

**SHIVAJI UNIVERSITY, KOLHAPUR.**

Draft Programme Circular No. 746Exam of May, 2020

Faculty : Engineering

Course :M.E.Examination (Course Code 106)

Part – I Sem.- I&amp; 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](http://www.unishivaji.ac.in)

The Centres and Places of the Examination will be as under :

Sr. No.	Centres	Centre Code	Colleges Abbr.	College Code	Places
1	Karad	02	GCEK	06	Government College of Engineering, Karad
2	Satara	08	KBP	13	K.B.P. College of Engineering, Satara
3	Warnanagar	10	TKT	15	Tatyasaheb Kore Institute of Technology, Warananagar
4	Sakharale	07	RIT	12	Rajarambapu Institute of Technology, Sakharale
5	Budhagaon	06	PVPIT	11	P.V.P. Institute of Technology, Budhagaon
6	Ichalkaranji	09	DKTE	424	DKTEs Textile & Engineering, Ichalkaranji
7	Jaysingpur	04	JJM	08	Dr. J. J. Magdum College of Engineering, Jaysingpur
8	Ambabai Talim Sanshta's Sanjay Bhokare Group Institutes, Miraj	40	WCE	418	Walchand College of Engineering, Sangli
9	Ashta	01	ADCET	05	Annasaheb Dange College of Engg. & Tech., Ashta
10	Atigre	522	SDG	416	Sou. Sushila Danchand Ghodawat, Charitable Trusts Group of Institutions, Atigre
11	Wathar	38	BMSP	420	Ashokrao Mane Group of Institutions Faculty of Engineering & Management Studies, Wathar
12	Panhala	525	SETI	417	Sanjeevan Engineering & Technology Institute, Panhala
13	YTC	485	LIMB	358	Gourishankar College of Engineering, Limb
14	Kolhapur Institute of Technology's College of Engg., Gokul Shirgaon, Kolhapur	03	KIT	09	Kolhapur Institute Of Technology's College Of Engg., Gokul Shirgaon, Kolhapur
			DYP	07	D.Y.Patil College Of Enggi. & Tech., Kasaba Bawada, Kolhapur
			BCE	281	Bharati Vidypeeth College of Engg., Kolhapur

The written Examination will be conducted in the following order :

**M.E. Examination C.B.C.S. SEMESTER – I**  
**Day & Date : - Monday, 04/05/2020 Time: 10.00 a.m. to 1.00 p.m.**

Branch	Sub-Branch	Sub Code	Papers
CIVIL	Structure	34341	Theory of Elasticity & Plasticity Time : 10.00 a.m. to 2.00 p.m.
	Construction & Management	34319	Project Evaluation and Financing
ELECTRICAL	Power System	34336	Power System Modeling and Stability
	Control System	34331	Linear System Theory
BIOCHEMICAL ENGINEERING & BIO-TECHNOLOGY	-	42982	Advanced Bio reaction Engineering
COMPUTER SCIENCE	-	48760	Mathematical Foundations of Computer Science
CAD/CAM/CAE	-	48729	Advanced Machine Design
AUTOMOBILE	-	38712	Design of Experiments & Research Methodology

**SEMESTER – I**  
**Day & Date : -Tuesday – 05/05/2020 Time: 10.00 a.m. to 1.00 p.m.**

Branch	Sub-Branch	Sub Code	Papers
CIVIL	Structure	34342	Mechanics of Structures Time: 10.00 am to 2.00 p.m.
	Construction & Management	34320	Planning & Management of Projects
ELECTRICAL	Power System	34337	Modern Power System Protection & Related Instrumentation
	Control System	34332	Applied Linear Algebra for Control System
BIOCHEMICAL ENGINEERING & BIO-TECHNOLOGY	-	42983	Advanced Biological Thermodynamics
COMPUTER SCIENCE	-	48761	Advanced Distributed System
CAD/CAM/CAE	-	48730	Computer Aided Manufacturing
AUTO MOBILE	-	38713	Automotive Engines & Emission

**SEMESTER – I**  
**Day & Date :- Wednesday, 06/05/2020 Time: 10.00 a.m. to 1.00 p.m.**

Branch	Sub-Branch	Sub Code	Papers
CIVIL	Structure	34343	Adv. Design of Concrete Structure Time:10.00 am to 2.00 p.m.
	Construction & Management	34321	Construction Methods
ELECTRICAL	Power System	34338	Modern Power System Analysis & Computer Methods
	Control System	34333	Process Control
BIOCHEMICAL ENGINEERING & BIOTECHNOLOGY	-	42984	Advanced Microbiology & Biochemistry
COMPUTER SCIENCE	-	48762	Design & Analysis of Algorithm
CAD/CAM/CAE	-	48731	Finite Element Analysis

AUTO MOBILE	-	38714	Theory of Elasticity & Reliability
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**SEMESTER - I**

Day & Date :- Friday, 08/05/2020

Time: 10.00 a.m. to 1.00 p.m.

Branch	Sub-Branch	Sub Code	Papers
CIVIL	Structure	34344	Dynamics of Structure Time:10.00 a.m. to 2.00 p.m.
	Construction & Management	34322	Construction Equipment
ELECTRICAL	Power System	34339	E.H.V.A.C. Transmission
	Control System	34334	Digital Signal Processing
BIOCHEMICAL ENGINEERING & BIOTECHNOLOGY		42985	Advanced Bioseparation Processes
COMPUTER SCIENCE	-		Elective – I
		48763	Unix Network Programming
		48764	Real Time System
		48765	Data Mining & Warehousing
CAD/CAM/CAE	-	48732	Design of Experiments and Research Methodology
AUTOMOBILE	-	38715	Transmission System Theory & Design
ELECTRONICS	-		Elective – I
		34499	Statistical Communication Theory (up to May, 2020)
		34486	Advanced Network Engineering (up to May, 2020)

**SEMESTER-I**

Day & Date : - Saturday, 09/05/2020

Time: 10.00 a.m. to 1.00 p.m.

Branch	Sub-Branch	Sub Code	Papers
CIVIL	Structure Elective-I	35983	Design of Foundations Time:10.00 a.m. to 2.00 p.m.
		35984	Advances in Concrete Composites
		35985	Structural Optimization
	Construction & Management Elective-I	34440	Entrepreneurship in Construction
		34323	Human Resources Development in Construction
		35993	Work Study & Incentive Management
BIOCHEMICAL ENGINEERING BIO-TECHNOLOGY	Elective-I	42986	Immunotechnology
		42987	Biosensor Technology
		42988	Environmental Biotechnology
		42989	Animal Biotechnology
CAD/CAM/CAE	Elective –I	48733	Mechatronic Systems Design
		48734	Technology Management Engineering
		48735	Tribology & Surface Engineering
		48736	MEMS & Nanotechnology
		48737	Design & Development of CAD/CAM/CAE Software
		48738	Advanced Materials & processing Forming
AUTOMOBILE	Elective –I	38716	Finite Element Analysis
		38717	Hydraulic & Pneumatic System
		38718	Combustion Engineering
		38719	Vehicle Instrumentation & testing
		38720	Automobile Air Conditioning

**SEMESTER-I**

Day &Date	Sub-Branch	Sub Code	Time: 10.00 a.m. to 1.00 p.m.
Monday, 04/05/2020	Mechanical- Production Engineering	56210	Advanced Materials and Manufacturing Processes
Tuesday, 05/05/2020		56211	Design Of Experiments and Research Methodology
Wednesday, 06/05/2020		56212	Metal Forming Technology
Friday, 08/05/2020	Elective-I	56216	Facility Planning & Plant Layout
		56217	Advanced Machine Tool Design
		56218	Mechatronic System Design
		56219	Advanced Tooling & Die Design
		56220	Human Resource Management
		56221	Costing & Cost Control
Saturday, 09/05/2020	Elective-II	56222	Advanced Fluid Power Engineering
		56223	Manufacturing System Design
		56224	MEMS & Nanotechnology
		56225	Supply Chain Management & Logistics
		56226	Engineering Economics
		56227	Financial Management
Only For Student & College Information – Measurements & Instrumentation Lab Subject Code – 56213, Advanced CNC Technology Lab Subject Code – 56214, Seminar-I Subject Code – 56215			

**SEMESTER – I : BRANCH – MECHANICAL**

Day &Date	Sub-Branch	Sub Code	Time: 10.00 a.m. to 1.00 p.m.
Monday,04/05/2020	Mechanical- Product Design & Development	56250	Applied Machine Design
Tuesday, 05/05/2020		56251	Computer Aided Design and Simulation
Wednesday, 06/05/2020		56252	Design Of Experiments and Research Methodology
Friday, 08/05/2020	Elective-I	56254	Advanced Material and Processing
		56255	Industrial Automation
		56256	System Design
		56257	Material Handling Equipment Design
Saturday, 09/05/2020	Elective-II	56258	Dynamic Analysis & Testing Methodology
		56259	Reverse Engineering
		56260	Computational Fluid Dynamics
		56261	Design Optimization

**SEMESTER – I BRANCH - MECHANICAL  
New Course from December -2012**

Day &Date	Sub-Branch	Sub Code	Time: 10.00 a.m. to 1.00 p.m.
Monday, 04/05/2020	Mechanical- Machine Design	55589	Mathematical Modeling And Design Optimization
Tuesday, 05/05/2020		55590	Advanced Mechanics Of Solids
Wednesday, 06/05/2020		55591	Advanced Theory Of Vibrations
Friday, 08/05/2020	Elective-I	55592	Tribology
		55593	Process Equipment Design
		55594	Advanced Finite Element Analysis
		55595	Mechatronics
Saturday, 09/05/2020	Elective-II	55596	Vibration Control and Condition Monitoring
		55597	Product Design and Development
		55598	Material Handling Equipment Design
		55599	Robotics

**SEMESTER – I BRANCH - MECHANICAL**  
New Course from December-2012

Day &Date	Sub-Branch	Sub Code	Time: 10.00 a.m. to 1.00 p.m.
Monday, 04/05/2020	Mechanical-Heat Power & Engineering	56033	Advanced Fluid Mechanics
Tuesday, 05/05/2020		56036	Advanced Heat Transfer
Wednesday, 06/05/2020		56034	Advanced Thermodynamics and Combustion
Friday, 08/05/2020	Elective-I	56042	Advanced I.C. engine
		56132	Advanced Refrigeration
		56133	Advanced Power Plant Engineering
Saturday, 09/05/2020	Elective-II	56134	Advanced Automobile Engineering
		56135	Design Of Air Conditioning Systems
		56136	Energy Analysis and Management

**SEMESTER – I BRANCH – MECHANICAL**  
New Course From DEC – 2012

Day &Date	Sub-Branch	Sub Code	Time: 10.00 a.m. to 1.00 p.m.
Monday, 04/05/2020	Mechanical-Design Engineering	56137	Mathematical Modeling And Design Optimization
Tuesday, 05/05/2020		56138	Solid Mechanics
Wednesday, 06/05/2020		56139	Advanced Engineering Materials
Friday, 08/05/2020	Elective-I	56142	Reliability Engineering
		56143	Process Equipment Design
		56144	Material Handling Equipment Design
		56145	Product Design & Development
Saturday, 09/05/2020	Elective-II	56146	Robotics
		56147	Machine Tool Design
		56148	Advanced Finite Element Analysis
		56149	Reverse Engineering

**SEMESTER – I BRANCH – ELECTRONICS**  
New Course from December – 2012

Day &Date	Sub-Branch	Sub Code	Time: 10.00 a.m. to 1.00 p.m.
Monday, 04/05/2020	VLSI and Embedded System	60742	CMOS VLSI Design – I
Tuesday, 05/05/2020		60743	Advanced Digital Signal Processing
Wednesday, 06/05/2020		60744	Advanced Embedded System
Friday, 08/05/2020		60745	Digital Systems Engineering
Saturday, 09/05/2020	Elective-I	60747	DSP VLSI – I
		60748	System on Chip Architecture – I
		60749	Communication System Design
		60750	Algorithm for VLSI Design Automation

**SEMESTER-I New course  
Branch- Environmental**

Day &Date	Sub-Branch	Sub Code	Time: 10.00 a.m. to 1.00 p.m.	
Monday, 04/05/2020	Environmental	66362	Air and Noise Pollution	
Tuesday, 05/05/2020		66363	Solid and Hazardous Waste Management	
Wednesday, 06/05/2020		66364	Physics Chemical Process for Water and Wastewater	
Friday, 08/05/2020	Elective-I	66366	Industrial Health and Safety Auditing	
		66367	Optimization Techniques	
		66368	Project Management	
Saturday, 09/05/2020				Elective-II
		66369	Energy Management	
		66370	Operation and Maintenance of Treatment Plants	
		66371	Green Building	

**SEMESTER – I (New Course)  
BRANCH – ELECTRONICS & TELECOMMUNICATION**

Day &Date	Sub-Branch	Sub Code	Time: 10.00 a.m. to 1.00 p.m.
Monday, 04/05/2020	Electronics & Telecommunication	66385	Advanced Embedded System
Tuesday, 05/05/2020		66386	Error Control Coding Techniques
Wednesday, 06/05/2020		66387	Advance Wireless Communication
Friday, 08/05/2020		66388	Random Process
Saturday, 09/05/2020	Elective – I	66391	Mobile Computing
		66392	Digital Data Compression
		66393	Internet Traffic Engineering
		66394	Advanced Antenna Theory

**SEMESTER – I Branch - Industrial Engineering  
(New Course from December,2016)**

Day &Date	Sub-Branch	Sub Code	Time: 10.00 a.m. to 1.00 p.m.
Monday, 04/05/2020	Industrial Engineering	68670	Design of Experiments and Research Methodology
Tuesday, 05/05/2020		68671	Work Study
Wednesday, 06/05/2020		68672	Ergonomics
Friday, 08/05/2020	Elective-I	68673	Stochastic Process and Marker Chains
		68674	Manufacturing System Design
		68675	Probabilistic Risk Assessment
		68676	Project Engineering and Network Analysis
		68677	Technology Management
Saturday, 09/05/2020	Elective-II	68678	Multivariate Statistical Modeling
		68679	Supply Chain Management
		68680	Reliability Analysis and Prediction
		68681	Queuing Theory and Models
		56226 / 68682	Total Quality Management

**Only For Student & College Information : Measurements & Instrumentation Lab Subject Code– 56213, Advanced CNC Technology Lab Subject Code –56214, Seminar-I Subject Code – 56215**

**SEMESTER - I New Course from – December 2014**

Day &Date	Sub-Branch	Sub Code	Time: 10.00 a.m. to 1.00 p.m.
Monday, 04/05/2020	CHEMICAL	64209	Advanced Momentum and Heat Transfer
Tuesday, 05/05/2020		64210	Advanced Chemical Engineering Thermodynamics
Wednesday, 06/05/2020		64211	Process Modeling in Chemical Engineering
Friday, 08/05/2020	Elective-I	64212	Nanotechnology
		64213	Green Technology
		64214	Pharmaceutical Biotechnology
Saturday, 09/05/2020	Elective-II	64215	Catalysis and Surface Phenomena
		64216	Bioprocess Engineering
		64217	Material Engineering
		64218	Process and Equipment Design

**SEMESTER - I New Course from – December 2014**

Day &Date	Sub-Branch	Sub Code	Time: 10.00 a.m. to 1.00 p.m.
Monday, 04/05/2020	ELECTRONIC	63931	Advanced Digital Signal processing
Tuesday, 05/05/2020		63932	CMOS VLSI Design
Wednesday, 06/05/2020		63933	Random Signal Processing
Friday, 08/05/2020	Elective I	63934	High Performance Communication Network
		63935	Design of Digital Circuit and Logic Design
		63936	Optimization Techniques
		63937	Advance Communication System
Saturday, 09/05/2020	Elective II	63938	Software Defined Radios
		63939	Image Processing And Application
		63940	Design of VLSI System
		63941	Robotic and Application
		63942	Wireless Sensor network
		63943	Industrial DC Drives

**SEMESTER - I New Course from – December 2014**

Day &Date	Sub-Branch	Sub Code	Time: 10.00 a.m. to 1.00 p.m.
Monday, 04/05/2020	CAD-CAM-CAE	63965	Design of Experiments and Research Methodology
Tuesday, 05/05/2020		63966	Finite Elements Analysis
Wednesday, 06/05/2020		63967	Micro Electro-Mechanical System
Friday, 08/05/2020		63968	Computer Aided Manufacturing
Saturday, 09/05/2020	Elective-I	63969	Advanced Design Engineering
		63970	Advanced Tool Design
		63971	Design of Hydraulic and Phenaulic System
		63972	Mechatronic System Design

**SEMESTER – II**

Day &Date : - Monday, 04/05/2020 Time: 2.30 p.m. to 5.30 p.m.

Branch	Sub-Branch	Sub Code	Papers
CIVIL	Structure	34346	Theory of Plates and Shell Time : 2.00 p.m. to 6.00 p.m.
	Environment	34448	Air Pollution & Control
	Construction & Management	34324	Const. Techniques
ELECTRICAL	Power System	34515	Power System Planning & Eco.
	Control System	34526	Non-Linear Control System
ELECTRONICS & TELECOMM.	-	43027	RF & Microwave Circuit Design
BIOCHEMICAL ENGINEERING & BIOTECHNOLOGY	-	43448	Bioreactor Design
COMPUTER SCIENCE	-	48768	Design of Database Systems
CAD/CAM/CAE	-	48742	Manufacturing Systems Design

<b>AUTOMOBILE</b>	-	<b>38722</b>	<b>Engine Design</b>
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**SEMESTER – II**

**Day &Date : - Tuesday, 05/05/2020**

**Time: 2.30 p.m. to 5.30 p.m.**

<b>Branch</b>	<b>Sub-Branch</b>	<b>Sub Code</b>	<b>Papers</b>
<b>CIVIL</b>	<b>Structure</b>	<b>34347</b>	<b>Finite Element Method Time : 2.00 p.m. to 6.00 p. m.</b>
	<b>Environment</b>	<b>36022</b>	<b>Environmental Pollution &amp; Impact Assessment</b>
	<b>Construction &amp; Management</b>	<b>34325</b>	<b>Legal Aspects in Construction Engg.</b>
<b>ELECTRICAL</b>	<b>Power System</b>	<b>34516</b>	<b>Real Time Control of Power System</b>
	<b>Control System</b>	<b>34527</b>	<b>Optimal Control System</b>
<b>ELECTRONICS &amp; TELECOMM.</b>	-	<b>43028</b>	<b>Wireless Communication</b>
<b>BIOCHEMICAL ENGINEERING &amp; BIO- TECHNOLOGY</b>	-	<b>43449</b>	<b>Advanced Enzyme Technology</b>
<b>COMPUTER SCIENCE</b>	-	<b>48769</b>	<b>Network Core Protocols &amp; Management</b>
<b>CAD/CAM/CAE</b>	-	<b>48743</b>	<b>Product Life Cycle Management</b>
<b>AUTOMOBILE</b>	-	<b>38723</b>	<b>Classic &amp; Body Engg.</b>

**SEMESTER - II**

**Day &Date : - Wednesday, 06/05/2020**

**Time: 2.30 p.m. to 5.30 p.m.**

<b>Branch</b>	<b>Sub-Branch</b>	<b>Sub Code</b>	<b>Papers</b>
<b>CIVIL</b>	<b>Structure</b>	<b>34348</b>	<b>Earthquake Engineering Time : 2.00 p.m. to 6.00 p. m.</b>
	<b>Environment</b>	<b>34451</b>	<b>Waste Management Techniques</b>
	<b>Construction &amp; Management</b>	<b>34326</b>	<b>Management Information System for Construction Management</b>
<b>ELECTRICAL</b>	<b>Power System</b>	<b>34517</b>	<b>H.V.D.C. Transmission</b>
	<b>Control System</b>	<b>34528</b>	<b>Digital Control System</b>
<b>ELECTRONICS &amp; TELECOMM.</b>	-	<b>43029</b>	<b>Adaptive Signal Processing</b>
<b>BIOCHEMICAL ENGINEERING &amp; BIO – TECHNOLOGY</b>	-	<b>43450</b>	<b>Advanced Food Technology</b>
<b>COMPUTER SCIENCE</b>	-	<b>48770</b>	<b>Parallel Algorithms &amp; Design</b>
<b>CAD/CAM/CAE</b>	-	<b>48744</b>	<b>Ind. Automation &amp; Robotics</b>
<b>AUTOMOBILE</b>	-	<b>38724</b>	<b>Vehicle Dynamics</b>

**SEMESTER – II**

**Day &Date :- Friday, 08/05/2020**

**Time: 2.30 p.m. to 5.30 p.m.**

<b>Branch</b>	<b>Sub-Branch</b>	<b>Sub Code</b>	<b>Papers</b>
<b>CIVIL</b>	<b>Structure</b>	<b>34349</b>	<b>Advanced Design of Steel Structure Time 2.00 p.m. to 6.00 p. m.</b>
	<b>Environment</b>	<b>36023</b>	<b>Environmental Policy Laws &amp; Economic</b>
	<b>Construction &amp; Management</b>	<b>34327</b>	<b>Computational Methods &amp; Optimization Techniques</b>
<b>ELECTRICAL</b>	<b>Power System</b>	<b>34518</b>	<b>Elective-I : H.V. Engg.</b>
		<b>34519</b>	<b>Power Controllers.</b>
		<b>36015</b>	<b>Power System Instrumentation</b>
		<b>34520</b>	<b>Fuzzy Logic &amp; Artificial Neural Network</b>
	<b>Control System</b>	<b>34529</b>	<b>Elective-I : Micro-Controllers &amp; Applications</b>
		<b>34530</b>	<b>Optimization Techniques</b>
		<b>34531</b>	<b>Identification &amp; Estimation</b>
		<b>34532</b>	<b>Adaptive Control Systems</b>
	<b>36051</b>	<b>Multivariable Control System</b>	



		36052	Robust Control
ELECTRONICS & TELECOMM.	Elective-II	43030	Multi Rate Systems & Filter
		43031	Cryptography & Network Security
		43032	Speech & Audio Processing
BIOCHEMICAL ENGINEERING & BIO-TECHNOLOGY	-	43451	Advanced Genetic Engineering
COMPUTER SCIENCE	Elective – II	48771	Artificial Neural Network & Genetic algorithms
		48772	Operating System Design & Evaluation
		48773	Multicore Architecture & Programming
CAD/CAM/CAE	-	48745	Optimization Techniques
AUTOMOBILE	-	38725	Noise & Vibration
ELECTRONICS	Elective – II	34506	Mobile Communication Engineering (up to May, 2020)
		34509	Broadband Communication (up to May, 2020)

**SEMESTER-II**

Day & Date : - Saturday, 09/05/2020

Time: 2.30 p.m. to 5.30 p.m.

Branch	Sub-Branch	Sub Code	Papers
CIVIL	Structure	35986	Elective-II : Stability of Structure Time : 2.00 p.m. to 6.00 p. m.
		35987	Design of R. C. C. Bridge
		34457	Structural Reliability
		35988	Design of Folded Plates and Shells
	Environment	36024	Elective-II : Environmental Quality Management
		36025	Remote Sensing & GIS Applications in Environmental Engineering
	Construction & Management	35995	Elective-II : Advanced Construction
		35996	Appropriate Technology
		35997	Environmental Impact Assessment
ELECTRICAL	Power System	34521	Elective-II : Adv. Microprocessor of Techniques for Power System
		34522	Electric Power Quality & Harmonics
		36016	Artificial Intelligence & Expert Systems
	Control System	34533	Elective-II : Fuzzy & Neural Control
		36053	Applied Optimal Control
		36054	Stochastic Control
		36055	Real Time Computer Control
		36056	Software Applications to Control System
		36057	Robotics
ELECTRONICS & TELECOMM.		43033	Elective-III : Mobile Computing
		43034	Stochastic Models & Queuing Theory
		43035	Communication System Design
		43036	Optical Networks
BIOCHEMICAL ENGINEERING & BIO-TECHNOLOGY		43452	Elective-II : Planet Biotechnology
		43453	Pharmaceutical Biotechnology
		43454	Advanced protein Engineering
		43455	Advanced Bioinformatics
CAD/CAM/CAE		48746	Elective- II : Computational Fluid Dynamics
		48747	Quality & Reliability Engineering
		48748	System Dynamics & Simulation
		48749	Artificial Intelligence
		48750	Automatic Control Engineering
		48751	CAD/CAM/CAE Practices in Metal Forming
AUTOMOBILE		48752	Rapid Prototyping
		38726	Elective – II : Computational Fluid Dynamics
		38727	Human Resource Development
		38728	Advanced Automotive Electronics
		38729	Automotive Maintenance & Management
COMPUTER SCIENCE		38730	Tribology
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**SEMESTER – II BRANCH – MECHANICAL**

Branch	Sub-Branch	Sub Code	Papers
Monday, 04/05/2020	Mechanical- Production Engineering	56228	Optimization Techniques
Tuesday, 05/05/2020		56229	Advanced Casting Technology
Wednesday, 06/05/2020		56230	Production & Operations Management
Friday, 08/05/2020	Elective-III	56235	Fabrication Engg. Welding Technology
		56236	Entrepreneurship Development
		56237	Precision Manufacturing
		56238	Reliability Engineering
		56239	World Class Manufacturing
		56240	Total Quality Management
Saturday, 09/05/2020	Elective-IV	56241	Plastics Processing & Die Design
		56242	Automatic Control Engineering
		56243	Enterprise Resource Planning
		56244	Industrial Automation & Robotics
		56245	Project Management
		56246	Open Elective

**Only For Student & College Information**

Adv. Manufacturing Engg. Lab.-56231 T/W, Ext., Automation & Simulation Lab. - 56232 T/W Ext.  
Seminar- II 56233 T/W, Comprehensive Viva Voce 56234 Ext.

**SEMESTER – II BRANCH - MECHANICAL**  
New Course from May, 2013 Time: 2.30 p.m. to 5.30 p.m.

Branch	Sub-Branch	Sub Code	Papers
Monday, 04/05/2020	Mechanical- Product Design & Development	56262	Manufacturing System Design
Tuesday, 05/05/2020		56263	Creativity, Innovation & New Product Development
Wednesday, 06/05/2020		56264	Product Life Cycle Management
Friday, 08/05/2020	Elective-III	56267	Experimental Stress Analysis
		56268	Reliability Engineering
		56269	Industrial Robotics & Expert System
		56270	Open Elective
Saturday, 09/05/2020	Elective-IV	56271	Rapid Prototyping
		56272	Engineering Optimization In Design
		56273	AI.& Neural Network
		56274	TQM & Six Sigma

**SEMESTER II**  
**BRANCH – VLSI AND EMBEDDED SYSTEM**  
New Course from – May 2014 Time: 2.30 p.m. to 5.30 p.m.

Day & Date	Sub-Branch	Sub Code	Papers
Monday, 04/05/2020	VLSI & EMBEDDED SYSTEM	60751	CMOS VLSI DESIGN –II
Tuesday, 05/05/2020		60752	Analog & Mixed signal Design
Wednesday, 06/05/2020		60753	Embedded Software Design
Friday, 08/05/2020		60754	Testing & Text ability
Saturday, 09/05/2020	Elective-II	60756	DSP VLSI – II
		60757	Automotive Embedded System
		60758	Low Power VLSI design
		60759	System on chip Architecture –II

**SEMESTER II**

New Course from May- 2015

Time: 2.30 p.m. to 5.30 p.m.

Day & Date	Sub-Branch	Sub Code	Papers
Monday, 04/05/2020	CHEMICAL	64221	Advanced Mass Transfer System
Tuesday, 05/05/2020		64222	Modern Reaction Engineering
Wednesday,06/05/2020		64223	Chemical Process Control
Friday, 08/05/2020	Elective-III	64224	Computational Fluid Dynamics
		64225	Energy Engineering
		64226	Research Methodology
Saturday, 09/05/2020	Elective IV	64227	Project Management
		64228	Modern Separation Process
		64229	Down Stream Processing
		64230	Operation Research

**SEMESTER II**

New Course from – May 2015 Time: 2.30 p.m. to 5.30 p.m.

Day & Date	Sub-Branch	Sub Code	Papers
Monday, 04/05/2020	ELECTRONIC	63946	Real Time Embedded System Design
Tuesday, 05/05/2020		63947	Advanced Process Control
Wednesday, 06/05/2020		63948	Power Electronics System
Friday, 08/05/2020	Elective-III	63949	Design and Analysis or Algorithms
		63950	Design of Analog and Mixed Mode VLSI Circuits
		63951	Artificial Neural Networks
		63952	Cryptography and Network Security
		64059	Cognitive Radio Communication and Network
Saturday, 09/05/2020	Elective-IV	63954	Fuzzy System
		63955	VLSI in Digital Signal Processing
		63956	RF & Microwave Circuits
		63957	Renewable & Distributed Energy System
		63958	Advanced Computer Architecture

**SEMESTER II**

New Course from – December 2014

Time: 2.30 p.m. to 5.30 p.m.

Day & Date	Sub-Branch	Sub Code	Papers
Monday, 04/05/2020	CAD-CAM	63976	Product Life Cycle Management
Tuesday, 05/05/2020		63977	Advanced Mechanics or Materials
Wednesday,06/05/2020		63978	Automation & Robotics
Friday, 08/05/2020		63979	Design Optimization Techniques
Saturday, 09/05/2020	Elective-II	63980	Nano Technology
		63981	Industrial Product Design
		63982	Computational Fluid Dynamics
		63983	Reliability Engineering

**Semester-II New Course**

Br. Environmental

Time : 2.30 p.m. to 5.30 p.m.

Day & Date	Sub-Branch	Sub Code	Papers
Monday, 04/05/2020	Environmental	66372	Industrial Waste Treatment
Tuesday, 05/05/2020		66373	Biological Waste Water Treatment
Wednesday, 06/05/2020		66374	Environmental Impact Assessment and Legislation
Friday, 08/05/2020	Elective-III	66376	Remote Sensing and GIS
		66377	Watershed Management
		66378	Environmental Modeling and Simulation
Saturday, 09/05/2020	Elective IV	66379	Environmental Management System
		66380	Disaster Planning and Risk Analysis
		66381	Environmental Geo technology

**SEMESTER-II****Branch - Electronics & Telecommunication Time : 2.30 p.m. to 5.30 p.m.**

Day & Date	Sub-Branch	Sub Code	Papers
Monday, 04/05/2020	Electronics And Tele- communication	66395	Advance Microwave Circuit Design
Tuesday, 05/05/2020		66396	Adhoc and Wireless Sensor Network
Wednesday,06/05/2020		66397	Computer Vision
Friday, 08/05/2020	Elective-II	66400	1-Cryology and Network Security
		66401	2.Multi Rate System
		66402	3.SDR and cognitive Radio Technology
		66403	4.DSP architecture and Algorithm
Saturday, 09/05/2020	Elective-III	66404	Advanced Operating Systems
		66405	Optimization Techniques
		66406	Industry Automation and Process Control
		66407	Nanotechnology

**SEMESTER-II****Branch - Industrial Engineering****Time : 2.30 p.m. to 5.30 p.m.**

Day & Date	Sub-Branch	Sub Code	Papers
Monday, 04/05/2020	Industrial Engineering	68686	Optimization Techniques
Tuesday, 05/05/2020		68687	Human Factors Engineering
Wednesday, 06/05/2020		68688	Production Planning and Inventory Control
Friday, 08/05/2020	Elective-III	68689	1-Quality Engineering
		68690	2.Facility Layout and Design
		68691	3. Maintenance Engineering
		68692	4. Scheduling Algorithms
		68693	5. Productivity Management
Saturday, 09/05/2020	Elective-IV	68694	Multivariate Statistical Modeling
		68695	Logistics Management
		68696	Industrial Safety Engineering
		68697	Industrial Product Design
		68698	World Class Manufacturing

**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.