

## SHIVAJIUNIVERSITY,KOLHAPUR.

**Programme of M. E. I, II Semester, Examination to be held in May 2017**

**CIRCULER NO - 476 Exam Of May-2017**

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.E. 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	DKT's Textile & Engineering Institute, Ichalkaranji.
7	Jaysingpur.	Dr.J.J.Magadum College Of Enggi. Jaysingpur.
8	Ambabai Talim Savanshta, Miraj	Walchand College Of Enggi. Sangli.
9	Ashta	Annasaheb Dange College Of Enggi.&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	Department of Technology, New Building, Shivaji University, Kolhapur.	Kolhapur Institute Of Technology's College Of Enggi,Gokul Shirgaon, 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 Enineering

3. The written Examination will be conducted in the following order:

**SEMESTER – I****Day & Date : - Monday 15-5-2017 Time: 10.00 am to 1.00 p.m.**

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

**SEMESTER – I****Day & Date : -Wednesday 17-5-2016 Time: 10.00 a.m. to 1.00p.m.**

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

**SEMESTER – I****Day & Date : -Friday 19-5-2017 Time: 10.00 am to 1.00 p.m.**

<b>BRANCH</b>	<b>Sub- Branch</b>	<b>Papers</b>	
<b>CIVIL</b>	<b>Structure</b>	Adv. Design of Concrete Structure Time:10.00 am to 2.00 p.m.	<b>34343</b>
	<b>Construction &amp; Management</b>	Construction Methods	<b>34321</b>
<b>ELECTRICAL</b>	<b>Power System</b>	Modern Power System Analysis & Computer Methods	<b>34338</b>
	<b>Control System</b>	Process Control	<b>34333</b>
<b>BIOCHEMICAL ENGINEERING &amp; BIO - TECHNOLOGY</b>	-	Advanced Microbiology & Biochemistry	<b>42984</b>
<b>COMPUTER SCIENCE</b>	-	Design & Analysis of Algorithm	<b>48762</b>
<b>CAD/CAM/CAE</b>	-	Finite Element Analysis	<b>48731</b>
<b>AUTO MOBILE</b>	-	Theory of Elasticity & Reliability	<b>38714</b>

**SEMESTER - I**

Day &amp; Date : - Monday 22.5.2017 Time: 10.00 am to 1.00 p.m.

BRANCH	Sub- Branch	Papers	
CIVIL	Structure	Dynamics of Structure Time:10.00 am to 2.00 p.m.	34344
	Construction & Management	Construction Equipment	34322
ELECTRICAL	Power System	E.H.V.A.C. Transmission	34339
	Control System	Digital Signal Processing	34334
BIOCHEMICAL ENGINEERING & BIO - TECHNOLOGY		Advanced Bioseparation Processes	42985
COMPUTER SCIENCE	-	<b>Elective – I</b>	
		Unix Network Programming	48763
		Real Time System	48764
		Data Mining & Warehousing	48765
CAD/CAM/CAE	-	Design of Experiments and Research Methodology	48732
AUTOMOBILE	-	Transmission System Theory & Design	38715

**SEMESTER – I****Day & Date : - Wednesday 24-5-2017 Time: 10.00 am to 1.00 p.m.**

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

## SEMESTER – I BRANCH - MECHANICAL

**New-Course- From-DEC-2012**

**Time: 10.00 am to 1.00 p.m.**

DAY & DATE	SUB-BRANCH	PAPER	
Monday 15-5-2017	Mechanical- Production Engineering	Advanced Materials and Manufacturing Processes	56210
Wednesday 17-5-2017		Design Of Experiments and Research Methodology	56211
Friday 19-5-2017		Metal Forming Technology	56212
Monday 22-5-2017	Elective-I	Facility Planning & Plant Layout	56216
		Advanced Machine Tool Design	56217
		Mechatronic System Design	56218
		Advanced Tooling & Die Design	56219
		Human Resource Management	56220
		Costing & Cost Control	56221
Wednesday 24-5-2017	Elective-II	Advanced Fluid Power Engg.	56222
		Manufacturing System Design	56223
		MEMS & Nanotechnology	56224
		Supply Chain Management & Logistics	56225
		Engineering Economics	56226
		Financial Management	56227
<b>Only For Student &amp; College Information</b>			
<b>Measurements &amp; Instrumentation Lab Subject Code – 56213</b> <b>Advanced CNC Technology Lab Subject Code – 56214</b> <b>Seminar-I Subject Code – 56215</b>			

## SEMESTER – I    BRANCH – MECHANICAL

**New-Course- From-DEC-2012**

**Time: 10.00 am to 1.00 p.m.**

DAY & DATE	SUB-BRANCH	PAPER	
<b>Monday 15-5-2017</b>	<b>Mechanical-Product Design &amp; Development</b>	Applied Machine Design	<b>56250</b>
<b>Wednesday 17-5-2017</b>		Computer Aided Design and Simulation	<b>56251</b>
<b>Friday 19-5-2017</b>		Design Of Experiments and Research Methodology	<b>56252</b>
<b>Monday 22-5-2017</b>	<b>Elective-I</b>	Advanced Material and Processing	<b>56254</b>
		Industrial Automation	<b>56255</b>
		System Design	<b>56256</b>
		Material Handling Equipment Design	<b>56257</b>
<b>Wednesday 24-5-2017</b>	<b>Elective-II</b>	Dynamic Analysis & Testing Methodology	<b>56258</b>
		Reverse Engineering	<b>56259</b>
		Computational Fluid Dynamics	<b>56260</b>
		Design Optimization	<b>56261</b>
<b>Only For Student &amp; College Information</b>			
		<b>Seminar-I    Subject Code -</b>	<b>56253</b>



**SEMESTER – I BRANCH - MECHANICAL****New-Course- From-DEC-2012****Time: 10.00 am to 1.00 p.m.**

DAY & DATE	SUB-BRANCH	PAPER	
Monday 15-5-2017	Mechanical-Machine Design	Mathematical Modeling And Design Optimization	55589
Wednesday 17-5-2017		Advanced Mechanics Of Solids	55590
Friday 19-5-2017		Advanced Theory Of Vibrations	55591
Monday 22-5-2017	Elective-I	Tribology	55592
		Process Equipment Design	55593
		Advanced Finite Element Analysis	55594
		Mechatronics	55595
Wednesday 24-5-2017	Elective-II	Vibration Control and Condition Monitoring	55596
		Product Design and Development	55597
		Material Handling Equipment Design	55598
		Robotics	55599
<b>Only For Student &amp; College Information</b>			
Instrumentation Lab Subject Code -			55600
Seminar – I Subject Code -			55601

**SEMESTER – I BRANCH - MECHANICAL****New-Course- From-DEC-2012****Time: 10.00 am to 1.00 p.m.**

DAY & DATE	SUB-BRANCH	PAPER	
Monday 15-5-2017	Mechanical-Heat Power & Engineering	Advanced Fluid Mechanics	56033
Wednesday 17-5-2017		Advanced Heat Transfer	56036
Friday 19-5-2017		Advanced Thermodynamics and Combustion	56034
Monday 22-5-2017	Elective-I	Advanced I.C. engine	56042
		Advanced Refrigeration	56132
		Advanced Power Plant Engineering	56133
Wednesday 24-5-2017	Elective-II	Advanced Automobile Engineering	56134
		Design Of Air Conditioning Systems	56135
		Energy Analysis and Management	56136
<b>Only For Student &amp; College Information</b>			
Industrial Instrumentation Lab Subject Code -			56035
Seminar – I Subject Code -			56037

**SEMESTER – I    BRANCH – MECHANICAL****New-Course- From – DEC – 2012 Time: 10.00 am to 1.00 p.m.**

DAY & DATE	SUB-BRANCH	PAPER	
Monday 15-5-2017	Mechanical-Design Engineering	Mathematical Modeling And Design Optimization	56137
Wednesday 17-5-2017		Solid Mechanics	56138
Friday 19-5-2017		Advanced Engineering Materials	56139
Monday 22-5-2017	Elective-I	Reliability Engineering	56142
		Process Equipment Design	56143
		Material Handling Equipment Design	56144
		Product Design & Development	56145
Wednesday 24-5-2017	Elective-II	Robotics	56146
		Machine Tool Design	56147
		Advanced Finite Element Analysis	56148
		Reverse Engineering	56149
<b>Only For Student &amp; College Information</b>			
Instrumentation Lab Subject Code –			56140
Seminar-I Subject Code –			56141

**SEMESTER – I    BRANCH – ELECTRONICS****New-Course- From – DEC – 2012 Time: 10.00 am to 1-00 p.m.**

DAY & DATE	Sub – Branch	Paper	
Monday 15-5-2017	VLSI and Embedded System	CMOS VLSI Design – I	60742
Wednesday 17-5-2017		Advanced Digital Signal Processing	60743
Friday 19-5-2017		Advanced Embedded System	60744
Monday 22-5-2017		Digital Systems Engineering	60745
Wednesday 24-5-2017		<b>Elective – I</b>	
		DSP VLSI – I	60747
		System on Chip Architecture – I	60748
		Communication System Design	60749
		Algorithm for VLSI Design Automation	60750
<b>Only For Student &amp; College Information</b>			
		Seminar – I	60746 TW

**SEMESTER-I New course**  
**Branch- Environmental**  
**Time : 10-00 am to 1-00 p.m.**

DAY & DATE	BRANCH	PAPER	
Monday 15-5-2017	Environmental	Air and Noise Pollution	66362
Wednesday 17-5-2017		Solid and Hazardous Waste Management	66363
Friday 19-5-2017		Physics Chemical Processes for Water and Wastewater	66364
Monday 22-5-2017		Elective-I	
		Industrial Health and Safety Auditing	66366
		Optimization Techniques	66367
		Project Management	66368
Wednesday 24-5-2017		Elective-II	
		Energy Management	66369
		Operation and Maintenance of treatment Plants	66370
		Green Building	66371
<b>Only For Student &amp; College Information</b>			

**SEMESTER – I BRANCH – ELECTRONICS & TELECOMMUNICATION (New Course)**  
**Time: 10.00 am to 01.00 p.m.**

DAY & DATE	Branch	Paper	
Monday 15-5-2017	Electronics & Telecommunication	Advanced Embedded System	66385
Wednesday 17-5-2017		Error Control Coding Techniques	66386
Friday 19-5-2017		Advanced Wireless Communication	66387
Monday 22-5-2017		Random Process	66388
Wednesday 24-5-2017		<b>Elective – I</b>	
		Mobile Computing	66391
		Digital Data Compression	66392
		Internet Traffic Engineering	66393
		Advanced Antenna Theory	66394
<b>Only For Student &amp; College Information</b>			

<b>ME (Electronics ) Semester -I (Old Course) (Upto May-2017)</b> Time: 10.00 a.m. to 1.00 p.m.			
Friday 26-5-2017	Electronics	1- Advance Network Engineering	

**SEMESTER – I BRANCH- Industrial Engineering  
New-Course- From-DEC-2016**

Time: 10.00 am to 01.00 p.m.

DAY & DATE	SUB-BRANCH	PAPER	
Monday 15-5-2017	Industrial Engineering	Design of Experiments and Research Methology	68670
Wednesday 17-5-2017		Work Study	68671
Friday 19-5-2017		Ergonomics	68672
Monday 22-5-2017	Elective-I	Srochstic Process and Markar Chains	68673
		Manufacturing System Design	68674
		Probabilistic Rist Assessment	68675
		Project Engineering and Network Analysis	68679
		Technology Management	68677
Wednesday 24-5-2017	Elective-II	Multivariate Stastical Modeling	68678
		Supply Chain Management	68679
		Reliability Analysis and Prediction	68680
		Queuing Theory and Models	68681
		Total Quality Management	56226
<b>Only For Student &amp; College Information</b>			
<b>Measurements &amp; Instrumentation Lab Subject Code – 56213</b> <b>Advanced CNC Technology Lab Subject Code – 56214</b> <b>Seminar-I Subject Code – 56215</b>			

**SEMESTER I****New Course From – DEC 2014 Time: 10.00a.m.. To 01.00 pm.**

DAY & DATE	BRANCH	PAPER	
Monday 15-5-2017	CHEMICAL	Advanced Momentum and Heat Transfer	64209
Wednesday 17-5-2017		Advanced Chemical Engineering Thermodynamics	64210
Friday 19-5-2017		Process Modeling in Chemical Engineering	64211
Monday 22-5-2017		<b>Elective-I</b> Nanotechnology	64212
			64213
		Green Technology Pharmaceutical Biotechnology	64214
Wednesday 24-5-2017		<b>Elective-II</b> Catalysis and Surface Phenomena	64215
		Bioprocess Engineering	64216
		Material Engineering	64217
		Process and Equipment Design	64218

**SEMESTER I****New Course From – DEC 2014 Time: 10-00 am. To 1-00 pm.**

DAY & DATE	BRANCH	PAPER	
Monday 15-5-2017	ELECTRONIC	Advanced Digital Signal processing	63931
Wednesday 17-5-2017		CMOS VLSI Design	63932
Friday 19-5-2017		Random Signal Processing	63933
Monday 22-5-2017		<b>Elective-I</b> High Performance Communication Network	63934
		Design of Digital Circuit and Logic Design	63935
		Optimization Techniques	63936
		Advance Communication System	63937
Wednesday 24-5-2017		<b>Elective II</b> Software Defined Radios	63938
		Image Processing And Application	63939
		Design of VLSI System	63940
		Robotic and Application	63941
		Wireless Sensor network	63942
		Industrial DC Drives	63943

**SEMESTER I****New Course From – DEC 2014 Time: 10.00 am. To 1-00 pm.**

<b>DAY &amp; DATE</b>	<b>BRANCH</b>	<b>PAPER</b>	
<b>Monday 15-5-2017</b>	<b>CAD-CAM</b>	Design of Experiments and Research Methodology	<b>63965</b>
<b>Wednesday 17-5-2017</b>		Finite Elements Analysis	<b>63966</b>
<b>Friday 19-5-2017</b>		Micro Electro-Mechanical System	<b>63967</b>
<b>Monday 22-5-2017</b>		Computer Aided Manufacturing	<b>63968</b>
<b>Wednesday 24-5-2017</b>		<b>Elective-I</b> Advanced Design Engineering	<b>63969</b>
		Advanced Tool Design	<b>63970</b>
		Design of Hydraulic and Phenaulic System	<b>63971</b>
		Mechatronic System Design	<b>63972</b>

**M.E. Sem.I (Eletronic and Telecommunication)(old Syllabus)(upto May-2017)**

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

Friday 26-5-2016	Advanced Network System	43021
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**SEMESTER – II****Day & Date : - Tuesday 16-5-2017 Time: 10.00 am to 1-00 p.m.**

<b>BRANCH</b>	<b>Sub- Branch</b>	<b>Papers</b>	
<b>CIVIL</b>	<b>Structure</b>	Theory of Plates and Shell Time 10-00 a.m. to 2.00 p. m.	<b>34346</b>
	<b>Environment</b>	Air Pollution & Control	<b>34448</b>
	<b>Construction &amp; Management</b>	Const. Techniques	<b>34324</b>
<b>ELECTRICAL</b>	<b>Power System</b>	Power System Planning & Eco.	<b>34515</b>
	<b>Control System</b>	Non-Linear Control System	<b>34526</b>
<b>ELECTRONICS &amp; TELECOMM.</b>	-	RF & Microwave Circuit Design	<b>43027</b>
<b>BIOCHEMICAL ENGINEERING &amp; BIOTECHNOLOGY</b>	-	Bioreactor Design	<b>43448</b>
<b>COMPUTER SCIENCE</b>	-	Design of Database Systems	<b>48768</b>
<b>CAD/CAM/CAE</b>	-	Manufacturing Systems Design	<b>48742</b>
<b>AUTOMOBILE</b>	-	Engine Design	<b>38722</b>

**SEMESTER – II****Day & Date : - Thursday 18-5-2017 Time: 10.00a.m. to 1.00 p.m.**

<b>BRANCH</b>	<b>Sub- Branch</b>	<b>Papers</b>	
<b>CIVIL</b>	<b>Structure</b>	Finite Element Method Time 10-00 a.m. to 2.00 p. m.	<b>34347</b>
	<b>Environment</b>	Environmental Pollution & Impact Assessment	<b>36022</b>
	<b>Construction &amp; Management</b>	Legal Aspects in Construction Engg.	<b>34325</b>
<b>ELECTRICAL</b>	<b>Power System</b>	Real Time Control of Power System	<b>34516</b>
	<b>Control System</b>	Optimal Control System	<b>34527</b>
<b>ELECTRONICS &amp; TELECOMM.</b>	-	Wireless Communication	<b>43028</b>
<b>BIOCHEMICAL ENGINEERING &amp; BIO- TECHNOLOGY</b>	-	Advanced Enzyme Technology	<b>43449</b>
<b>COMPUTER SCIENCE</b>	-	Network Core Protocols & Management	<b>48769</b>
<b>CAD/CAM/CAE</b>	-	Product Life Cycle Management	<b>48743</b>
<b>AUTOMOBILE</b>	-	Classic & Body Engg.	<b>38723</b>



**SEMESTER - II****Day & Date : - Saturday 20-5-2017 Time: 10.00 am to 1.00 p.m.**

<b>BRANCH</b>	<b>Sub- Branch</b>	<b>Papers</b>	
<b>CIVIL</b>	<b>Structure</b>	Earthquake Engineering Time 10.000 a.m. to 2.00 p. m.	<b>34348</b>
	<b>Environment</b>	Waste Management Techniques	<b>34451</b>
	<b>Construction &amp; Management</b>	Management Information System for Construction Management	<b>34326</b>
<b>ELECTRICAL</b>	<b>Power System</b>	H.V.D.C. Transmission	<b>34517</b>
	<b>Control System</b>	Digital Control System	<b>34528</b>
<b>ELECTRONICS &amp; TELECOMM.</b>	-	Adaptive Signal Processing	<b>43029</b>
<b>BIOCHEMICAL ENGINEERING &amp; BIO - TECHNOLOGY</b>	-	Advanced Food Technology	<b>43450</b>
<b>COMPUTER SCIENCE</b>	-	Parallel Algorithms & Design	<b>48770</b>
<b>CAD/CAM/CAE</b>	-	Ind. Automation & Robotics	<b>48744</b>
<b>AUTOMOBILE</b>	-	Vehicle Dynamics	<b>38724</b>

**SEMESTER – II**

Day &amp; Date :- Tuesday 23-5-2017 Time: 10.00 am to 1.00 p.m.

BRANCH	Sub- Branch	Papers	
<b>CIVIL</b>	<b>Structure</b>	Advanced Design of Steel Structure Time: 10.00 a.m. to 2.00 p.m.	<b>34349</b>
	<b>Environment</b>	Environmental Policy Laws & Economic	<b>36023</b>
	<b>Construction &amp; Management</b>	Computational Methods & Optimization Techniques	<b>34327</b>
<b>ELECTRICAL</b>	<b>Power System</b>	<b>Elective-I</b> H.V. Engg.	<b>34518</b>
		Power Controllers.	<b>34519</b>
		Power System Instrumentation	<b>36015</b>
		Fuzzy Logic & Artificial Neural Network	<b>34520</b>
	<b>Control System</b>	<b>Elective-I</b> Micro-Controllers & Applications	<b>34529</b>
		Optimization Techniques	<b>34530</b>
		Identification & Estimation	<b>34531</b>
		Adaptive Control Systems	<b>34532</b>
		Multivariable Control System	<b>36051</b>
		Robust Control	<b>36052</b>

<b>ELECTRONICS &amp; TELECOMM.</b>	-	<b>Elective-II</b>	
		Multi Rate Systems & Filter	<b>43030</b>
		Cryptography & Network Security	<b>43031</b>
		Speech & Audio Processing	<b>43032</b>
<b>BIOCHEMICAL ENGINEERING &amp; BIO-TECHNOLOGY</b>	-	Advanced Genetic Engineering	<b>43451</b>
<b>COMPUTER SCIENCE</b>	-	<b>Elective – II</b>	
		Artificial Neural Network & Genetic algorithms	<b>48771</b>
		Operating System Design & Evaluation	<b>48772</b>
		Multicore Architecture & Programming	<b>48773</b>
<b>CAD/CAM/CAE</b>	-	Optimization Techniques	<b>48745</b>
<b>AUTOMOBILE</b>	-	Noise & Vibration	<b>38725</b>

## SEMESTER-II

Day &amp; Date : - Thursday 25-5-2016 Time: 10.00 am to 1.00 p.m.

BRANCH	Sub- Branch	Papers	
CIVIL	Structure	<b>Elective-II</b> Stability of Structure Time: 10.00 a.m. to 2.00 p.m.	35986
		Design of R.C.C. Bridge	35987
		Structural Reliability	34457
		Design of Folded Plates and Shells	35988
	Environment	<b>Elective-II</b> Environmental Quality Management	36024
		Remote Sensing & GIS Applications in Environmental Engg.	36025
	Construction & Management	<b>Elective-II</b> Advanced Construction	35995
		Appropriate Technology	35996
		Environmental Impact Assessment	35997
	ELECTRICAL	Power System	<b>Elective-II</b> Adv. Microprocessor of Techniques for Power System
Electric Power Quality & Harmonics			34522
Artificial Intelligence & Expert Systems			36016
Control System		<b>Elective-II</b> Fuzzy & Neural Control	34533
		Applied Optimal Control	36053
		Stochastic Control	36054
		Real Time Computer Control	36055
		Software Applications to Control System	36056
		Robotics	36057
ELECTRONICS & TELECOMM.		<b>Elective-III</b> Mobile Computing	43033
	Stochastic Models & Queuing Theory	43034	
	Communication System Design	43035	
	Optical Networks	43036	
BIOCHEMICAL ENGINEERING & BIO-TECHNOLOGY	<b>Elective-II</b> Planet Biotechnology	43452	
	Pharmaceutical Biotechnology	43453	
	Advanced protein Engineering	43454	
	Advanced Bioinformatics	43455	

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**SEMESTER – II****Day & Date :- Thursday 25-5-2017 Time:10.00 am to 1.00 p.m.**

<b>CAD/CAM/CAE</b>	<b>Elective- II</b>	
	Computational Fluid Dynamics	<b>48746</b>
	Quality & Reliability Engineering	<b>48747</b>
	System Dynamics & Simulation	<b>48748</b>
	Artificial Intelligence	<b>48749</b>
	Automatic Control Engineering	<b>48750</b>
	CAD/CAM/CAE Practices in Metal Forming	<b>48751</b>
Rapid Prototyping	<b>48752</b>	
<b>AUTOMOBILE</b>	<b>Elective - II</b>	
	Computational Fluid Dynamics	<b>38726</b>
	Human Resource Development	<b>38727</b>
	Advanced Automotive Electronics	<b>38728</b>
	Automotive Maintenance & Management	<b>38729</b>
	Tribology	<b>38730</b>
<b>COMPUTER SCIENCE</b>	-	-

**SEMESTER – II BRANCH – MECHANICAL**

New-Course – From - May – 2013 Time: 10.00 am. To 1.00 pm.

DAY & DATE	SUB-BRANCH	PAPER	
Tuesday 16-5-2017	Mechanical- Machine Design	Advanced Material Science	55602
Thursday 18-5-2017		Advanced Machine Design	55603
Saturday 20-5-2017		Mechanics Of Machinery	55604
Tuesday 23-5-2017	Elective-III	Experimental Stress Analysis	55605
		Composite Materials	55606
		Advanced Machine Tool Design	55607
		Open Elective	55608
Thursday 25-5-2017	Elective-IV	Noise & Vibration Harshness (NVH)	55609
		Vehicle Dynamics	55610
		Engineering Fracture Mechanics	55611
		Reliability Engineering	55612
<b>Only For Student &amp; College Information</b>			
		Computer Aided Analysis Lab – 55613	T/W Ext.
		Seminar – II 55614	Ext.
		Comprehensive Viva 55618	Ext.

**SEMESTER – II BRANCH - MECHANICAL**

New-Course- From - May-2013 Time : 10.00 am. To 1.00 pm.

DAY & DATE	SUB-BRANCH	PAPER	
Tuesday 16-5-2017	Mechanical- Heat Power & Engineering	Numerical Computation of Fluid & Heat Flow	56043
Thursday 18-5-2017		Energy Analysis of Thermal System	56044
Saturday 20-5-2017		Design Of Heat Transfer Equipments	56045
Tuesday 23-5-2017	Elective-III	Design Of Renewable Energy Equipments & System	56049
		Cryogenics	56050
		Open Elective	56053
Thursday 25-5-2017	Elective-IV	Gas Turbines & Jet Propulsion	56051
		Advanced Mathematical Methods & Optimization	56052
		Design Of pumps, Compressors & Blowers	56054
<b>Only For Student &amp; College Information</b>			
		Thermal Engg. Lab. - 56046	T/W & Ext.
		Seminar – II 56047	T/W
		Comprehensive viva - 56048	

## SEMESTER – II      BRANCH - MECHANICAL

**New-Course - From – May – 2013 Time: 10.00 am. To 1.00 pm.**

DAY & DATE	SUB-BRANCH	PAPER	
Tuesday 16-5-2017	<b>Mechanical-Design Engineering</b>	Advanced Theory Of Vibrations	<b>56150</b>
Thursday 18-5-2017		Advanced Design Engineering	<b>56151</b>
Saturday 20-5-2017		Analysis and Synthesis of Mechanisms	<b>56152</b>
Tuesday 23-5-2017	<b>Elective-III</b>	Design for Sustainability & Life Cycle Cost	<b>56158</b>
		Tribology	<b>56159</b>
		Open Elective	<b>56160</b>
		Experimental Stress Analysis	<b>56157</b>
Thursday 25-5-2017	<b>Elective-IV</b>	Noise And Vibration Harshness ( NVH)	<b>56161</b>
		Vehicle Dynamics	<b>56162</b>
		Engineering Fracture Mechanics	<b>56163</b>
		Design for Manufacture & Assembly	<b>56164</b>
<b>Only For Student &amp; College Information</b>			
		<b>Computer Aided Analysis Lab –</b>	<b>56153 T/W &amp; Ext</b>
		<b>Seminar – II</b>	<b>56154 T/W</b>
		<b>Comprehensive Viva</b>	<b>56155</b>
		<b>Industrial Training</b>	<b>56156</b>

**SEMESTER – II    BRANCH - MECHANICAL****New – Course – From – May – 2013 Time: 10.00 am. To 1.00 pm.**

<b>DAY &amp; DATE</b>	<b>SUB-BRANCH</b>	<b>PAPER</b>	
<b>Tuesday 16-5-2017</b>	<b>Mechanical-Production Engineering</b>	Optimization Techniques	<b>56228</b>
<b>Thursday 18-5-2017</b>		Advanced Casting Technology	<b>56229</b>
<b>Saturday 20-5-2017</b>		Production & Operations Management	<b>56230</b>
<b>Tuesday 23-5-2017</b>	<b>Elective-III</b>	Fabrication Engg. Welding Technology	<b>56235</b>
		Entrepreneurship Development	<b>56236</b>
		Precision Manufacturing	<b>56237</b>
		Reliability Engineering	<b>56238</b>
		World Class Manufacturing	<b>56239</b>
		Total Quality Management	<b>56240</b>
<b>Thursday 25-5-2017</b>	<b>Elective-IV</b>	Plastics Processing & Die Design	<b>56241</b>
		Automatic Control Engineering	<b>56242</b>
		Enterprize Resource Planning	<b>56243</b>
		Industrial Automation & Robotics	<b>56244</b>
		Project Management	<b>56245</b>
		Open Elective	<b>56246</b>
<b>Only For Student &amp; College Information</b>			
<b>Adv. Manufacturing Engg. Lab. – 56231 T/W Ext.</b> <b>Automation &amp; Simulation Lab. - 56232 T/W Ext.</b> <b>Seminar- II 56233 T/W</b> <b>Comprehensive Viva Voce 56234 Ext.</b>			

**SEMESTER – II BRANCH - MECHANICAL****New-Course – From – May – 2013 Time: 10.00 am. To 1.00 pm.**

DAY & DATE	SUB-BRANCH	PAPER	
Tuesday 16-5-2017	Mechanical-Product Design & Development	Manufacturing System Design	56262
Thursday 18-5-2017		Creativity, Innovation & New Product Development	56263
Saturday 20-5-2017		Product Life Cycle Management	56264
Tuesday 23-5-2017	Elective-III	Experimental Stress Analysis	56267
		Reliability Engineering	56268
		Industrial Robotics & Expert System	56269
		Open Elective	56270
Thursday 25-5-2017	Elective-IV	Rapid Prototyping	56271
		Engineering Optimization In Design	56272
		AI. & Neural Network	56273
		TQM & Six Sigma	56274
<b>Only For Student &amp; College Information</b>			
		<b>Seminar-II</b>	<b>56265 T/W</b>
		<b>Comprehensive Viva</b>	<b>56266 Ext.</b>

**SEMESTER II****BRANCH – VLSI AND EMBEDDED SYSTEM****New Course From – May 2014 Time: 10.00 am. To 1.00 pm.**

DAY & DATE	SUB-BRANCH	PAPER	
Tuesday 16-5-2017	VLSI AND EMBEDDED SYSTEM	CMOS VLSI DESIGN –II	60751
Thursday 18-5-2017		Analog & Mixed signal Design	60752
Saturday 20-5-2017		Embedded Software Design	60753
Tuesday 23-5-2017		Testing & Text ability	60754
Thursday 25-5-2017	Elective-II	DSP VLSI – II	60756
		Automotive Embedded System	60757
		Low Power VLSI design	60758
		System on chip Architecture –II	60759



**SEMESTER II****New Course From May- 2015 Time: 10.00 am. To 1.00 pm.**

DAY & DATE	BRANCH	PAPER	
Tuesday 16-5-2017	CHEMICAL	Advanced Mass Transfer System	64221
Thursday 18-5-2017		Modern Reaction Engineering	64222
Saturday 20-5-2017		Chemical Process Control	64223
Tuesday 23-5-2017		<b>Elective-III</b> Computational Fluid Dynamics	64224
		Energy Engineering	64225
		Research Methodology	64226
Thursday 25-5-2017		<b>ElectiveIV</b> Project Management	64227
		Modern Separation Process	64228
		Down Stream Processing	64229
		Operation Research	64230

**SEMESTER I I****OLD-Course UP TO – Dec 2015 Time: 10.00 am. To 1-00 pm.**

DAY & DATE	BRANCH	PAPER	
	Electronic	Elective-II Communication Switeching System	34505
		Mobile Communiocation Engineering	34506
		Neural Network	34507
		Distributed Database System	34508
		<b>Elective-III</b> Broadband Communication	34509
	Web Technology	34510	
	Software Engineering	34511	

**SEMESTER II**  
**New Course From – May 2015 Time: 10.00 am. To 1.00 pm.**

DAY & DATE	BRANCH	PAPER	
Tuesday 16-5-2017	ELECTRONIC	Real Time Embedded System Design	63946
Thursday 18-5-2017		Advanced Process Control	63947
Saturday 20-5-2017		Power Electronics System	63948
Tuesday 23-5-2017		<b>Elective-III</b> Design and Analysis or Algorithms	63949
		Design of Analog and Mixed Mode VLSI Circuits	63950
		Artificial Neural Networks	63951
		Cryptography and Network Security Cognitive Rodio Cmmunication and Network	63952 64059
Thursday 25-5-2017		ELECTRONIC	<b>Elective-IV</b> <b>Fuzzy System</b>
	<b>VLSI in Digital Signal Processing</b>		63955
	<b>RF &amp; Microwave Circuits</b>		63956
	<b>Renewable &amp; Distributed Energy System</b>		63957
	<b>Advanced Computer Architecture</b>		63958

**New Course From – DEC 2014 Time: 10-00 am. To 1-00 pm.**

DAY & DATE	BRANCH	PAPER	
Tuesday 16-5-2017	CAD-CAM	Product Life Cycle Management	63976
Thursday 18-5-2017		Advanced Mechanics or Materials	63977
Saturday 20-5-2017		Automation & Robotics	63978
Tuesday 23-5-2017		Design Optimization Techniques	63979
Thursday 25-5-2017		<b>Elective-II</b> Nano Technology	63980
		Industrial Product Design	63981
		Computational Fluid Dynamics	63982
		Reliability Engineering	63983

**Semester-II New Course  
Br. Environmental  
Time : 10.00 a.m. to 1-00 p.m.**

DAY & DATE	BRANCH	PAPER	
Tuesday 16-5-2017	Environmental	Industrial Waste Treatment	66372
Thursday 18-5-2017		Biological Waste Water Treatment	66373
Saturday 20-5-2017		Environmental Impact Assessment and Legislation	66374
Tuesday 23-5-2017		<b>Elective-III</b> Remote Sensing and GIS	66376
		Watershed Management	66377
		Environmental Modeling and Simulation	66378
Thursday 25-5-2017		<b>ElectiveIV</b> Environmental Management System	66379
		Disaster Planning and Risk Analysis	66380
		Environmental Geotechnology	66381

SEMESTER-II Br- ELECTRONICS & TELECOMMUNICATION  
Time : 10-00 a.m.to 1.00 p.m.

DAY & DATE	BRANCH	PAPER		
<b>Tuesday 16-5-2017</b>	<b>Electronics And Telecommunication</b>	Advance Microwave Circuit Design	<b>66395</b>	
<b>Thursday 18-5-2017</b>		Adhoc and Wireless Sensor Network	<b>66396</b>	
<b>Saturday 20-5-2017</b>		Computer Vision	<b>66397</b>	
<b>Tuesday 23-5-2017</b>		Elective-II 1-Cryology and Network Security 2.Multi Rate System 3.SDR and cognitive Radio Technology 4.DSP architecture and Algorithm		<b>66401</b>
				<b>66402</b>
				<b>66403</b>
<b>Thursday 25-5-2017</b>		Elective-III Advanced Operating Systems		<b>66404</b>
			Optimization Techniques	<b>66405</b>
			Industry Automation and Process Control	<b>66406</b>
	Nanotechnology		<b>66407</b>	

SEMESTER-II Br- Industrial Engineering  
Time : 10-00 a.m.to 1.00 p.m.

DAY & DATE	BRANCH	PAPER	
Tuesday 16-5-2017	<b>Industrial Engineering</b>	Optimization Techniques	<b>68686</b>
Thursday 18-5-2017		Human Factors Engineering	<b>68687</b>
Saturday 20-5-2017		Production Planning and Inventory Control	<b>68688</b>
Tuesday 23-5-2017		Elective-III 1-Quality Engineering 2.Facility Layout and Design 3. Maintenance Engineering 4. Scheduling Algorithms 5. Productivity Management	<b>68689</b> <b>68690</b> <b>68691</b> <b>68692</b> <b>68693</b>
		<b>Elective-IV</b>	
		Multivariate Statical Modeling	<b>68694</b>
		Logistics Management	<b>68695</b>
		Industrial Safety Engineering	<b>68696</b>
Thursday 25-5-2017		Industrial Product Design	<b>68697</b>
		World Class Manufacturing	<b>68698</b>

**NOTE:**

- 1) 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.
- 2) The Candidates are allowed to use the electronic calculators for numerical calculations at their own cost. University will not supply such calculators.
- 3) The cellular Phone, Scientific Calculator, Pager & Digital Diary or any means, which can be used for unfair practice, are not allowed in the Examination hall.
- 4) 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.

Vidyanagar,  
Kolhapur- 416 004.  
Date 18-03-2017

Sd/-  
**M.A.Kakade**  
Director, Board Of Examinations  
& Evaluation