

M.Tech. Part-I Sem - I & II Regular Course May, 2020

SHIVAJI UNIVERSITY, KOLHAPUR.

Draft Programme Circular No.745 Exam of May,2020

Faculty : Engineering

Course :**M.Tech.Examination Regular Course (Course Code 121)**

Part – I Sem.- I& II Examination to be held in May, 2020

INSTRUCTIONS :Common instruction as per Circular No. SU/On Exam/29, dated 01.02.2020, and also available on University website www.unishivaji.ac.in

M.Tech-SEMESTER-I
(Regular Course)
(Time: - 10.00 a.m. to 01.00 p.m.)

Day & Date	BRANCHES	PAPER
04.05.2020 Monday	1) Electronics Technology	CMOS VLSI Design (39906)
	2) Computer Science and Technology	Theory of Computer science (39925)
	3) Energy Technology	Energy Scenario (39841)
	4) Environmental Science & Technology	Introduction to Environmental science and Ecology (39951)
06.05.2020 Wednesday	1) Electronics Technology	Digital Systems Testing and Simulation with VHDL (39907)
	2) Computer Science and Technology	Advance Operating System (39926)
	3) Energy Technology	Biomass and its Conversion Technologies (39842)
	4) Environmental Science & Technology	Environmental Chemistry and Microbiology (39952)
09.05.2020 Saturday	1) Electronics Technology	High Speed Analog Design Techniques (39908)
	2) Computer Science and Technology	Design and analysis of Algorithms (39927)
	3) Energy Technology	Solar Photovoltaic Energy Conversion (39843)
	4) Environmental Science & Technology	Energy and Environment (39953)
12.05.2020 Tuesday	1) Electronics Technology	1) Mixed Signal ASIC Design (39909)
		2) PIC ARM and AVR (39910)
	2) Computer Science and Technology	1) Computer Vision and Image Processing (39928)
		2) Artificial Neural Networks (39929)
		3) Real time O.S. (39930)
		4) Human & Computer Interaction (40312)
	3) Energy Technology	1) Waste to Energy conversion (39844)
		2) Wind Energy and Small hydropower systems (39845)
		3) Energy efficient lighting (39846)
	4) Environmental Science & Technology	1) Environmental Sanitation (39954)
		2) Optimization Techniques (39955)
		3) Environmental Biotechnology (39956)

14.05.2020 Thursday	1) Electronics Technology	1) Analog and Low Power (39911) Digital VLSI Design
		2) Embedded C and RTOs (39912)
	2) Computer Science and Technology	1) Multimedia Communications (39931)
		2) Embedded Systems (39932)
		3) Data Mining (39933)
		4) Geographical Information Systems (39934)
	3) Energy Technology	1) Fuel and Combustion Tech. (39847)
		2) Solar Passive Architecture (39848)
		3) Energy Storage systems (39849)
	4) Environmental Science & Technology	1) Industrial Waste Management (39957)
		2) Environmental Economics (39958) And Regulation.

M.Tech. SEMESTER-II
(Regular Course)
(Time: - 10.00 a.m. to 01.00 p.m.)

Day & Date	BRANCHES	PAPER
05.05.2020 Tuesday	1) Electronics Technology	DSP Processor Fundamentals (39914)
	2) Computer Science and Technology	Computer Network Administration (39936)
	3) Energy Technology	Solar Thermal Energy Conversion (39851)
	4) Environmental Science & Technology	Physic-Chemical & Biological (39960) Treatment Processes
08.05.2020 Friday	1) Electronics Technology	High Speed Digital Design (39915) Techniques
	2) Computer Science and Technology	Advanced Computer Architecture (39937)
	3) Energy Technology	Energy Management & Audit (39852)
	4) Environmental Science & Technology	Air Pollution and Control (39961)
11.05.2020 Monday	1) Electronics Technology	Advanced Computer Networks (39916)
	2) Computer Science and Technology	Advanced in Database Design (39938)
	3) Energy Technology	Energy Efficiency in thermal & (39853) electrical utility
	4) Environmental Science & Technology	Environment Management Systems (39962)

13.05.2020 Wednesday	1) Electronics Technology	1) Micro Electromechanical systems (39917)
		2) Design Using FPAG and VHDL (39918)
	2) Computer Science and Technology	1) Web Technology (39939)
		2) Component Technology (39940)
		3) Quantum Computing (39941)
		4) Bio Informatics (39942)
		5) Digital Security (40313)
	3) Energy Technology	1) Hydrogen technology and fuel cell technology (39854)
		2) Alternative fuels for transportation (39855)
		3) Power Plant Engineering (39856)
	4) Environmental Science & Technology	1) Advanced Water & Waste Water Treatment Technique (39963)
		2) Environmental Toxicology (39964)
		3) Environmental Statistics and Experimental Design (39965)

M.Tech. SEMESTER-II (Cont.)

(Regular Course)

(Time: -10.00 a.m. to 01.00 p.m.)

Day & Date	BRANCHES	PAPER
15.05.2020 Friday	1) Electronics Technology	1) Mixed signal ASIC Design (39919)
		2) DSP Algorithms & Applications (39920)
	2) Computer Science and Technology	1) Advance Software Technology (39943)
		2) Computer Modeling & Simulation (39944)
		3) Neutral Language Processing (39945)
		4) Grid Computing (39946)
		5) Network Protocols (40314)
		6) Mobile Computing (40315)
	3) Energy Technology	1) Power Co-generation

15.05.2020 Friday		(39857)
		2) Energy modeling & project (39858) Management
		3) The New Energy Technologies (39859)
	4) Environmental Science & Technology	1) Remote Sensing and GIS (39966) 2) Solid Waste Management (39967)

SHIVAJI UNIVERSITY, KOLHAPUR.

Draft Programme Circular No. 745 Exam of May, 2020

Faculty : Engineering

Course :M. Tech. Examination Credit System (Course Code 150)

Part – I Sem.- I& II Examination to be held in May, 2020

INSTRUCTIONS : Common instruction as per Circular No. SU/On Exam/29, dated 01.02.2020, and also available on University website www.unishivaji.ac.in

1	Credit System Sem – I syllabus Only for Fresh (Regular) students from 2016-17
2	Credit System Sem – II syllabus Only for Fresh (Regular) students from 2016-17

M.Tech Semester-I Credit System (Old Course)

(Time: - 10.00a.m. to 01.00 p.m.)

Day & Date	BRANCHES		PAPER	CODE
04.05.2020 Monday	1	Electronics Technology	High Speed Analog Design	56439
	2	Computer Science and Technology	Mathematical Foundation of Computer Science	56348
	3	Energy Technology	Energy Scenario	56409
	4	Environmental Science and Technology	Physico -Chemical and Biological Treatment processes	56378
	5	Food Technology	Advances in Food Engg. & Tech	61172
06.05.2020 Wednesday	1	Electronics Technology	Reconfigurable Platforms & HDL	56440
	2	Computer Science and Technology	Design and Analysis of algorithms	56349
	3	Energy Technology	Biomass and its Conversion Technologies	56410
	4	Environmental Science and Technology	Environmental Chemistry and Microbiology	56379
	5	Food Technology	Advances in Food Science and Nutrition	61173
09.05.2020 Saturday	1	Electronics Technology	Communication Networks	56441
	2	Computer Science and Technology	Artificial Neural Network	56350
	3	Energy Technology	Solar Photovoltaic energy Conversion	56411
	4	Environmental Science and Technology	Solid Waste management	56380
	5	Food Technology	Novel Techniques in Food Packaging	61174
12.05.2020 Tuesday	1	Electronics Technology	Memory Technologies	56446
			CMOS VLSI Design	56447
			Asynchronous Circuits Design	56448
			Advanced Computer Architecture	56449
	2	Computer Science and Technology	Advance Database Systems	56355
			Bio-Informatics	56356
			Advanced Compilers	56357
	3	Energy Technology	Waste to Energy Conversion	56416
			Wind Energy and Small Hydropower System	56417
			Energy Efficient Lighting	56418

	4	Environmental Science and Technology	Energy and Environmental	56385
			Environmental Toxicology	56386
			Disaster Management and Risk Analysis	56387
	5	Food Technology	Advances in Meat Fish & Poultry Processing	61179
			EL-1 Modern Techniques in Fruits and Vegetable Processing	61180
			Waste Utilization of Food Processing Industries	61181
14.05.2020 Thursday	1	Electronics Technology	Digital System and Testing	56450
			Mixed Signal ASIC Design	56451
			RISC Microcontrollers	56452
			Automotive Embedded Systems	56453
			VLSI Design	56454
	2	Computer Science and Technology	Advanced Operating Systems	56358
			Real Time Systems	56359
			Web Engineering.	56360
	3	Energy Technology	Fuel and combustion Technology	56419
			Solar Passive Architecture	56420
			Energy Storage Systems	56421
	4	Environmental Science and Technology	Optimization Techniques	56388
			Environmental Economics	56389
			Environmental Statistics and Experimental Design	56390
	5	Food Technology	Advances in Processing of Dairy Technology	61182
			Food Rheology and Texture	61183
			Advances in Cereals and Pulses Processing Technology	61184

M.Tech Semester-I Credit System

(New Course A.Y. from 2016-17)

(Time: - 10.00a.m. to 01.00 p.m.)

Day & Date	BRANCHES		PAPER	CODE
04.05.2020 Monday	1	Electronics Technology	High Speed Analog Design	68068
	2	Computer Science and Technology	Mathematical Foundation of Computer Science	68054
	3	Energy Technology	Energy Resources and Their Utilization	68111
	4	Environmental Science and Technology	Physico -Chemical and Biological Treatment processes	68083
	5	Food Technology	Advances in Food Engg. &Tech	68097
06.05.2020 Wednesday	1	Electronics Technology	Reconfigurable Platforms & HDL	68069
	2	Computer Science and Technology	Design and Analysis of algorithms	68055
	3	Energy Technology	Biomass and its Conversion Technologies	68112
	4	Environmental Science and Technology	Remote Sensing and GIS Applications in Environmental Engineering.	68084
	5	Food Technology	Advances in Food Science and Nutrition	68098
09.05.2020 Saturday	1	Electronics Technology	Communication Networks	68070
	2	Computer Science and Technology	Artificial Neural Network	68056
	3	Energy Technology	Solar Photovoltaic energy Conversion	68113
	4	Environmental Science and Technology	Solid and Hazardous Waste Management	68085
	5	Food Technology	Novel Techniques in Food Packaging	68099
12.05.2020 Tuesday	1	Electronics Technology	Memory Technologies	68071
			CMOS VLSI Design	68072
			Asynchronous Circuits Design	68073
			Advanced Computer Architecture	68074
	2	Computer Science and Technology	Advance Database Systems	68057
			Bio-Informatics	68058
			Advanced Compilers	68059
	3	Energy Technology	Waste to Energy Conversion	68114
			Wind Energy and Small Hydropower System	68115
			Energy Efficient Lighting	68116
	4	Environmental Science and Technology	Energy and Environmental	68086
			Environmental Toxicology	68087
			Environmental Chemistry & Microbiology	68088
5	Food Technology	Advances in Meat Fish	68100	

			&Poultry Processing		
			EL-1 Modern Techniques in Fruits and Vegetable Processing	68101	
			Waste Utilization of Food Processing Industries	68102	
14.05.2020 Thursday		1. Electronics Technology	Optimization Techniques	68089	
			Design of Energy Efficient	68090	
			Operational Health and Safety Management	68091	
		2. Computer Sci. Technology	Fuel and Combustion Technology	68118	
			Solar passive Architecture	68119	
		3. Energy Technology	Energy storage Systems	68120	
			Advanced Operating Systems	68060	
		4. Environmental Sci. Technology	Real Time Systems	68061	
			Web-Engineering	68062	
			Digital System and Testing	68075	
		5. Food Technology	Mixed Signal ASIC Design	68076	
			Automotive Embedded Systems	68077	
		(Open Elective for all Branches)		Advances in Processing of Dairy Technology	68103
				Food rheology and Texture	68104
Advances in Cereals and Pulses Processing Technology	68105				

M.Tech Semester-II Credit System (Old Course)

(Time: -10.00a.m. to 01.00 p.m.)

Day & Date	BRANCHES		PAPER	CODE
05.05.2020 Tuesday	1	Electronics Technology	DSP Processor	56455
	2	Computer Science and Technology	Parallel Computer Architecture	56361
	3	Energy Technology	Solar Thermal Energy Conversion	56422
	4	Environmental Science and Technology	Air pollution and Control	56391
	5	Food Technology	Advances in Food Biotechnology	61185
08.05.2020 Friday	1	Electronics Technology	Real Time Operating System	56456
	2	Computer Science and Technology	Computer Vision and Image Processing	56362
	3	Energy Technology	Energy management and Audit	56423
	4	Environmental Science and Technology	Industrial Waste Treatment	56392
	5	Food Technology	Chemical and Instrumental analysis of food Components	61186
11.05.2020 Monday	1	Electronics Technology	High Speed Digital Design	56457
	2	Computer Science and Technology	Computer Security	56363
	3	Energy Technology	Energy Efficiency in Thermal and Electrical Utility	56424
	4	Environmental Science and Technology	Advanced Water and Waste Water Treatment	56393
	5	Food Technology	Food Quality Safety and Toxicology	61187
13.05.2020 Wednesday	1	Electronics Technology	System on Chip	56462
			Wavelet Transform and Applications	56463
			Micro Electromechanical System	56464
			Robotics and Machine Vision	56465
	2	Computer Science and Technology	Data-Mining and Warehousing	56368
			Business Intelligence	56369
			Web Services and SOA	56370
	3	Energy Technology	Hydrogen Technology And Fuel cell Technology	56429
			Alternative Fuels for Transportation	56430
			Power Plant Engineering	56431
	4	Environmental Science and	Environmental Management Systems	56398

		Technology	Numerical Methods and Statistics	56399
			Remote Sensing and GIS Application. In Envi. Engg.	56400
			Environmental Sanitation	56401
	5	Food Technology	Newer developments in bakery and confectionery	61192
			Nutraceutical and Functional Foods	61193
			Food Color and Flavor Technology	61194
15.05.2020 Friday	1	Electronics Technology	RF Integrated Circuit Design	56466
			VLSI in Signal Processing	56467
			High Performance Networks	56468
			Mobile Computing	56469
			VLSI Design E Embedded System	56470
	2	Computer Science and Technology	Geographical Information Systems	56371
			Artificial Intelligence and Natural Language Processing	56372
			System Modeling and Simulation	56373
	3	Energy Technology	Power co-generation	56432
			Energy Modeling and Project Management	56433
			The New Energy Technologies	56434
	4	Environmental Science and Technology	Operation and Maintenance of Environmental Facilities	56402
			Project Management	56403
			Environmental Biotechnology	56404
	5	Food Technology	Recent developments in processing of plantation crops	61195
			Simulation and Modeling in Food Processing	61196
			Project Management for Food Processing Industries	61197

M.Tech Semester-II Credit System
(New Course A.Y. from 2016-17)
(Time: -10.00a.m. to 01.00 p.m.)

Day & Date	BRANCHES		PAPER	CODE
05.05.2020 Tuesday	1	Electronics Technology	DSP Processor	68144
	2	Computer Science and Technology	Parallel Computer Architecture	68235
	3	Energy Technology	Solar Thermal Energy Conversion	68190
	4	Environmental Science and Technology	Air pollution and Control	68158
	5	Food Technology	Advances in Food Biotechnology	68248
08.05.2020 Friday	1	Electronics Technology	Real Time Operating System	68145
	2	Computer Science and Technology	Computer Vision and Image Processing	68236
	3	Energy Technology	Energy management and Audit	68191
	4	Environmental Science and Technology	Environment Management Systems	68159
	5	Food Technology	Chemical and Instrumental analysis of food Components	68249
11.05.2020 Monday	1	Electronics Technology	Mobile Computing	68146
	2	Computer Science and Technology	Computer Security	68237
	3	Energy Technology	Energy Efficiency in Thermal and Electrical Utility	68192
	4	Environmental Science and Technology	Advanced Water and Waste Water Treatment	68160
	5	Food Technology	Food Quality Safety and Toxicology	68250
13.05.2020 Wednesday	1	Electronics Technology	System on Chip	68147
			Wavelet Transform and Applications	68148
			Micro Electro Mechanical System	68149
			Robotics and Machine Vision	68150
	2	Computer Science and Technology	Data-Mining and Warehousing	68238
			Business Intelligence	68239
			Web Services and SOA	68240
	3	Energy Technology	Hydrogen Technology And Fuel cell Technology	68193
			Alternative Fuels for Transportation	68194

			Power Plant Engineering	68195
	4	Environmental Science and Technology	Industrial Waste Treatment	68161
			Environmental Policies and Legislation	68162
			Environmental Sanitation	68163
	5	Food Technology	Newer developments in bakery and confectionery	68251
			Nutraceutical and Functional Foods	68252
			Food Color and Flavor Technology	68253
15.05.2020 Friday	1	Electronics Technology	High Performance Networks	68152
			High Speed Digital Design	68153
	2	Computer Science and Technology	Geographical Information Systems	68241
			Artificial Intelligence and Natural Language Processing	68242
			System Modeling and Simulation	68243
	3	Energy Technology	Power co-generation	68197
			Energy Modeling and Project Management	68198
			The New Energy Technologies	68199
	4	Environmental Science and Technology	Operation and Maintenance of Environmental Facilities	68165
			Rural Water Supply And Sanitation	68164
			Environmental Biotechnology	68166
	5	Food Technology	Recent Developments in Processing of Plantation crops	68254
			Simulation and Modeling in Food Processing	68255
			Project Management for Food Processing Industries	68256

N.B:

The Practical Examination will be conducted in the Collages before the commencement of Theory Examination.

**Engineering & Technology Exam Section
Date -**

**Sd/-
Shri. G. R. Palse
I/c. Director,
Board of Examinations and Evaluations.**