### SHIVAJIUNIVERSITY, KOLHAPUR.

**DraftProgramme**Circular No. 747Exam of May,2020

Faculty: Engineering

Course :M.Tech.Examination C.B.C.S. Pattern(Course Code 1156)

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 <a href="www.unishivaji.ac.in">www.unishivaji.ac.in</a>

1	C.B.C.S. Pattern Sem – I syllabus Only for Fresh (Regular) students from October, 2018
2	C.B.C.S. Pattern Sem – II syllabus Only for Fresh (Regular) students from March, 2019

The Centresand Places of the Examination will be as under:

Sr.	Centres	Centre	Colleges	College	Places
No.		Code	Abbr.	Code	
1	Warnanagar	10	TKT	15	Tatyasaheb Kore Institute of Technology, Warananagar
2	Jaysingpur	04	JJM	08	Dr. J. J. Magdum College of Engineering, Jaysingpur
			KIT	09	Kolhapur Institute of Technology's College of Engg., GokulShirgaon, Kolhapur
3	Kolhapur Institute of Technology's College of	03	DYP	07	D.Y.Patil College of Enggi. & Tech., KasabaBawada, Kolhapur
	Engg., GokulShirgaon, Kolhapur		BCE	281	BharatiVidypeeth College of Engg., Kolhapur

The written Examination will be conducted in the following order:

#### M.Tech.CBCS Semester-I

#### **BRANCH-MECHANICAL**

#### **New Course FromDec -2018**

DAY & DATE	SUB-BRANCH	SUB CODE	Time: 10.00 a.m. to 12.30 p.m.
Monday, 04/05/2020	Mechanical- Design Engineering	72048	Mathematical Modeling and Design Optimization
Tuesday, 05/05/2020		72049	Solid Mechanics
Wednesday, 06/05/2020		72050	Advanced Finite Element Analysis
	Elective-I	72053	Material Handling Equipment Design
Friday,		72051	Reliability Engineering
08/05/2020		72052	Process Equipment Design
		72054	Product Design And Development
	Elective-II	72055	Robotics
Saturday,		72056	Machine Tool Design
09/05/2020		72057	Advanced Design Engineering
		72058	Reverse Engineering

#### **BRANCH – MECHANICAL**

#### **New Course FromDec - 2018**

DAY & DATE	SUB-BRANCH	SUB CODE	Time: 10.00 a.m. to 12.30 p.m.
Monday, 04/05/2020	Mechanical Heat Power Engineering	72061	Advanced Fluid Mechanics
Tuesday, 05/05/2020		72062	Advanced Thermodynamics AndCombustion
Wednesday, 06/05/2020		72063	Advanced Heat Transfer
	Elective-I	72064	Advanced I.C. Engines
Friday, 08/05/2020		72065	Advanced Refrigeration
00/05/2020		72066	Advanced Power Plant Engineering
		72067	Advanced Automobile Engineering -
Saturday, 09/05/2020	Elective-II	72068	Design of Air Conditioning Systems
07/03/2020		72069	Advanced Automobile Engineering

DAY & DATE	SUB-BRANCH	SUB CODE	Time: 10.00 a.m. to 12.30 p.m.	
Monday, 04/05/2020	Mechanical- Machine Design	72105	Solids Mechanics	
Tuesday, 05/05/2020		72106	Mathematical Modeling And Design Optimization	
Wednesday, 06/05/2020		72107	Vibrations Engineering	
		72108	Tribology	
Friday,	Elective-I	72109	Process Equipment Design	
08/05/2020		72110	Finite Element Analysis	
		72111	Mechatronics	
		72112	Vibration Control And Condition Monitoring	
Saturday,	Elective-II	72113 Product De	Product Design And Development	
09/05/2020		72114	Material Handling Equipment Design	
		72115	Robotics	

### BRANCH – ELECTRONICS

#### **New Course FromDec - 2018**

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DAY & DATE	SUB-BRANCH	SUB CODE	Time: 10.00 a.m. to 12.30 p.m.		
Monday, 04/05/2020		72016	Advanced Digital Signal Processing		
Tuesday, 05/05/2020	ELECTRONICS	72017	Cosmos VLSI Design		
Wednesday, 06/05/2020		72018	Random Signal Processing		
		72019	High Performance Communication Network		
Friday, 08/05/2020		72020	Design of Digital Circuit & Logic Design		
08/05/2020	Elective I	72021	Advanced Communication Systems		
		72022	Software Defined Radios		
		72023	Image Processing & Applications		
Saturday,		72024	Design Of VLSI Systems		
09/05/2020	Elective-II	72025	Wireless Sensor Networks		
		72026	Industrial Dc Drives		

### BRANCH – ELECTRONICS& TELECOMMUNICATION New Course FromDec - 2018

DAY & DATE	SUB-BRANCH	SUB CODE	Time: 10.00 a.m. to 12.30 p.m.
Monday, 04/05/2020	Electronics &	72040	Advanced Embedded System
Tuesday, 05/05/2020	Telecommunication	72041	Error Control Coding Techniques
Wednesday, 06/05/2020		72042	Advanced Wireless Communication
	Elective – I	72043	Random Process
Friday, 08/05/2020		72044	Digital Data Compression
08/05/2020		72045	Advanced Biomedical Signal Processing
		72046	Optimization techniques
		72047	Mobile Computing
Saturday,		72431	Design of VLSI Systems
09/05/2020	Elective – II	72432	Internet Traffic Engineering
		72433	Advanced Antenna Theory

#### BRANCH - COMPUTER SCIENCE AND TECHNOLOGY

New Course From Dec – 2018

DAY & DATE	SUB-BRANCH	SUB CODE	Time: 10.00 a.m. to 12.30 p.m.
Monday, 04/05/2020	Computer Science And Technology	72028	<b>Mathematical Foundations of Computer Science</b>
Tuesday, 05/05/2020		72029	Design of Database Systems
Wednesday, 06/05/2020		72030	Advanced Algorithms
Friday,	Elective-I	72031	Advanced Network Protocol
08/05/2020		72032	Ad-Hoc Wireless Network
		72033	Pervasive Computing
	Elective-II	72034	Cloud And Virtualization
Saturday, 09/05/2020		72035	High Performance Computing Architectures
07/00/2020		72036	Advanced Operating Systems

### BRANCH – CHEMICAL

#### **New Course From Dec – 2018**

DAY & DATE	SUB-BRANCH	SUB CODE	Time: 10.00 a.m. to 12.30 p.m.
Monday,		72080	Advanced Momentum And Heat Transfer
04/05/2020			
Tuesday,	CHEMICAL	72081	Advanced Chemical Engineering
05/05/2020			Thermodynamics
Wednesday,		72082	Process Modeling In Chemical
06/05/2020			Engineering
Friday,	Elective-I	72083	Nano Technology
08/05/2020		72084	Green Technology
		72085	Pharmaceutical Biotechnology
		72086	Catalysis And Surface Phenomena
Saturday,		72087	<b>Bioprocess Engineering</b>
09/05/2020	Elective-II	72088	Materials Engineering
	Licetive-II	72089	Process And Equipment Design

#### **BRANCH – CAD-CAM-CAE**

#### **New Course From Dec – 2018**

		Tiew Course From Dec 2010	
DAY & DATE	SUB-BRANCH	SUB CODE	Time: 10.00 a.m. to 12.30 p.m.
Monday, 04/05/2020		72092	Computer Aided Design
Tuesday, 05/05/2020	CAD-CAM-CAE	72093	Advanced Machine Design
Wednesday, 06/05/2020		72094	Advanced Finite Element Analysis
		72095	Mechatronics system design
Friday, 08/05/2020	Elective I	72096	Design & Development of CAD/CAM/CAE Engineering
00,00,2020		72097	Theory of Plasticity and Elasticity
		72098	Design of Hydraulic and Pneumatic System
		72099	Design of Experiment and Research Methodology
Saturday,	Elective II	72100	Automatic Control
09/05/2020		72101	Optimization Techniques
		72102	Tribology & Surface Engineering
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#### BRANCH – CIVIL CONSTRUCTION& MANAGEMENTNew Course From Dec – 2018

DAY & DATE	SUB-BRANCH	SUB CODE	Time: 10.00 a.m. to 12.30 p.m.
Monday, 04/05/2020		72072	<b>Construction Project Management</b>
Tuesday, 05/05/2020	CIVIL CONSTRUCTION & MANAGEMENT	72073	Construction Equipment
Wednesday, 06/05/2020		72074	<b>Project Economics &amp; Financing</b>
Friday, 08/05/2020		72075	Computational Methods and Optimization Techniques
	Elective I	72076	Entrepreneurship in Construction
Saturday,		72077	Human Resource Development in Construction
09/05/2020		72078	Repair and Rehabilitation of Structures
		72079	<b>Ground Improvement Techniques</b>

### M.Tech.CBCS Semester-II

#### BRANCH – MECHANICAL

### New Course From May - 2019

DAY & DATE	SUB-BRANCH	SUB CODE	Time: 2.30 p.m. to 5.00 p.m.
Tuesday, 05/05/2020		72697	Vibration Engineering
Wednesday, 06/05/2020	Mechanical Design Engineering	72698	Smart Materials and Structure
Friday, 08/05/2020		72699	Analysis and Synthesis of Mechanisms
		72700	<b>Experimental Stress Analysis</b>
Saturday,		72701	Design for Sustainably and Life CycleCost
09/05/2020	Elective-III	72702	Tribology
		72703	Open Elective
		72704	Noise and Vibration Harshness
Monday,	T-1 - 42 TX7	72705	Vehicle Dynamics
11/05/2020	Elective-IV	72706	Engineering Fracture Mechanics
		72707	Design for Manufacture and Assembly

#### BRANCH – MECHANICAL

### New Course FromMay - 2019

DAY & DATE	SUB-BRANCH	SUB CODE	Time: 2.30 p.m. to 5.00 p.m.
Tuesday, 05/05/2020	Mechanical Heat Power Engineering	72711	Numerical Computation of Fluid and Heat Flow
Wednesday, 06/05/2020		72712	<b>Energy Analysis of Thermal Systems</b>
Friday, 08/05/2020		72713	Design of Heat Transfer Equipment's
Saturday, 09/05/2020	Elective-III	72714	Design of Renewable Energy Equipment's & Systems
		72715	Cryogenics
		72716	Open Elective
Monday, 11/05/2020	Elective-IV	72717	Gas Turbines and Jet Propulsion
		72718	Advanced Mathematical Methods and Optimization
		72719	Design of Pumps, Compressors and Blowers

### BRANCH – MECHANICAL

## New Course FromMay - 2019

DAY & DATE	SUB-BRANCH	SUB CODE	Time: 2.30 p.m. to 5.00 p.m.
Tuesday, 05/05/2020		72759	Mechanics of Machinery
Wednesday, 06/05/2020	Mechanical Machine Design	72760	Advanced Machine Design
Friday, 08/05/2020		72761	Advanced Materials
Saturday, 09/05/2020	Elective-III	72762	<b>Experimental Stress Analysis</b>
		72763	Composite Materials
		72764	Advanced Machine Tool Design
1.1011443,		72766	Noise and Vibration Harshness
	Elective-IV	72767	Vehicle Dynamics
11/05/2020		72768	<b>Engineering Fracture Mechanics</b>
		72769	Reliability Engineering

### **BRANCH – ELECTRONICS**

# New Course FromMay - 2019

DAY & DATE	SUB-BRANCH	SUB CODE	Time: 2.30 p.m. to 5.00 p.m.
Tuesday, 05/05/2020	ELECTRONICS	72230	Real Time Embedded System Design
Wednesday, 06/05/2020		72231	Power Electronics Systems
		72232	Design & Analysis of Algorithms
Friday, 08/05/2020	Elective III	72233	Design of Analog & Mixed Mode VLSI Circuits
00/05/2020	Elective III	72234	RF & Microwave Circuits
		72235	<b>Advanced Wireless Communication</b>
Saturday, 09/05/2020	Elective-IV	72236	Fuzzy Systems
		72237	VLSI in Digital Signal Processing
		72238	Nano Technology
		72239	Cryptography & Network Security
Monday, 11/05/2020	Elective-V	72240	Advanced Process Control
		72241	Renewable & Distributed Energy Systems
		72242	Internet of Things
		72243	Robotic Design & Control

**BRANCH – ELECTRONICS & TELECOMMUNICATION New Course FromMay - 2019** 

DAY & DATE	SUB-BRANCH	SUB CODE	Time: 2.30 p.m. to 5.00 p.m.
Tuesday, 05/05/2020	Electronics &	72683	Computer Vision
Wednesday, 06/05/2020	Telecommunication	72684	Adhoc& Wireless Sensor Networks
		72685	Cryptography & Network Security
Friday, 08/05/2020	Elective – III	72686	Multi Rate System
00/03/2020	Elective – III	72687	Advanced Light Wave Communication
		72688	DSP Architecture & Algorithm
Saturday, 09/05/2020	Elective – IV	72689	Advanced Microwave Circuit Design
		72690	SDR & Cognitive Radio Technology
		72691	Industry Automation & Process Control
		72692	Nanotechnology
	Elective – V	72693	Advanced Operating Systems
Monday, 11/05/2020		72694	Artificial Intelligence
		72695	Soft Computing
		72696	Cyber Security

## **BRANCH – COMPUTER SCIENCEAND TECHNOLOGY New Course From May - 2019**

DAY & DATE	SUB-BRANCH	SUB CODE	Time: 2.30 p.m. to 5.00 p.m.
Tuesday, 05/05/2020	Computer Science And Technology	72245	Systems and Information Security
Wednesday, 06/05/2020		72246	Machine Learning
Friday,		72247	Data Analytics
08/05/2020	Elective-III	72248	Data Warehousing and Data Mining
		72249	<b>Business Analytics</b>
Saturday,		72250	Deep Learning
09/05/2020	Elective-IV	72251	Computer Vision
		72252	Pattern Recognition
Monday,		72512	Parallel and Distributed Computing
11/05/2020	Elective-V	72513	Information Retrieval
		72514	Natural Language Processing

# **BRANCH – CHEMICALNew Course FromMay - 2019**

DAY & DATE	SUB-BRANCH	SUB CODE	Time: 2.30 p.m. to 5.00 p.m.
Tuesday, 05/05/2020		72732	Advanced Mass Transfer
Wednesday, 06/05/2020	CHEMICAL Engineering	72733	Modern Reaction Engineering
Friday, 08/05/2020		72734	Chemical Process Control
Saturday,		72735	Computational Fluid Dynamics
09/05/2020	Elective –III	72736	Energy Engineering
		72737	Research Methodology
		72739	Project Management
Monday,	Elective-IV	72740	Advance Separation Techniques
11/05/2020		72741	Downstream Process Technology
		72742	Operational Research

# BRANCH – CAD-CAM-CAENew Course FromMay - 2019

DAY & DATE	SUB-BRANCH	SUB CODE	Time: 2.30 p.m. to 5.00 p.m.
Tuesday, 05/05/2020		72745	Manufacturing Systems Design
Wednesday, 06/05/2020	CAD-CAM-CAE	72746	Computer Aided Manufacturing
Friday, 08/05/2020		72747	Product Life Cycle Management
	Elective-III	72748	Nanotechnology
Saturday,		72749	Rapid Manufacturing
09/05/2020		72750	Computational Fluid Dynamics
		72751	Open Elective
	Elective-IV	72752	Design for Manufacturing and Assembly
Monday,		72753	Ind. Automation and Robotics
11/05/2020		72754	CAD/CAM/CAE Practices in Metal forming
		72755	Industrial Product Design

**BRANCH – CIVIL CONSTRUCTION & MANAGEMENTNew Course FromMay - 2019** 

DAY & DATE	SUB-BRANCH	SUB CODE	Time: 2.30 p.m. to 5.00 p.m.
Tuesday, 05/05/2020	Civil Construction & Management	72723	<b>Construction Contracts and Legal Aspects</b>
Wednesday, 06/05/2020		72724	Statistical Analysis and Research Methodology
Friday, 08/05/2020		72725	<b>Construction Methods and Techniques</b>
Saturday, 09/05/2020	Elective-II	72726	<b>Advanced Construction</b>
		72727	<b>Environmental Impact Assessment</b>
		72728	Advance Construction Materials & Building Services

#### 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.