

UNIVERSITY OF PUNE



EXAMINATION CIRCULAR No. 219 of 2011

Programme of the M.E. Course (Three-Semester) (2002 Course) (All Branches) (Civil, Mechanical, Elect. & Telecom., Electronics, Electrical, Production, Computer, Petroleum, Instrumentation Process & Biomedical Instrumentation, Computer Science & Engineering-(IT), Computer Science-Information Technology, Industrial, Chemical and Polymer, Examination, December, 2011.

Instructions :

1.	Candidates are required to be present at the respective place of examination fifteen minutes before the time fixed for the first Paper & ten minutes before the time of each subsequent Paper.
2.	Candidates are forbidden from taking any material into the examination hall that can be used for malpractice at the time of examination.
3.	Use of Non-programmable Electronic Calculator is only allowed.
4.	No request for any Special Concession, such as change in time or any day fixed for the University examination, on religious or any other ground shall be granted.
5.	The Centre and Place of the examination of respective branches will be as follows :

1.	Govt. C.O.E, Shivajinagar, Pune-411005	<p>DY Patil College of Engineering, Pimpri, Pune – 18 (All students of Pune Centre for Civil, Mechanical, Computer, Computer Network Branches)</p> <p>P.V.G.'s College of Engineering, & Technology, Pune-411009. (All students of Pune Centre for All Branches other than Civil, Mechanical, Computer, Computer Network Branches)</p>
2.	M.I.T COE, Paud Road., Pune – 38.	
3.	V.I.T., Bibvewadi, Pune-411037	
4.	P.I.C.T. Pune – 411043	
5.	P.V.G.'s C.O.E & Tech., Pune-411009	
6.	Dr. D. Y. Patil C.O.E Akurdi, Pune 411044	
7.	Cummins C.O.E, Karvenagar, Pune 411052	
8.	AISSMS, COE Pune 411001.	
9.	Sinhgad Inst.Tech. Vadgaon Bk., Pune -41	
10.	R.Shahu C.O.E, Tathawade, Pune-411033	
11.	P.E.S'S Society Coll. Of Engg. Pune 411005	
12.	M.A.E Alandi, C.O.E., Dist: Pune	
13.	M.I.T COE, Paud Road., Pune – 38.	
14.	SAE, Kondhawa (BK) Pune – 48.	
15.	D.Y. Patil I.E.T. Pimpri	
16.	K.K.Wagh College Of Engineering, Nasik	
17.	M.I.T. Pune – 411038	
18.	G.S. Moze, C.O.E., Balewadi, Pune	
19.	Sinhgad Inst. Of Tech., Lonavala	
21.	V.P. MIDC, Baramati, Dist. Pune.	

Ahmednagar Center

Sr. No.	Name of the Colleges	Centre / Place
1.	Prarara Rural College of Engineering, Loni	All Branches Pravara Rural College of Engineering, Loni, Tal. Rahata, Dist. Ahmednagar.
2.	College of Engineering, Kopargaon	
3.	Amrutvahini C.O.E, Sangamner.	
4.	Pad. Dr. V.Vikhe Patil College of Engineering, Viladghat, Ahmednagar	

Nashik Center

Sr. No.	Name of the Colleges	Centre / Place
1.	KK Wagh College of Engineering, Nashik.	KK Wagh College of Engineering, Nashik.
2.	SND College of Engg. Yeola, Dist.Nashik.	
3.	Matoshri Edu. Soc.'s Coll. of Engg. & Res. Center, Dist. Nashik.	
4.	Sandip Foundation Inst. of Tech. & Res. Center, Dist. Nashik.	
5.	Sapkal Knowledge of Engg. Trimbakwshwar Road, Nashik.	
6.	Sir Vishveshwariya Coll. of Engg., Chincholi, Tal. Sinner, Dist. Nashik.	

6. The Written Examination will be conducted in the following order :

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

Day and Date	(Civil) 2002 Course		
	Construction and Management 1	Hydraulic Engineering 2	Structures 3
Thursday, 08.12.2011	*Statistical Analysis and Computational Methods Elective – II (510110)	Computational Methods in Hydraulic Engg. (501301)	*Numerical Methods and Finite Element Methods (501501)
Friday, 09.12.2011	*Construction Equipment and Material Management (501102)	Hydrology and Ground	*Earthquake Resistant Design of Structure (501507)
Saturday, 10.12.2011	*Management and Project Planning in Construction (501101)	Fluid Mechanics (501302)	*Advanced Structural Mechanics (501503)
Monday 12.12.2011	*Project Economics and Financial Management (501108)	Sediment Transport and River Mechanics (501307)	*Plates and Shells (501506)
Tuesday, 13.12.2011	*Construction Materials and Materials Management (501103)	*Irrigation and Drainage (501303)	*Reinforced Concrete Priestesses Concrete Design (501502)
Wednesday, 14.12.2011	*Operation Research (501109)	Concrete Earth & Rock fill Dams (501308)	*Advanced Design of Steel Structures (501508)
Thursday, 15.12.2011	*Construction Techniques (501104)	*Free Surface Flow (501304)	*Structural Dynamics (501504)
Friday, 16.12.2011	*Professional Practices in Construction (501507)	Systems Engg. (501309)	---
Saturday, 17.12.2011	Elective I (501106) * (a) Concrete Technology * (b) Construction Safety * (c) Adv. Constru. Engg. * (d) Human Resource Develop. in Constru. * (e) High Rise Structural and Building Services	Elective (501310) (a) Pipeline Hydraulic (b) Coastal Engineering (c) Computer aided design of Hydraulic structure (d) Water Resources Engg.	Elective I (501509) *(a) Bridge Engineering *(b) Experimental Stress Analysis *(c) Non-Linear Analysis of Structures *(d) Structural Optimization
Monday, 19.12.2011	Elective II (501110) * (a) Value Engineering & Risk Analysis * (b) Infra Structure Development & Internal Contracting * (c) Rehabilitation Disaster Management * (d) TQM & MIS in Construction	Open Channel Hydraulic (501302)	Elective II (501510) * (a) High Rise Structures * (b) Structural Stability * (c) Structural Reliability * (d) Advance in Concrete Composites

***Note : Papers marked are of four hours' duration (between 2-30 p.m. to 6-30 p.m.)**

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

Day and Date	(Mechanical) 2002 Course			
	Heat Power Engineering 4	Design Engineering 5	Design Engineering (Old) 6	Weapon Old 7
Thursday, 08.12.2011	Numerical Methods and Computational Techniques(502101)	Numerical Methods and Computational Techniques(502101)	Numerical Methods and Computational Techniques (502101)	Numerical Methods and Computational Techniques (502101)
Friday, 09.12.2011	Advanced Fluid Mechanics (502106)	Design Engineering	Design Engineering (502204)	Explosives Propellants and Pyrotechnics (502703)
Saturday, 10.12.2011	Instrumentation and Automatic Control (502102)	Instrumentation and Automatic Control (502102)	Instrumentation and Automatic Control (502102)	Instrumentation and Automatic Control (502102)
Monday 12.12.2011	Thermal & Mechanical Design of Heat Exchangers(502107)	Material Handling Equipments Design Elective II	Material Handling Equipments Design Elective I	Design of Ordnance Basic Structure and Super Structure (502704)
Tuesday, 13.12.2011	Advanced Thermodynamics (502103)	M/C Stress Analysis (502201)	M/C Stress Analysis (502201)	Material Science and Technology (502301)
Wednesday, 14.12.2011	Energy Conservation and Management (502108)	Analysis and Synthesis of Mechanism	Analysis and Synthesis of Mechanism (502206)	Ammunition (502705)
Thursday, 15.12.2011	Advanced Heat Transfer (502104)	Mechanical Vibrations (502202)	Mechanical Vibrations (502202)	Ballistics (502701)
Friday, 16.12.2011	Elective I (502109) (1) I.C. Engine I (2) Environmental Pollution & Control (3) Advanced Refri. & Cryogenics (4) Theory & Design of Pumps Blowers & Compressors	Elective I (1) Machine Tool Design (2) Process Equipment Design (3) Robotics	Elective I (502207) a) Machine Tool Design b) Process Equipment Design	Elective I (a) Weapon System Production and Quality assurance (b) Tank Weapon and Armour (502706)
Saturday, 17.12.2011	Elective II (502110) (1) I.C. Engine II (2) Non- Conventional Energy Sources (3) Advanced Air Condi.Heating & (4)Gas Turbines	Elective II (1) Reliability Engineering (2) Computer Aided Design	Elective II (502208) a) Manufacturing Engineering and Techniques b) Industrial Drives & Systems Design c) Adv. Welding Tech.	Elective II (a) Weapon Thermo-dynamics, Heat Transfer and Weapon Dynamics (b) Small Arms and cannons (502707)
Monday, 19.12.2011	---	Tribology	Tribology (502105)	---

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

Day and Date	(E & TC) 2002 Course			
	Instrumentation	Instrumentation (Old)	Microwave	V.L.S.I. & Embedded System
	8	9	10	11
Thursday, 08.12.2011	Embedded System Design (504107)	Estimation and Coding of Signals (504101)	Statistical Signal Analysis & Stochastic Processes (504201)	Analog & Digital CMOS IC Design
Friday, 09.12.2011	---	Advanced Microcontroller Techniques (504106)	Multiple Access Communication Systems (504206)	System Design Using PLDS.
Saturday, 10.12.2011	Communication Networks (504104)	Optical Communication (504102)	Communication Networks (504104)	Embedded System Design
Monday 12.12.2011	Intelligent Instrumentation (504106)	Electronic Instrumentation (504107)	---	Fault Tolerant System Design
Tuesday, 13.12.2011	Advanced DSP (504102)	Advanced Digital Signal Processing (504103)	Advanced DSP (504102)	Real Time Operating Systems
Wednesday, 14.12.2011	Machine Vision Systems (504108)	Data Networks (504108)	RF and Microwave Circuit Design (504204)	Embedded Signal Processing
Thursday, 15.12.2011	Digital Control System (504103)	Active Network Synthesis (504104)	Antenna & Radiating Systems (504202)	ASIC Design and Modeling
Friday, 16.12.2011	VLSI Design (504101)	Elective I (504109) a) Biomedical Instrumentation b) VLSI Design	Microelectronics (504205)	Elective I (a) RF IC Design (b) Design of Semiconductor Memories
Saturday, 17.12.2011	Elective I (504109) (1) Reconfigurable Computing (2) High Performance Networks	Elective II (504110) a) Digital Control and Industrial Applications b) Image Processing Techniques	Elective I (504207) (1) Machine vision and Pattern Analysis (2) Network Security Systems	Elective II (a) Reconfigurable Computing (b) Case Studies in Embedded System
Monday, 19.12.2011	Elective II (504110) (1) Industrial drives and control (2) Biomedical Instrumentation	---	Elective II (504208) (1) Integrated optics and Optical Communication (2) Continuous speech Processing	---

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

Day and Date	(Electronics) 2002 Course	
	Digital Systems 12	Computer 13
Thursday, 08.12.2011	Embedded System Design (504303)	Embedded System & Software (504402)
Friday, 09.12.2011	Advanced Digital System Design (504306)	---
Saturday, 10.12.2011	---	Software Metrics (504401)
Monday 12.12.2011	Multimedia Techniques (504307)	Multimedia Systems (504406)
Tuesday, 13.12.2011	D.S.P. & Application (504302)	D.S.P. and Application (504302)
Wednesday, 14.12.2011	Elective I (504309) (a) Parallel Computing (b) Image Processing & Pattern Recognition	Parallel processing Systems (504404)
Thursday, 15.12.2011	Computer Networks (504304)	Computer Networks (504304)
Friday, 16.12.2011	Microelectronics (504301)	Systems on Chip (504405)
Saturday, 17.12.2011	Elective II (504310) (a) Reconfigurable Computing (b) Expert Systems	Elective I (504407) (1) Artificial Intelligence & Expert Systems (2) High Performance Computer Networks
Monday, 19.12.2011	Network Security Systems (504308)	Elective II (504408) (1) Compiler Construction (2) Applied Algorithms

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

Day and Date	(Electrical) 2002 Course	
	Control Systems 14	Power System 15
Thursday, 08.12.2011	Microcontroller & Application in Control System (503107)	Microcontroller & Application in Power System (503107)
Friday, 09.12.2011	Identification & Adaptive Control (503108)	Power System Protection
Saturday, 10.12.2011	Optimization Techniques & Control (503106)	Power System Modeling (503203)
Monday 12.12.2011	Intelligent Control (503109)	Power System Planning and Reliability
Tuesday, 13.12.2011	Non-Linear Control System (503102)	Computer Application in Power System (503202)
Wednesday, 14.12.2011	Automation & Robotics Elective (503110)	Power System Operation and Control
Thursday, 15.12.2011	Digital Control System (503101)	High Voltage Power Transmission (503204)
Friday, 16.12.2011	Computer Method in Control System (503104)	Power System Dynamics
Saturday, 17.12.2011	Elective (503110) (1) Digital Signal Processing (2) Process Control	Elective (1) Special Topics in High Voltage Engg. (2) Power Sector Economics Regulation & Restructuring (3) Advanced Microprocessor & Application (4) Power System Harmonics (5) Renewable Energy Systems (6) Artificial Neural Network & Fuzzy System
Monday, 19.12.2011	(1) Multivariable Control System (503103)	---

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

Day and Date	(Production) 2002 Course	(Computer) 2002 Course	(Petroleum) 2002 Course
	Production 16	Computer 17	Petroleum 18
Thursday, 08.12.2011	Advanced Mathematical Method	Embedded System Design Elective II	Numerical Method and Simulation in Petroleum Engineering
Friday, 09.12.2011	Hard and Soft Automation	Advanced Database Management Systems	Geographical Information Systems and Computer Application in Petroleum Industry
Saturday, 10.12.2011	Microprocessor	Distributed Operating System	Horizontal & Multilateral Drilling
Monday 12.12.2011	Robotics and its Industrial Applications	Mobile Computing	---
Tuesday, 13.12.2011	Advanced Machine Tool Design	Advanced Computer Architecture	Artificial Lift & Stimulation Techniques
Wednesday, 14.12.2011	C.I.M. Advanced Manufacturing Processes	Geometric & Solid Modeling	Reservoir Characterization & Management
Thursday, 15.12.2011	CAD-CAM-FMS	Advanced Computer Network	Environment Management Technology & Safety Procedures
Friday, 16.12.2011	Elective I (1) Advanced Welding Techniques (2) Human Factors in Design and Manufacturing	Elective I (1) Network Security (2) Intelligent Systems (3) Speech Processing	Elective II (a) Advanced Natural Gas Engg. & Technology (b) Technology of Coal Bed Methane (c) Technology of Gas Hydrates (d) Analytical Techniques in Petroleum Geochemistry (e) International Business Strategies & Risk Analysis
Saturday, 17.12.2011	Elective II (1) Precision Engineering (2) Teri technology and Maintenance Management (3) Reliability Engineering	Elective II (1) Advances in Computer Techniques (2) Computer Vision (3) Bio-Informatics	Elective I (a) Well Control (b) Well Testing & Analysis (c) Reservoir Monitoring & Log Analysis (d) Advanced Heological Methods in Exploration & Production (e) Advanced Reservoir Petrophysics (f) Enhanced Oil Recovery
Monday, 19.12.2011	(2) Tribology Elective	Applied Algorithms	Offshore Technology

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

Day and Date	Instrumentation, Process & Biomedical	Computer Science & Engineering	Computer Science Information Technology
	Instrumentation, Process & Biomedical 19	Computer Science & Engineering 20	Computer Science I.T. 21
Thursday, 08.12.2011	Advanced Mathematics (506101)	Operating System	Operating System
Friday, 09.12.2011	Control System (506106)	Advance - Database	Advance - Database System
Saturday, 10.12.2011	Advanced Electronic Instrumentation (506103)	Software Engineering	Software Engineering
Monday 12.12.2011	Application of DSP (506107)	Mobile Computing	Mobile Computing
Tuesday, 13.12.2011	Transducer Design (506102)	Net Centric Computing	Net Centric Computing
Wednesday, 14.12.2011	Artificial Intelligence & Robotics (506104)	Human Computing Interface	Human Computing Interface
Thursday, 15.12.2011	1. Micro-Controller Application in Instrumentation (506108)	Adv. Internet Tech.	Adv. Internet Tech.
Friday, 16.12.2011	1. Advanced Medical Instrumentation (506116) 2. Advanced Process Instrumentation (506109)	Elective I (a) Operation Research & Stats (b) Intelligent Systems (c) Object Oriented Systems (d) Computer Algorithms for Signal Processing	Elective I (a) Operation Research & Stats (b) Intelligent Systems (c) Object Oriented Systems (d) Computer Algorithms for Signal Processing
Saturday, 17.12.2011	Elective (506117) 1. Bio - Medical Instrumentation (a) Ultrasonic Application in Bioengineering (b) Lasers in Medicine (c) Bioinformatics	Elective II (a) Embedded Systems (b) Data Ware Housing & (c) ERP-EC (d) Bio-Informatics	Elective II (a) Embedded Systems (b) Data Ware Housing & (c) ERP-EC (d) Bio-Informatics
Monday, 19.12.2011	Elective (506110) 2. Process Instrumentation (a) Applied Instrumentation (b) Advance Techniques in Modeling & Optimization (c) Instrumentation for Strategic Application	---	---

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

Day and Date	Industrial Engg.	Chemical Engg.	Polymer Engg.
	Industrial Engineering	Chemical Engineering	Polymer Engineering
	22	23	24
Thursday, 08.12.2011	Advanced Statistical Method	Advanced Momentum & Heat Transfer (109101)	Mathematical & Statistical Method (509201)
Friday, 09.12.2011	Operation and Management	Advanced Mass Transfer (109106)	Advanced Polymer Compounding & Processing (509206)
Saturday, 10.12.2011	Human Factors Engineering	Advanced Thermodynamics (109102)	Polymer Reaction Engineering (509202)
Monday 12.12.2011	Design of Manufacturing System	Advanced Chemical Reaction Engineering (109107)	Structure Properties & Testing of Polymers (509207)
Tuesday, 13.12.2011	Industrial Psychology	Process Modeling & Simulation (109103)	Polymer Physics & Characterization (509203)
Wednesday, 14.12.2011	Financial Management	Advanced Process Dynamics & Control (109108)	Design & Processing of Composites (509208)
Thursday, 15.12.2011	Advance Operations Research	Novel Separation Techniques (109104)	Transport Phenomena in Polymers (509204)
Friday, 16.12.2011	Quality & Reliability Engineering	Elective I Catalysis and Surface Phenomena (109109)	Elective I (a) Specialty Polymer Materials (b) Modeling and Simulation (c) Computer Aided Tool and Product Design (509209)
Saturday, 17.12.2011	Software Engineering	Elective II Fluidization Engineering (109110)	Elective I (a) Advanced Elastomer Technology (b) Science and Engineering of Fibers (c) Recent Advances in Polymer Science (509210)
Monday 19.12.2011	Organizational Development	---	---

NOTE: The Last Examination of (M.E.Old) will be held in June 2010.

University of Pune
Ganeshkhind, Pune-411007
Ref. No. XCT/ 1280
Date : 23.11.2011

Dr. S. M. Ahire
Controller of Examinations.