# SHIVAJIUNIVERSITY, KOLHAPUR. Final Programme of M.Tech.CBCS Semester-I & II

Examination to be held in Nov./Dec. **2019** NO - 489 Exam Of Nov./Dec. **2019** 

- 1. The candidates are requested to be present at their respective places of Examination FIFTEEN MINUTES before the time appointed for setting of the First Paper and TEN MINUTES before the time appointed for setting of each subsequent Paper. Candidates are forbidden to take any book or paper into the Examination Hall.
- 2. The M.Tech.(CBSE) SEMESTER-I& II NEW SYLLABUS Examination will be held at:

Sr. No.	Centre	College Name
1	Karad	Govt. College of Engineering, Karad
2	Satara	K.B.P,College of Engineering, Satara
3	Warananagar.	Tatyasaheb Kore Institute of Technology, Warananagar.
4	Sakharale	Rajarambapu Institute of Technology, Sakharale
5	Budhagaon.	P.V.P. Institute of Technology, Budhagaon.
6	Ichalkaranji	DKTE.'s Textile & Engineering Institute, Ichalkaranji.
7	Jaysingpur.	Dr.J.J.Magadum College Of Engg., Jaysingpur.
8	Ambabai Talim Savanshta, Miraj	Walchand College Of Engg., Sangli.
9	Ashta	Annasaheb Dange College Of Engg.&Tech., Ashta
10	Atigre	Sou. Sushila Danchand Ghodawat, Charitable Trusts Group of Institutions, Atigre
11	Wathar	Ashokrao Mane Group of Institutions Faculty of Engineering & Management Studies , Wathar
12	Bharati Vidypeeth	Kolhapur Institute Of Technology"s College Of Engg., Gokul Shirgaon, Kolhapur
	College of Engg., Morewadi, Kolhapur	D.Y.Patil College Of Enggi.&Tech., Kasaba Bawada, Kolhapur
		Bharati Vidypeeth College of Engg., Kolhapur
13	Panhala	Sanjeevan Engineering and Technology Institute, Panhala
14	LIMB	Gouri Shankar College of Engineering

# SEMESTER – I BRANCH-MECHANICAL

**New-Course- From-DEC- 2019** 

Time: 10.00 a.m. to 12.30 p.m.

DAY & DATE	SUB-BRANCH	PAPER	
Thursday, 28/11/2019		Mathematical Modeling And Design Optimization	72048
Friday, 29/11/2019	Design Engineering	Solid Mechanics	72049
Saturday, 30/11/2019		Advanced Finite Element Analysis	72050
	Elective-I	Material Handling Equipment Design	72053
Monday,		Reliability Engineering	72051
02/12/2019		<b>Process Equipment Design</b>	72052
		<b>Product Design And Development</b>	72054
	Elective-II	Robotics	72055
Tuesday,		Machine Tool Design	72056
03/12/2019		Advanced Design Engineering	72057
		Reverse Engineering	72058

#### SEMESTER – I BRANCH – MECHANICAL

New-Course- From-DEC-2019 Time: 10.00 a.m. to 12.30 p.m.

DAY & DATE	SUB-BRANCH	PAPER	
Thursday, 28/11/2019		Advanced Fluid Mechanics	72061
Friday, 29/11/2019	Mechanical Heat Power Engineering	Advanced Thermodynamics And Combustion	72062
Saturday, 30/11/2019	0 0	Advanced Heat Transfer	72063
	Elective-I	Advanced I.C. Engines	72064
Monday,		Advanced Refrigeration	72065
02/12/2019		Advanced Power Plant Engineering	72066
	Elective-II	Advanced Automobile Engineering -	72067
Tuesday, 03/12/2019		Design of Air Conditioning Systems	72068
		Advanced Automobile Engineering	72069

## SEMESTER – I BRANCH - MECHANICAL

New-Course- From-DEC-2019 Time: 10.00 a.m. to 12.30 p.m.

DAY & DATE	SUB-BRANCH	PAPER	
Thursday, 28/11/2019		Solids Mechanics	72105
Friday, 29/11/2019	Mechanical- Machine Design	Mathematical Modeling And Design Optimization	72106
Saturday, 30/11/2019		Vibrations Engineering	72107
		Tribology	72108
Monday, 02/12/2019	Elective-I	<b>Process Equipment Design</b>	72109
02/12/2019		Finite Element Analysis	72110
		Mechatronics	72111
		Vibration Control And Condition Monitoring	72112
Tuesday,	Elective-II	<b>Product Design And Development</b>	72113
03/12/2019		Material Handling Equipment Design	72114
		Robotics	72115

# SEMESTER – I BRANCH – ELECTRONICS

New-Course- From – DEC – 2019 Time: 10.00 a.m. to 12.30 p.m.

DAY & DATE	Sub – Branch	Paper	
Thursday, 28/11/2019		Advanced Digital Signal Processing	72016
Friday, 29/11/2019	ELECTRONICS	Cosmos VLSI Design	72017
Saturday, 30/11/2019		Random Signal Processing	72018
Monday,	Elective I	High Performance Communication Network-	72019
02/12/2019		Design Of Digital Circuit & Logic Design	72020
		<b>Advanced Communication Systems</b>	72021
		Software Defined Radios	72022
		Image Processing & Applications	72023
Tuesday,	Elective-II	Design Of VLSI Systems	72024
03/12/2019		Wireless Sensor Networks	72025
		Industrial Dc Drives	72026

## SEMESTER-I BRANCH ELECTRONICS & TELECOMMUNICATION

(New Course-DEC 2019) Time: 10.00 a.m. to 12.30 p.m.

DAY & DATE	Branch	Paper	
Thursday, 28/11/2019	Telecommunication	Advanced Embedded System	72040
Friday, 29/11/2019		Error control Coding Techniques	72041
Saturday, 30/11/2019		Advanced Wireless Communication	72042
	Elective – I	Random Process	72043
Monday, 02/12/2019		Digital Data Compression	72044
02/12/2013		Advanced Biomedical Signal Processing	72045
		Optimization techniques	72046
	Elective – II	Mobile Computing	72047
Tuesday,		Design of VLSI Systems	72431
03/12/2019		Internet Traffic Engineering	72432
		Advanced Antenna Theory	72433

# SEMESTER – I BRANCH COMPUTER SCIENCE AND TECHNOLOGY

**New-Course- From-DEC-2019** 

Time: 10.00 a.m. to 12.30 p.m.

DAY & DATE	SUB-BRANCH	PAPER	
Thursday, 28/11/2019		Mathematical Foundations Of Computer Science	72028
Friday, 29/11/2019	Computer Science And Technology	<b>Design Of Database Systems</b>	72029
Saturday, 30/11/2019		Advanced Algorithms	72030
Monday,		Advanced Network Protocol	72031
02/12/2019	Elective-I	Ad-Hoc Wireless Network	72032
		Pervasive Computing	72033
		Cloud And Virtualization	72034
Tuesday, 03/12/2019	Elective-II	High Performance Computing Architectures	72035
		<b>Advanced Operating Systems</b>	72036

# SEMESTER I BRANCH- CHEMICAL

New Course From – DEC 2019 Time: 10.00 a.m. To 12.30 pm.

DAY & DATE	BRANCH	PAPER	
Thursday, 28/11/2019		Advanced Momentum And Heat Transfer	72080
Friday, 29/11/2019	CHEMICAL	Advanced Chemical Engineering Thermodynamics	72081
Saturday, 30/11/2019		Process Modeling In Chemical Engineering	72082
		Nano Technology	72083
Monday, 02/12/2019	Elective-I	Green Technology	72084
		Pharmaceutical Biotechnology	72085
		Catalysis And Surface Phenomena	72086
Tuesday,	Elective-II	Bioprocess Engineering	72087
03/12/2019		Materials Engineering	72088
		Process And Equipment Design	72089

# SEMESTER I BRANCH- CAD-CAM-CAE

New Course From – DEC 2019 Time: 10.00 a.m. To 12.30 pm.

DAY & DATE	BRANCH	PAPER	
Thursday, 28/11/2019	CAD-CAM-CAE	Computer Aided Design	72092
Friday, 29/11/2019		Advanced Machine Design	72093
Saturday, 30/11/2019		Advanced Finite Element Analysis	72094
		Mechatronics system design	72095
Monday,	Elective I	Design & Development of CAD/CAM/CAE Engineering	72096
02/12/2019		Theory of Plasticity and Elasticity	72097
		Design of Hydraulic and Pneumatic System	72098
		Design of Experiment and Research Methodology	72099
Tuesday,	Elective II	Automatic Control	72100
03/12/2019		Optimization Techniques	72101
		Tribology & Surface Engineering	72102

# SEMESTER - I

# BRANCH CIVIL CONSTRUCTION & MANAGEMENT

New Course From – DEC 2019 Time: 10.00 a.m. To 12.30 pm.

DAY & DATE	DAY & DATE BRANCH		PAPER	
Thursday, 28/11/2019		<b>Construction Project Management</b>	72072	
Friday, 29/11/2019	CIVIL	<b>Construction Equipment</b>	72073	
Saturday, 30/11/2019	CONSTRUCTION & MANAGEMENT	Project Economics & Financing	72074	
Monday, 02/12/2019		Computational Methods and Optimization Techniques	72075	
		Entrepreneurship In Construction	72076	
Tuesday,	Elective I	Human Resource Development in Construction	72077	
03/12/2019		Repair and Rehabilitation of Structures	72078	
		<b>Ground Improvement Techniques</b>	72079	

# SEMESTER – II BRANCH - MECHANICAL

**New-Course- From-DEC- 2019** 

Time: 2.30 p.m. to 5.00 p.m.

DAY & DATE	SUB-BRANCH	PAPER	
Friday, 29/11/2019		Vibration Engineering	72697
Saturday, 30/11/2019	Design Engineering	Smart Materials and Structure	72698
Monday, 02/12/2019		Analysis and Synthesis of Mechanisms	72699
	Elective-III	<b>Experimental Stress Analysis</b>	72700
Tuesday,		Design for Sustainably and Life Cycle Cost	72701
03/12/2019		Tribology	72702
		Open Elective	72703
	Elective-IV	Noise and Vibration Harshness	72704
Wednesday,		Vehicle Dynamics	72705
04/12/2019		<b>Engineering Fracture Mechanics</b>	72706
		Design for Manufacture and Assembly	72707

# SEMESTER- 7 II BRANCH – MECHANICAL

**New-Course- From-DEC-2019** 

Time: 2.30 p.m. to 5.00 p.m.

DAY & DATE	SUB-BRANCH	PAPER	
Friday, 29/11/2019		Numerical Computation of Fluid and Heat Flow	72711
Saturday, 30/11/2019	Mechanical Heat Power Engineering	Energy Analysis of Thermal Systems	72712
Monday, 02/12/2019		Design of Heat Transfer Equipment's	72713
Tuesday,	Elective-III	Design of Renewable Energy Equipment's & Systems	72714
03/12/2019		Cryogenics	72715
		Open Elective	72716
		Gas Turbines and Jet Propulsion	72717
Wednesday, 04/12/2019	Elective-IV	Advanced Mathematical Methods and Optimization	72718
		Design of Pumps, Compressors and Blowers	72719

# SEMESTER-II BRANCH – MECHANICAL

**New-Course- From-DEC-2019** 

Time: 2.30 p.m. to 5.00 p.m.

DAY & DATE	SUB-BRANCH	PAPER	
Friday, 29/11/2019		Mechanics of Machinery	72759
Saturday, 30/11/2019	Mechanical Machine Design	Advanced Machine Design	72760
Monday 02/12/2019		Advanced Materials	72761
Tuesday, 03/12/2019	Elective-III	<b>Experimental Stress Analysis</b>	72762
		<b>Composite Materials</b>	72763
		<b>Advanced Machine Tool Design</b>	72764
Wednesday, 04/12/2019		Noise and Vibration Harshness	72766
	Elective-IV	Vehicle Dynamics	72767
		<b>Engineering Fracture Mechanics</b>	72768
		Reliability Engineering	72769

# SEMESTER – II BRANCH – ELECTRONICS

New-Course- From – DEC – 2019 Time: 2.30 p.m. to 5.00 p.m.

DAY & DATE Sub – Branch		Paper	
Friday, 29/11/2019	ELECTRONICS	Real Time Embedded System Design	72230
Saturday, 30/11/2019		Power Electronics Systems	72231
		Design & Analysis of Algorithms	72232
Monday, 02/12/2019	Elective III	Design of Analog & Mixed Mode VLSI Circuits	72233
02/12/2019		RF & Microwave Circuits	72234
		<b>Advanced Wireless Communication</b>	72235
		Fuzzy Systems	72236
Tuesday,	El. 42 IX7	VLSI in Digital Signal Processing	72237
03/12/2019	Elective-IV	Nano Technology	72238
		Cryptography & Network Security	72239
		Advanced Process Control	72240
Wednesday, 04/12/2019	El. 42 X/	Renewable & Distributed Energy Systems	72241
	Elective-V	Internet of Things	72242
		Robotic Design & Control	72243

#### SEMESTER - II BRANCH

# **ELECTRONICS & TELECOMMUNICATION**

(New Course-DEC 2019) Time: 2.30 p.m. to 5.00 p.m.

DAY & DATE Branch		Paper		
Friday, 29/11/2019	Electronics & Telecommunication	Computer Vision	72683	
Saturday, 30/11/2019		Adhoc & Wireless Sensor Networks	72684	
	Elective – III	Cryptography & Network Security	72685	
Monday, 02/12/2019		Multi Rate System	72686	
02/12/2019		Advanced Light Wave Communication	72687	
		DSP Architecture & Algorithm	72688	
Tuesday, 03/12/2019	Elective – IV	Advanced Microwave Circuit Design	72689	
		SDR & Cognitive Radio Technology	72690	
		<b>Industry Automation &amp; Process Control</b>	72691	
		Nanotechnology	72692	
Wednesday, 04/12/2019		Advanced Operating Systems	72693	
	Elective V	Artificial Intelligence	72694	
	Elective – V	Soft Computing	72695	
		Cyber Security	72696	

# SEMESTER 9 - II BRANCH

#### COMPUTER SCIENCE AND TECHNOLOGY

New-Course- From-DEC-2019 Time: 2.30 p.m. to 5.00 p.m.

DAY & DATE	SUB-BRANCH	PAPER	
Friday, 29/11/2019	Computer	Systems and Information Security	72245
Saturday, 30/11/2019	— Science And Technology	Machine Learning	72246
Monday, 02/12/2019		Data Analytics	72247
	Elective-III	Data Warehousing and Data Mining	72248
		<b>Business Analytics</b>	72249
Tuesday, 03/12/2019		Deep Learning	72250
	Elective-IV	<b>Computer Vision</b>	72251
		Pattern Recognition	72252
Wednesday, 04/12/2019		Parallel and Distributed Computing	72512
	Elective-V	Information Retrieval	72513
		Natural Language Processing	72514

# SEMESTER - II BRANCH

**CHEMICAL** 

New-Course- From-DEC-2019 Time: 2.30 p.m. to 5.00 p.m.

DAY & DATE	SUB-BRANCH	PAPER	
Friday, 29/11/2019		Advanced Mass Transfer	72732
Saturday, 30/11/2019	CHEMICAL Engineering	<b>Modern Reaction Engineering</b>	72733
Monday, 02/12/2019		<b>Chemical Process Control</b>	72734
	Elective –III	Computational Fluid Dynamics	72735
Tuesday, 03/12/2019		<b>Energy Engineering</b>	72736
		Research Methodology	72737
Wednesday, 04/12/2019		Project Management	72739
		Advance Separation Techniques	72740
	Elective-IV	<b>Downstream Process Technology</b>	72741
		<b>Operational Research</b>	72742

## SEMESTER - II BRANCH

**CAD-CAM-CAE** 

New-Course- From-DEC-2019 Time: 2.30 p.m. to 5.00 p.m.

DAY & DATE	SUB-BRANCH	PAPER	
Friday, 29/11/2019		Manufacturing Systems Design	72745
Saturday, 30/11/2019	onday,	Computer Aided Manufacturing	72746
Monday, 02/12/2019		Product Life Cycle Management	72747
Tuesday, 03/12/2019	Elective-III	Nanotechnology	72748
		Rapid Manufacturing	72749
		<b>Computational Fluid Dynamics</b>	72750
		Open Elective	72751
Wednesday, 04/12/2019		Design for Manufacturing and Assembly	72752
		Ind. Automation and Robotics	72753
	Elective-IV	CAD/CAM/CAE Practices in Metal forming	72754
		Industrial Product Design	72755

#### SEMESTER - II BRANCH

# CIVIL CONSTRUCTION & MANAGEMENT New-Course- From-DEC-2019

Time: 2.30 p.m. to 5.00 p.m.

DAY & DATE	SUB-BRANCH	PAPER	
Friday, 29/11/2019		Construction Contracts and Legal Aspects	72723
Saturday, 30/11/2019	Civil Construction & Management	Statistical Analysis and Research Methodology	72724
Monday, 02/12/2019		<b>Construction Methods and Techniques</b>	72725
Tuesday, 03/12/2019		<b>Advanced Construction</b>	72726
	Elective-II	<b>Environmental Impact Assessment</b>	72727
	Licenve II	Advance Construction Materials & Building Services	72728

#### NOTE:

- 4) The examination programme is subject to change. If there is any change in examination programme, it will be communicated in time however the University is not responsible for the loss or inconvenience caused to the candidate.
  - The Candidates are allowed to use the electronic calculators for numerical calculations at their own cost. University will not supply such calculators.
- 5) The cellular Phone, Scientific Calculator & Digital Diary or any means, which can be used for unfair practice, are not allowed in the Examination hall.
- 6) The students should verify the customized time table given on their Hall Ticket with the final Programme sent to their college at least two days prior to the date of examination.
- 7) In case of any Query found in respective Question Paper, student shall communicate the same through Principal/Senior Supervisor within 7<sup>th</sup> days from the date of concerned Question Paper to, Deputy Registrar, Appointment Section, Room No. 205, Exam. Building No. 1, Shivaji University, Kolhapur-416004.

Vidyanagar, Kolhapur- 416 004. Date -23/10/2019 Sd/Shri. G. R. Palse
I/c. Director,
Board of Examinations and
Evaluations.