## SHIVAJIUNIVERSITY, KOLHAPUR.

# Final Programme of M. E. I, II Semester, Examination to be held in **December-2015**

#### CIRCULER NO - 414 Exam Of December- 2015

- 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:

	T	T
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,	Kolhapur Institute Of Technology"s College Of Enggi,Gokul Shirgaon, Kolhapur
	Shivaji University, Kolhapur.	D.Y.Patil College Of Enggi.&Tech. Kasaba Bawada, Kolhapur
13	Panhala	Sanjeevan Engineering and Technology Institute, Panhala
14	AGC	Arvind Gavali College of Engineering

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

## SEMESTER - I

Day & Date : - Monday 28—12-2015 Time: 10.00 am to 01.00 p.m.

BRANCH	Sub-Branch	Papers	
	Structure	Theory of Elasticity & Plasticity Time: 10.00 am to 02.00 p.m.	34341
CIVIL			
	Construction & Management	Project Evaluation and Financing	34319
ELECTRICAL	Power System	Power System Modeling and Stability	34336
ELECTRICAL	Control System	Linear System Theory	34331
BIOCHEMICAL ENGINEERING & BIO-TECHNOLOGY	-	Advanced Bio reaction Engineering	42982
COMPUTER SCIENCE	-	Mathematical Foundations of Computer Science	48760
CAD/CAM/CAE	-	Advanced Machine Design	48729
AUTOMOBILE	-	Design of Experiments & Research Methodology	38712

#### **Old Course**

Day & Date : - - Monday 28-12-2015 Time: 10.00 am to 01.00 p.m.

	HPE	Advanced Fluid Mechanics and CFD	34414
MECHANICAL	Design	Computational Techniques in Design Engineering	34427
	Product Design & Development	Applied Machine Design	48783

Day & Date : - Wednesday 30-12-2015 Time: 10.00 am to 01.00 p.m.

BRANCH	Sub- Branch	Papers	
	Structure	Mechanics of Structures Time: 10.00 am to 02.00 p.m.	34342
CIVIL			
	Construction & Management	Planning & Management of Projects	34320
	Power System	Modern Power System Protection & Related Instrumentation	34337
ELECTRICAL	Control System	Applied Linear Algebra for Control System	34332
BIOCHEMICAL ENGINEERING & BIO-TECHNOLOGY	-	Advanced Biological Thermodynamics	42983
COMPUTER SCIENCE	-	Advanced Distributed System	48761
CAD/CAM/CAE	-	Computer Aided Manufacturing	48730
AUTO MOBILE	-	Automotive Engines & Emission	38713

#### Semester - I

#### **Old Course**

Day & Date : - Wednesday 30-12-2015 Time: 10.00 am to 01.00 p.m.

	Design	Industrial Instrumentation	34428
MECHANICAL	Product Design & Development	Computer Aided Design and Simulation	48784

Day & Date : - Friday 1-1-2016 Time: 10.00 am to 01.00 p.m.

BRANCH	Sub- Branch	Papers	
	Structure	Adv. Design of Concrete Structure Time: 10.00 am to 02.00 p.m.	34343
CIVIL			
	Construction & Management	Construction Methods	34321
ELECTRICAL	Power System	Modern Power System Analysis & Computer Methods	34338
LLLGTRICAL	Control System	Process Control	34333
BIOCHEMICAL ENGINEERING & BIO - TECHNOLOGY	-	Advanced Microbiology & Biochemistry	42984
COMPUTER SCIENCE	-	Design & Analysis of Algorithm	48762
CAD/CAM/CAE	-	Finite Element Analysis	48731
AUTO MOBILE		Theory of Elasticity &Reliability	38714

## **Old Course**

Day & Date : - Friday 1-1- 2016 Time: 10.00 am to 01.00 p.m.

	HPE	Adv. Instrumentation Techniques	34416
MECHANICAL	Product Design & Development	Design of Experiments and Research Methodology	48785

Day & Date : - Monday 4-1-2016 Time: 10.00 am to 01.00 p.m.

BRANCH	Sub- Branch	Papers	
	Structure	Dynamics of Structure Time: 10.00 am to 02.00 p.m.	34344
CIVIL			
	Construction & Management	Construction Equipment	34322
ELECTRICAL	Power System	E.H.V.A.C. Transmission	34339
ELECTRICAL	Control System	Digital Signal Processing	34334
BIOCHEMICAL ENGINEERING & BIO - TECHNOLOGY		Advanced Bioseperation Processes	42985
		Elective – I	
COMPUTER SCIENCE		Unix Network Programming	48763
COMPOTER SCIENCE	-	Real Time System	48764
		Data Mining & Warehousing	48765
CAD/CAM/CAE	-	Design of Experiments and Research Methodology	48732
AUTOMOBILE	-	Transmission System Theory & Design	38715

## **Old Course**

Day & Date : - Monday 4-1-2016 Time: 10.00 am to 01.00 p.m.

MECHANICAL	Design	Design of Experiments and Research Methodology	34430
MECHANICAL	Product Design & Development	Dynamic Analysis & Testing Methodology	48786

## Day & Date : - Wednesday 6-1-2016 Time: 10.00 am to 01.00 p.m.

BRANCH	Sub- Branch	Papers	
		Elective-I	
		Design of Foundations	35983
	Structure	Time: 10.00am. to 02.00 p.m.	
		Advances in Concrete Composites	35984
		Structural Optimization	35985
CIVIL			
		Elective-I Entrepreneurship in Construction	34440
	Construction & Management	Human Resources Development in Construction	34323
		iii) Work Study & Incentive Mgt.	35993
		Elecive-I	
BIOCHEMICAL		Immunotechnology	42986
ENGINEERING		Biosensor Technology	42987
BIO-TECHNOLOGY		Environmental Biotechnology	42988
		Animal Biotechnology	42989
		Elective –I	
		Mechatronic Systems Design	48733
		Technology Management Engineering	48734
		Tribology & Surface Engineering	48735
CAD/CAM/CAE	-	MEMS & Nanotechnology	48736
		Design & Development of CAD/CAM/CAE Software	48737
		Advanced Materials & processing Forming	48738
		Elective –I	
		Finite Element Analysis	38716
AUTOMOBILE		Hydraulic & Pneumatic System	38717
AUTOWIODILE	-	Combustion Engineering	38718
		Vehical Instrumentation & testing	38719
		Automobile Air Conditioning	38720

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

DAY & DATE	SUB-BRANCH	PAPER	
Monday 28-12-2015		Advanced Materials and Manufacturing Processes	56210
Wednesday 30-12-2015	Mechanical- Production	Design Of Experiments and Research Methodology	56211
Friday 1-1-2016	Engineering	Metal Forming Technology	56212
		Facility Planning & Plant Layout	56216
		Advanced Machine Tool Design	56217
Monday	Elective-I	Mechatronic System Design	56218
4-1-2016		Advanced Tooling & Die Design	56219
		Human Resource Management	56220
		Costing & Cost Control	56221
		Advanced Fluid Power Engg.	56222
		Manufacturing System Design	56223
Wednesday	Elective-II	MEMS & Nanotechnology	56224
6-1-2016	Elective-II	Supply Chain Management & Logistics	56225
		Engineering Economics	56226
		Financial Management	56227
Only For Studen	t & College Inform	ation	
Measurements & Instrumentation Lab Subject Code – 56213 Advanced CNC Technology Lab Subject Code – 56214 Seminar-I Subject Code – 56215			

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

DAY & DATE	SUB-BRANCH	PAPER	
Monday 28-12-2015		Applied Machine Design	56250
Wednesday 30-12-2015	Mechanical-Product Design & Development	Computer Aided Design and Simulation	56251
Friday 1-1-2016		Design Of Experiments and Research Methodology	56252
	Elective-I	Advanced Material and Processing	56254
Monday		Industrial Automation	56255
4-1-2016		System Design	56256
		Material Handling Equipment Design	56257
	Elective-II	Dynamic Analysis & Testing Methodology	56258
Wednesday 6-1-2016		Reverse Engineering	56259
0-1-2010		Computational Fluid Dynamics	56260
		Design Optimization	56261
Only For Stude	nt & College Information	•	
		Seminar-I Subject Code -	56253

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

Time: 10.00 am to 01.00 p.m.

DAY & DATE	SUB-BRANCH	PAPER		
Monday 28-12-2015		Mathematical Modeling And Design Optimization	55589	
Wednesday 30-12-2015	Mechanical-Machine Design	Advanced Mechanics Of Solids	55590	
Friday 1-1-2016		Advanced Theory Of Vibrations	55591	
	Elective-I	Tribology	55592	
Monday		Process Equipment Design	55593	
4-1-2016		Advanced Finite Element Analysis	55594	
		Mechatronics	55595	
	Elective-II	Vibration Control and Condition Monitoring	55596	
Wednesday		Product Design and Development	55597	
6-1-2016		Material Handling Equipment Design	55598	
		Robotics	55599	
Only For Student & College Information				
Instrumentation Lab Subject Code - Seminar – I Subject Code -			55600 55601	

## SEMESTER - I BRANCH - MECHANICAL

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

DAY & DATE	SUB-BRANCH	PAPER	
Monday 28-12-2015		Advanced Fluid Mechanics	56033
Wednesday 30-12-2015	Mechanical-Heat Power & _ Engineering	Advanced Heat Transfer	56036
Friday 1-1-2016		Advanced Thermodynamics and Combustion	56034
	Elective-I	Advanced I.C. engine	56042
Monday 4-1-2016		Advanced Refrigeration	56132
4 1 2010		Advanced Power Plant Engineering	56133
		Advanced Automobile Engineering	56134
Wednesday 6-1-2016	Elective-II	Design Of Air Conditioning Systems	56135
0 1 2010		Energy Analysis and Management	56136
Only For Student	& College Information	•	
	Industrial I Seminar – l	Instrumentation Lab Subject Code - 56035 Subject Code - 56037	

New-Course- From – DEC – 2012 Time: 10.00 am to 01.00 p.m.

DAY & DATE	SUB-BRANCH	PAPER	
Monday 28-12-2015		Mathematical Modeling And Design Optimization	56137
Wednesday 30-12-2015	Mechanical-Design Engineering	Solid Mechanics	56138
Friday 1-1-2016		Advanced Engineering Materials	56139
	Elective-I	Reliability Engineering	56142
Monday		Process Equipment Design	56143
4-1-2016		Material Handling Equipment Design	56144
		Product Design & Development	56145
	Elective-II	Robotics	56146
Wednesday		Machine Tool Design	56147
6-1-2016		Advanced Finite Element Analysis	56148
		Reverse Engineering	56149
Only For Student 8	College Information		
		Instrumentation Lab Subject Code – Seminar-I Subject Code –	56140 56141

## SEMESTER - I BRANCH - ELECTRONICS

New-Course- From - DEC - 2012 Time: 10.00 am to 01.00 p.m.

DAY & DATE	Sub – Branch	Paper	
Monday 28-12-2015		CMOS VLSI Design – I	60742
Wednesday 30-12-2015		Advanced Digital Signal Processing	60743
Friday 1-1-2016		Advanced Embedded System	60744
Monday 4-1-2016		Digital Systems Engineering	60745
		Elective – I	
		DSP VLSI – I	60747
Wednesday 6-1-2016		System on Chip Architecture – I	60748
0 1 2010		Communication System Design	60749
		Algorithm for VLSI Design Automation	60750
	Only For Stude	nt & College Information	
		Seminar – I	60746 TW

#### **BranchCivilEnvironmental(old)**

Time: 10.00 am to 1-00 p.m.

DAY & DATE	BRANCH	PAPER	
Monday 28-12-2015		Environmental Chemistry and Microbiology	34442
Wednesday 30-12-2015	Environmental	Advanced Water Supply Treatment Technology	34444
Friday 1-1-2016		Numerical Methods in Environmental Engg.	36019
Monday 4-1-2016		Muncipal and Industrial Solid Waste Management	36020
		Elective-I	
Wednesday		Hydrology and Watershed Mgt.	34445
6-1-2016		Disaster Management	36021
nly For Student	& College Informatio	n	

# SEMESTER - I BRANCH - ELECTRONICS& TELECOMMUNICATION(Old Course)

DAY & DATE	Branch	Paper	
Monday 28-12-2015		Advanced Light Wave Communication	43019
Wednesday 30-12-2015	Electronice 0	Linear Algebra and Error Control Techniques	43020
Friday 1-1-2016	Electronics & Telecommunication	Advanced Network Systems	4302
Monday 4-1-2016		Random Process	43022
		Elective – I	
		Digital Data Compression	43023
Wednesday 6-1-2016		Optimization Techniques	43024
0 1 2010		Real Time Embedded Systems	4302
	Only For Stude	ent & College Information	

#### SEMESTER-I New course Branch- Civil Environmental Time: 10.00 am to 1-00 p.m.

DAY & DATE	BRANCH	PAPER	
Monday 28-12-2015		Air and Noise Pollution	66362
Wednesday 30-12-2015	Environmental	Solid and Hazardous Waste Management	66363
Friday 1-1-2016		Physics Chemical Processe for Water and Wastewater	66364
		Elective-I	
Monday		Industrial Health and Safety Auditing	66366
4-1-2016		Optimization Techniques	66367
		Project Management	66368
		Elective-II	
Wednesday		Energy Management	66369
Wednesday 6-1-2016		Operation and Mainteneace of treatment Plants	66370
		Green Building	66371

# SEMESTER - I BRANCH - ELECTRONICS& TELECOMMUNICATION(New Course)

DAY & DATE	Branch	Paper	
Monday 28-12-2015		Advanced Embedded System	66385
Wednesday 30-12-2015		Error Control Coding Techniques	66386
Friday 1-1-2016	Electronics & Telecommunication	Advance Wireless Communication	66387
Monday 4-1-2016		Random Process	66388
		Elective – I	-
		Mobile Computing	66391
Wednesday 6-1-2016		Digital Data Compression	66392
0-1-2010		Internet Traffic Engineering	66393
		Advanced Antenna Theory	66394
	Only For Stude	nt & College Information	•

Day & Date : - Tuesday 29-12-2015 Time: 10.00 am to 01.00 p.m.

BRANCH	Sub- Branch	Papers	
	Structure	Theory of Plates and Shell Time10.00 a.m. to 02.00 p. m.	34346
CIVIL	Environment	Air Pollution & Control	34448
	Construction & Management	Const. Techniques	34324
ELECTRICAL	Power System	Power System Planning & Eco.	34515
ELECTRICAL	Control System	Non-Linear Control System	34526
ELECTRONICS & TELECOMM.	-	RF & Microwave Circuit Design	43027
BIOCHEMICAL ENGINEERING & BIO- TECHNOLOGY	-	Bioreactor Design	43448
COMPUTER SCIENCE	-	Design of Database Systems	48768
CAD/CAM/CAE	-	Manufacturing Systems Design	48742
AUTOMOBILE	-	Engine Design	38722

# From May 2014

Day & Date : - Tuesday 29-12-2015 Time: 10.00 am to 01.00 p.m.

	HPE-G.I	I. C. Engines - I	34419
MECHANICAL	Product Design & Development	Manufacturing System Design	48799

Day & Date : - Thursday 31-12-2015 Time: 10.00 am to 01.00 p.m.

BRANCH	Sub- Branch	Papers	
	Structure	Finite Element Method Time10.00 a.m. to 02.00 p. m.	34347
CIVIL	Environment	Environmental Pollution & Impact Assessment	36022
	Construction & Management	Legal Aspects in Construction Engg.	34325
ELECTRICAL	Power System	Real Time Control of Power System	34516
ELECTRICAL	Control System	Optimal Control System	34527
ELECTRONICS & TELECOMM.	-	Wireless Communication	43028
BIOCHEMICAL ENGINEERING & BIO- TECHNOLOGY	-	Advanced Enzyme Technology	43449
COMPUTER SCIENCE	-	Network Core Protocols & Management	48769
CAD/CAM/CAE	-	Product Life Cycle Management	48743
AUTOMOBILE	-	Classic & Body Engg.	38723

# New Course - May 2014

# Day & Date : - Thursday 31-12-2015 Time: 10.00 am to 01.00 p.m.

MECHANICAL			
	Design	M/C Dynamics	34433
	Product Design & Development	Rapid Prototyping	48800

## Day & Date : - Saturday 2-1-2016 Time: 10.00 am to 01.00 p.m.

BRANCH	Sub- Branch	Papers	
	Structure	Earthquake Engineering Time10.00 a.m. to 02.00 p. m.	34348
CIVIL	Environment	Waste Management Techniques	34451
	Construction & Management	Management Information System for Construction Management	34326
ELECTRICAL	Power System	H.V.D.C. Transmission	34517
ELECTRICAL	Control System	Digital Control System	34528
ELECTRONICS & TELECOMM.	-	Adaptive Signal Processing	43029
BIOCHEMICAL ENGINEERING & BIO - TECHNOLOGY	-	Advanced Food Technology	43450
COMPUTER SCIENCE	-	Parallel Algorithms & Design	48770
CAD/CAM/CAE	-	Ind. Automation & Robotics	48744
AUTOMOBILE	-	Vehicle Dynamics	38724

## From May - 2014

# Day & Date : - Saturday 2-1-2016 Time: 10.00 am to 01.00 p.m.

MECHANICAL	Product Design & Development	Creativity Innovation & New Product Development	48801

# Day & Date :- Tuesday 5-1-2016 Time: 10.00 am to 01.00 p.m.

BRANCH	Sub- Branch	Papers	
	Structure	Advanced Design of Steel Structure Time: 10.00 a.m. to 02.00 p.m.	34349
CIVIL	Environment	Environmental Policy Laws & Economic	36023
	Construction & Management	Computational Methods & Optimization Techniques	34327
	Power System	Elective-I H.V. Engg.	34518
		Power Controllers.	34519
		Power System Instrumentation	36015
		Fuzzy Logic & Artificial Neural Network	34520
ELECTRICAL		Elective-I Micro-Controllers & Applications	34529
		Optimization Techniques	34530
	Control System	Identification & Estimation	34531
		Adaptive Control Systems	34532
		Multivariable Control System	36051
		Robust Control	36052

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

## From May 2014

# Day & Date :- Tuesday 5-1-2016 Time: 10.00 am to 01.00 p.m.

MECHANICAL	Design	Industrial Product Design	34435
	Product Design & Development	Product Life Cycle Management	48802

Day & Date : - Friday 8-1-2016 Time: 10.00 am to 01.00 p.m.

BRANCH	Sub- Branch	Papers	
		Elective-II Stability of Structure Time: 10.00 a.m. to 02.00 p.m.	35986
	Structure	Design of R.C.C. Bridge	35987
		Structural Reliability	34457
		Design of Folded Plates and Shells	35988
CIVIL		Elective-II Environmental Quality Management	36024
	Environment	Remote Sensing & GIS Applications in Environmental Engg.	36025
	Construction &	Elective-II Advanced Construction	35995
	Management	Appropriate Technology	35996
		Environmental Impact Assessment	35997
		Elective-II Adv. Microprocessor of Techniques for Power System	34521
	Power System	Electric Power Quality & Harmonics	34522
		Artificial Intelligence & Expert Systems	36016
ELECTRICAL		Elective-II Fuzzy & Neural Control	34533
		Applied Optimal Control	36053
	<b>Control System</b>	Stochastic Control	36054
		Real Time Computer Control	36055
		Software Applications to Control System	36056
		Robotics	36057
		Elective-III Mobile Computing	43033
ELECTRONICS &	TELECOMM.	Stochastic Models & Queuing Theory	43034
		Communication System Design	43035
		Optical Networks	43036
BIOCHEMICAL ENGINEERING & BIO-TECHNOLOGY		Elective-II Planet Biotechnology	43452
		Pharmaceutical Biotechnology	43453
		Advanced protein Engineering	43454
		Advanced Bioinformatics	43455

**Contd. Next Page** 

Day & Date :- Friday 8-1-2016 Time: 10.00 am to 01.00 p.m.

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

From May 2014 Time: 10.00 am to 01.00 p.m.

Tuesday	HPE GrI, II, III	Computational Techniques in Thermal Engg.	34423
29-12-2015		Elective-II Total Quality Management	36042
Thursday 31-12-2015		Advanced Material and Manufacturing Processes	56210
Saturday 2-1-2016	Production	Financial of Management	56227
Tuesday 4-1-2016		Mechatronic system Design	56218
Thursday 6-1-2016		Manufacturing System Design	56223
	Design	Elective-II	
Tuesday 29-12-2015		Tribology	34544
		Elective-II Reliability Engineering	48803
	Product Design & Development	Experimental Stress Analysis	48804
		Engineering Optimization in Design	48805
		Industrial Robotics & Expert Systems	48806
		Al & Neural Network	48807
		TQM and Six Sigma	48808

New-Course - From - May - 2013 Time: 10.00 am. To 01.00 pm.

DAY & DATE	SUB-BRANCH	PAPER	
Tuesday 29-12-2015		Advanced Material Science	55602
Thursday 31-12-2015	Mechanical- Machine Design	Advanced Machine Design	55603
Saturday 2-1-2016		Mechanics Of Machinery	55604
		Experimental Stress Analysis	55605
Tuesday	Elective-III	Composite Materials	55606
5-1-2016		Advanced Machine Tool Design	55607
		Open Elective	55608
		Noise & Vibration Harshness (NVH)	55609
Friday	Flootive IV	Vehicle Dynamics	55610
8-1-2016	Elective-IV	Engineering Fracture Mechanics	55611
		Reliability Engineering	55612
Only For Student & College Information			
		Computer Aided Analysis Lab – 55613 Seminar – II 55614 Comprehensive Viva 55618	T/W Ext. Ext. Ext.

## SEMESTER - II BRANCH - MECHANICAL

New-Course- From - May-2013 Time : 10.00 am. To 01.00 pm.

DAY & DATE	SUB-BRANCH	PAPER	
Tuesday 29-12-2015		Numerical Computation of Fluid & Heat Flow	56043
Thursday 31-12-20-15	Mechanical- Heat Power & Engineering	Energy Analysis of Thermal System	56044
Saturday 2-1-2016		Design Of Heat Transfer Equipments	56045
Tuesday		Design Of Renewable Energy Equipments & System	56049
5-1-2016	Elective-III	Cryogenics	56050
		Open Elective	56053
		Gas Turbines & Jet Propulsion	56051
Friday 8-1-2016	Elective-IV	Advanced Mathematical Methods & Optimization	56052
		Design Of pumps, Compressors & Blowers	56054
nly For Student & Co	ollege Information		
		Thermal Engg. Lab 56046 Seminar – II 56047 Comprehensive viv	T/W & Ex T/\ /a - 5604

New-Course - From - May - 2013 Time: 10.00 am. To 01.00 pm.

DAY & DATE	SUB-BRANCH	PAPER	
Tuesday 29-12-2015		Advanced Theory Of Vibrations	56150
Thursday 31-12-2015	Mechanical-Design Engineering	Advanced Design Engineering	56151
Saturday 2-1-2016	gg	Analysis and Synthesis of Mechanisms	56152
	Elective-III	Design for Sustainability & Life Cycle Cost	56158
Tuesday 5-1-2016		Tribology	56159
3-1-2010		Open Elective	56160
		Experimental Stress Analysis	56157
	Elective-IV	Noise And Vibration Harshness ( NVH)	56161
Friday		Vehicle Dynamics	56162
8-1-2016		Engineering Fracture Mechanics	56163
		Design for Manufacture & Assembly	56164
Only For Student & College Information			
	9	Computer Aided Analysis Lab – 56153 T/ Seminar – II 56154 T/ Comprehensive Viva 56155 ndustrial Training 56156	

New - Course - From - May - 2013 Time: 10.00 am. To 01.00 pm.

DAY & DATE	SUB-BRANC	H PAPER	
Tuesday 29-12-2015		Optimization Techniques	56228
Thursday 31-12-2015	Mechanical-Produ Engineering	Advanced Casting Technology	56229
Saturday 2-1-2016		Production & Operations Management	56230
		Fabrication Engg. Welding Technology	56235
		Entrepreneurship Development	56236
Tuesday 5-1-2016	Elective-III	Precision Manufacturing	56237
3-1-2010		Reliability Engineering	56238
		World Class Manufacturing	56239
		Total Quality Management	56240
	Elective-IV	Plastics Processing & Die Design	56241
Friday		Automatic Control Engineering	56242
8-1-2016		Enterprize Resource Planning	56243
		Industrial Automation & Robotics	56244
		Project Management	56245
		Open Elective	56246
Only For Student & College Information			
Adv. Manufacturing Engg. Lab. – 56231 T/W Automation & Simulation Lab 56232 T/W Seminar- II 56233 T/W			Ext.
	C	comprehensive Viva Voce 56234	Ext.

New-Course - From - May - 2013 Time: 10.00 am. To 01.00 pm.

DAY & DATE	SUB-BRANCH	PAPER	
Tuesday 29-12-2015	Mechanical-Product Design & Development  Elective-III	Manufacturing System Design	56262
Thursday 31-12-2015		Creativity, Innovation & New Product Development	56263
Saturday 2-1-2016		Product Life Cycle Management	56264
		Experimental Stress Analysis	56267
Tuesday		Reliability Engineering	56268
Tuesday 5-1-2016		Industrial Robotics & Expert System	56269
		Open Elective	56270
		Rapid Prototyping	56271
Friday	Elective-IV	Engineering Optimization In Design	56272
8-1-2016		Al.& Neural Network	56273
		TQM & Six Sigma	56274
Only For Studen	t & College Information	•	•
		Seminar-II 56265 Comprehensive Viva 56266	T/W Ext.

#### SEMESTER II

## **BRANCH – VLSI AND EMBEDDED SYSTEM**

New Course From - May 2014 Time: 10.00 am. To 01.00 pm.

DAY & DATE	SUB-BRANCH	PAPER	
Tuesday			60751
29-12-2015	VLSI	CMOS VLSI DESIGN -II	
Thursday	AND		60752
31-12-2015	EMBEDDED SYSTEM	Analog & Mixed signal Design	
Saturday			60753
2-1-2016		Embedded Software Design	
Tuesday 5-1-2016		Testing & Text ability	60754
Friday		DSP VLSI – II	60756
8-1-2016	Elective-II	Automotive Embedded System	60757
0-1-2010	Liective-ii	Low Power VLSI design	60758
		System on chip Architecture –II	60759

New Course From – DEC 2014 Time: 10.00 am. To 01.00 pm.

DAY & DATE	BRANCH	PAPER	
Monday 28-12-2015		Advanced Momentum and Heat Transfer	64209
Wednesday 30-12-2015		Advanced Chemical Engineering Thermodynamics	64210
Friday 1-1-2016	CHEMICAL	Process Modeling in Chemical Engineering	64211
Monday		Elective-I Nanotechnology	64212
4-1-2016		Green Technology	64213
		Pharmaceutical Biotechnology	64214
		Elective-II Catalysis and Surface Phenomena	64215
Wednesday		Bioprocess Engineering	64216
6-1-2016		Material Engineering	64217
		Process and Equipment Design	64218

SEMESTER I
New Course From – DEC 2014 Time: 10.00 am. To 01.00 pm.

DAY & DATE	BRANCH	PAPER	
Monday 28-12-2015		Advanced Digital Signal processing	63931
Wednesday 30-12-2015		CMOS VLSI Design	63932
Friday 1-1-2016		Random Signal Processing	63933
Monday		Elective-I High Performance Communication Network	63934
4-1-2016		Design of Digital Circuit and Logic Design	63935
		Optimization Techniques	63936
	ELECTRONIC	Advance Communication System	63937
		Elective II Software Defined Radios	63938
Wednesday 6-1-2016		Image Processing And Application	63939
		Design of VLSI System	63940
		Robotic and Application	63941
		Wireless Sensor network	63942
		Industrial DC Drives	63943

# New Course From – DEC 2014 Time: 10.00 am. To 01.00 pm.

DAY & DATE	BRANCH	PAPER	
Monday 28-12-2015		Design of Experiments and Research Methodology	63965
Wednesday 31-12-2015		Finite Elements Analysis	63966
Friday 1-1-2016		Micro Electro-Mechanical System	63967
Monday 4-1-2016	CAD-CAM	Computer Aided Manufacturing	63968
		Elective-I Advanced Design Engineering	63969
Wednesday		Advanced Tool Design	63970
6-1-2016		Design of Hydraulic and Phenaulic System	63971
		Mechatronic System Design	63972

Semester-II
OLD - Course UP TO -Dec 2015 Time: 10.00 am. To 01.00 pm.

DAY & DATE	BRANCH	PAPER		
Tuesday 29-12-2015		Environmental Bio-Technology	36134	
Thursday 31-12-2015		Advanced Mass Transfer	34468	
Saturday 2-1-2016	CHEMICAL	Advanced Reaction Engg.	34469	
Tuesday 5-1-2016		Advanced Process Dynamics & Control	34470	
Thursday 8-1-2016		EleIII Environmental Engineering Air Pollution Control Engg. Bio-Chemical Engineering	34471 34472 34473	
Saturday 10-1-2016		<b>ElectivelV</b> Energy Conservation & Recovery	34474	
		Catalysis	34475	
		Energy Engineering	34476	

## New Course From May- 2015 Time: 10.00 am. To 01.00 pm.

DAY & DATE	BRANCH	PAPER	
Tuesday 29-12-2015		Advanced Mass Transfer System	64221
Thursday 31-12-2015		Modern Reaction Engineering	64222
Saturday 2-1-2016		Chemical Process Control	64223
Tuosday		Elective-III Computional Fluid Dynamics	64224
Tuesday 5-1-2016	CHEMICAL	Energy Engineering	64225
	CHEWICAL	Redearch Methodology	64226
		ElectiveIV Project Management	64227
		Modern Separation Process	64228
Friday 8-1-2016		Down Stream Processing	64229
		Operation Research	64230

SEMESTER I | OLD-Course UP TO – Dec 2015 Time: 10.00 am. To 01.00 pm.

DAY & DATE	BRANCH	PAPER	
Tuesday 29-12-2015		Advanced Computer Architecture	34503
Thursday 31-12-2015		Embedded System Design	34502
Saturday 2-1-2016		Advanced Process Control	34503
Tuesday 5-1-2016	ELECTRONIC	Elective-II Communication Switeching System Mobile Communication Engineering Neural Network Distributed Database System	34505 34506 34507 34508
Friday 8-1-2016		Elective-III Broadband Communication Web Technology Software Engineering	34509 34510 34511

## SEMESTER II New Course From – May 2015 Time: 10.00 am. To 01.00 pm.

DAY & DATE	BRANCH	PAPER	
Tuesday 29-12-2015		Real Time Embedded System Design	63946
Thursday 31-12-2015		Advanced Process Control	63947
Saturday 2-1-2016		Power Electronics System	63948
		Elective-III Design and Analysis or Algorithms	63949
		Design of Analog and Mixed Mode VLSI Circuits	63950
Tuesday		Artificial Neural Networks	63951
5-1-2016	ELECTRONIC	Cryptography and Network Security Cognitive Rodio Cmmunication and Network	63952 64059
Friday 8-1-2016		Elective-IV Fuzzy System	63954
		VLSI in Digital Signal Processing	63955
		RF & Microwave Circuits Renewable & Distributed Energy System Advanced Computer	63956 63957
		Architecture	63958

### New Course From - DEC 2014 Time: 10.00 am. To 01.00 pm.

DAY & DATE	BRANCH	PAPER	
Tuesday 29-12-2015		Product Life Cycle Management	63976
Thursday 31-12-2015		Advanced Mechanics or Materials	63977
Saturday 2-1-2016		Automation & Robotics	63978
Tuesday 5-1-2016	CAD-CAM	Design Optimization Techniques	63979
		Elective-II Nano Technology	63980
Friday 8-1-2016		Indstrial Product Design	63981
		Computional Fluid Dynamics	63982
		Reliability Engineering	63983

#### **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.

Sd/-

Vidyanagar, Kolhapur- 416 004. Date 20-10-2015 M.A.Kakade
Controller of Examinations