Paper No	Paper Code	Paper Name	Day and Date	Paper Session-I
		Fermentation Technology and Process Designing	Monday 28-2-2022	
	69591	Quality Management and IPR	Wednesday 23-2022	From 10.30am to
	69590- 65088Biochemistry 63251Microbiology 65197Biotechnology	*Bioinformatics	Thursday 3.3-2022	11.30am
	69592- 63252-Microbiology	Medical Microbiology	Friday 4-3-2022	

# M.Sc. Pharmaceutical Microbiology [ C.B.C.S.]

M.Se	M.Sc Part-II Sem-IV- Pharmaceutical Microbiology (C.B.C.S.)				
Paper No	Paper Code	Paper Name	Day and Date	Paper Session -I	
CC401	80429	Quality Management and IPR	Wednesday 23-2022		
CCS402	80430	Fermentation Technology and Process Designing	Monday 28-2-2022	From 10.30am	
CCS403	80431	Bioinformatics	Thursday 3.3-2022	11.30am	
DSE404	80432	Medical Microbiology	Friday 4-3-2022		

# M.Sc. Agrochemical and Pest Management [ C.B.C.S.]

M.Sc Par	M.Sc Part-I Sem-II-Agrochemical and Pest Management (C.B.C.S.)				
Paper No	Paper Code	Paper Name	Day and Date	Paper Session-II	
CC-201	79233	Chemistry of Pesticides And Their Formulation-II	Monday 28-2-2022		
CC-202	79234	Analytical Techniques For Agrochemicals	Wednesday 23-2022	From 12.30pm	
CC-203	79235	Economic Entomology	Thursday 3.3-2022	to 1.30pm	
CC-204	79236	Agronomy, Seed Technology, Pathology, Weed Science Biostatistics	Friday 4-3-2022		

M.Sc. Agro Chemical & Pest Management [ C.B.C.S. ](New)

	New Revised From Oct Branch M.Sc Part-II Sem-III - AGRO CHEMICAL & PEST MANAGEMNT (C.B.C.S.)				
Paper No	Paper Code	Paper Name	Day and Date	Paper Session-IV	
IX	80567	Pesticide Residues And Toxicology	Tuesday 22-2-2022		
X	80568	Pest of Crop Plants And Their Control-I	Wednesday 23-2-2022		
XI	80569	Analysis of Agrochemical	Thursday 24-2-2022	From 4.30pm to	
XII	80570	Diseases of Vegetables Fruit tress,Plantation,Forest Ornamental Plants	Friday 25-2-2022	5.30pm	

M.Sc. Agro Chemical & Pest Management [ C.B.C.S. ](New)

New Revised I	From	M.Sc Part-II Sem-IV - AGRO CHEMIO	CAL&PEST MANAGEMNT (C.B	.C.S.)
March 2020 E	xam			
Paper No	Paper	Paper Name	Day and Date	Paper Session-II
	Code	_		
XIII	74519	Agro-based Marketing Management	Tuesday 22-2-2022	
XIV	74520	Pests Of Crop Plants And Their Control- II	Wednesday 23-2-2022	From 12.30pm to 1.30pm
XV	74521	Manufacture Of Agrochemicals	Thursday 24-2-2022	
XVI	74522	Agricultural Bio-Technology and Integrated Disease Management	Friday 25-2-2022	

M.Sc. Agro Chemical & Pest Management [ C.B.C.S. ](New)

New Revised	From	M.Sc Part-II Sem-IV - AGRO CHEMICAL & PEST MANAGEMNT (C.B.C.S.)			
March 2021E	xam				
Paper No	Paper Code	Paper Name	Day and Date	Paper Session-II	
XIII	81640	Agro-based Marketing Management	Tuesday 22-2-2022		
XIV	81641	Pests Of Crop Plants And Their Control- II	Wednesday 23-2-2022	From 12.30pm to 1.30pm	
XV	81642	Manufacture Of Agrochemicals	Thursday 24-2-2022		
XVI	81643	Agricultural Bio-Technology and Integrated Disease Management	Friday 25-2-2022		

M.Sc. General Microbiology [C.B.C.S.]

	M.Sc Part-II Sem-II General MICROBIOLOGY				
Paper No	Paper Code	Paper Name	Day and Date	Paper Session -I	
CC-201	74563	Techniques in Microbiology	Tuesday 8-3-2022	From 10.30am	
CC-202	74564	Microbial Physiology Biochemistry and Metabolism	Wednesday 9-3-2022	To 11.30am	
CC-203	74565	Medical Microbiology	Thursday 10-3-2022		
CC-204	74566	Microbial Ecology	Friday 11-3-2022		

M.Sc. General MICROBIOLOGY [C.B.C.S.-]

	M.Sc Part-II Sem-III General MICROBIOLOGY -		
Paper Code	Paper Name	Day and Date	Paper Session -III
80530	Biostatistics Bioinformatics & Scientific Writings	Monday 28-2-2022	
80531	Enzymology and Enzyme technology	Wednesday 23-2022	From 2.30pm to
80532	Fermentation Technology	Thursday 3.3-2022	3.30pm
80533	Quality Control Microbiology	Friday 4-3-2022	
	80530 80531 80532	Biostatistics Bioinformatics & Scientific Writings  80531 Enzymology and Enzyme technology  80532 Fermentation Technology	Biostatistics Bioinformatics & Monday 28-2-2022  Scientific Writings  Enzymology and Enzyme technology  Wednesday 23-2022  Thursday 3.3-2022  Fermentation Technology  Friday 4-3-2022

M.Sc. General Microbiology [C.B.C.S.]

	From March 2021 Exam			
Paper No	Paper Code	Paper Name	Day and Date	Paper Session-I
MIC-401	81634	Food and Dairy Microbiology	Monday 28-2-2022	From 10.30am
MIC-402	81635	Industrial Waste Management	Wednesday 23-2022	To 11.30am
MIC-403	81636	Recombinat DNA Technology	Thursday 3.3-2022	
MIC-404	81637	Quality Control Microbiology	Friday 4-3-2022	

M.Sc. Geology[C.B.C.S.]

	M.Sc. Part-I Sem-II Geology				
Paper No	Paper Code	Paper Name	Day and Date	Paper Session-II	
CC 201			Monday 28-2-2022		
CC-201	79238	Structural Geology and Geotectonics		From 12.30pm	
CC-202	79239	Stratigraphy and Palaeontology	Wednesday 23-2022	1.30pm	
CC-203	79240	Economic Geology	Thursday 3.3-2022		
CC-204	79241	Remote sensing and Geomorphology	Friday 4-3-2022		

M.Sc. Geology[C.B.C.S.]

	M.Sc. Part-II Sem-III Geology				
Paper No	Paper Code	Paper Name	Day and Date	Paper Session-IV	
CC-301	80520	Hydrogeology	Tuesday 22-2-2022		
CCS-302	80521	Geophysics and Exploration Methods	Wednesday 23-2-2022	From 4.30pm	
CCS-303	80522	Geochemistry	Thursday 24-2-2022	to 5.30pm	
		<b>Choose Any One of the Following</b>	7		
DCE 204	80523	Gemmology & Industrial Mineralogy	Friday 25-2-2022		
DSE-304	80524	Mining Geology			
	80525	Marine Geology			
	80526	Geoinformatics			

M.Sc. Geology[C.B.C.S.]

	M.Sc. Part-II Sem-IV Geology				
Paper No	Paper Code	Paper Name	Day and Date	Paper Session-II	
XIII	63210	Engineering Geology and Geotechniques	Tuesday 22-2-2022	From 12.30pm to 1.30pm	
XIV	63211	Natural Resource Management	Wednesday 23-2-2022	-	
XV	63212	Environmental Geology	Thursday 24-2-2022		

M.Sc. Geology[C.B.C.S.]

	M.Sc. Part-II Sem-IV Geology				
Paper No	Paper Code	Paper Name	Day and Date	Paper Session-II	
XIII	81626	Engineering Geology and Geotechniques	Tuesday 22-2-2022	From 12.30pm	
XIV	81627	Natural Resource Management	Wednesday 23-2-2022	to	
XV	81628	Environmental Geology	Thursday 24-2-2022		

Note:- In Case of any Query found in respective Question Paper ,Student shall communicate the same through Principal/Senior supervisor within 07 days from the date of concerned Question paper to, Deputy Registrar Appointment section Room No.205 Exam Building No.1 Shivaji University,Kolhapur-416004

s/d

Vidyanagar, Kolhapur-416004 Date:- -27-1-2022 Shri.G.R.Palse I/C Director Board of Examinations And Evaluation