92 /F- 2012

# **UNIVERSITY OF PUNE**



Phone : 020-25601218 Fax : 020-25601206 Email : <u>coe@unipune.ac.in</u> Web : http://www.unipune.ac.in EXAMINATION SECTION Ganeshkhind, Pune - 411 007 (Maharashtra) INDIA

#### Examination Circular No. 92 of 2012 Programme of B.E. 2003 (All Branches) Examinations, May, 2012

- 1. Candidates are required to be present at their places of examination, fifteen minutes before the time of the first paper and ten minutes before the time of each subsequent papers.
- 2. Candidates are forbidden from taking any material into the examination hall that can be used for malpractice at the time of examination.
- **3.** No request for any special concession such as a change in time or any day fixed for the University Examination on religious or any other ground shall be granted.
- **4.** Candidates are requested to see the Notice -Board at their place of examination regularly for changes if any, that may be notified later in the programme.
- 5. Candidates are requested to note the Day, Date and Time of every Paper on every Day
- 6. Candidates are permitted to use stencils at the time of examination.
- 7. Candidates appearing for the examinations are expected to provide themselves with Side- rules.
- 8. The exchange or loan of side-rules, drawing instruments of other materials used in the examination hall is Not Permitted while the examinations are in process. Candidates must bring their own instruments and will not be allowed to borrow from each other under any circumstances.
- **9.** Use of non-programmable battery operated electronic Calculator of Pocket-size is allowed. The exchange of Calculators is not allowed.
- **10.** The Centers and Places of the examination will be as follows :

1.	<b>PUNE :</b>				
Sr. College Centers and Places of the Examinations		Centers and Places of the Examinations			
No.	Code				
1	2	Maharashtra Institute of Technology, Pune 411 038.			
2	5	Pune Institute of Computer Technology, Pune 411043.			
3	6	Cusrow Wadia Institute of Technology, Pune 411001.			
4	7	7         P.V.G.'s C.O.E.T., Pune 411009.			
5	8	Pad. Dr. D.Y. Patil College of Engineering, Nigdi, Pune 411044.			

6	19	College of Engineering, Malegaon (Bk.), Tal. Baramati, Dist – Pune 413115.			
7	20	H.S.S.S.'s Cummins College of Engineering for Women, Pune 411052.			
8	21	A.I.S.S.M.S.'s Institute of Technology, Pune 411001.(Repeater Students of P.I.E.T. College of Engineering, Shivajinagar, Pune -05. also. )			
9	22	Army Institute of Technology, Dighi Hills, Pune 411015.			
10	23	Sinhgad College of Engineering, Vadgaon Bk., Pune 411041.			
11	24	Pad. Dr. D.Y. Patil Institute of Engineering & Tech., Pimpri, Pune 411018			
12	25	A.I.S.S.M.S.'s Institute of Information Tech., Kennedy Road, Pune 411001.			
13	26	P.D.E.S.'s A.G. Awate College of Engineering, Hadapsar, Pune 411028.			
14	28	MAEER'S Maharashtra Academy of Engineering, Kedgaon Alandi, Dist. Pune.			
15	30	G.S. Moze College of Engineering, Balewadi, Pune.			
16	31	P.E.S.'s Modern College of Engineering, Pune 411005.			
17	32	M.E.S.'s College of Engineering, Pune 411001.			
18	33	Pimpri-Chinchwad Education Trust's College of Engg., Nigdi, Pune 411044.			
19	34	Bharati Vidyapeeth's College of Engineering for Women, Pune 411043(Repeater Students of Bharati Vidyapeeth's COE, Dhankawadi. Pune 411043 also.)			
20	35	VP's College of Engineering, Vidyanagari, Bhingwan Road, Tal. Baramati.			
		Dist: Pune			
21	36	Smt. Kashibai Navale College of Engineering for Women, Vadgaon Bk.,			
		Pune 411041			
22	37	Rajarshi Shahu College of Engineering, Tathwade, Pune 411 013.			
23	38	MAEER's Maharashtra Institute of Technology, College of Engineering.			
		Pune - 411038.			
24	39	V.I.I.T. College of Engineering, Sr. No. 2/3/4, Kondhwa (Bk.), Pune 411 048.			
		(Repeater Students of V.I.T College of Engg, Pune 411037 also)			
25	40	J.S.P.M.'s Jayawantrao Sawant College of Engineering, Handewadi Road,			
		Hadapsar, Pune 411028.			
26	42	Sinhgad Tech. Edu. Soc.'s Sinhgad Inst. of Tech., Kusgaon (BK), Lonawala,			
		Tal. Mawal			
27	43	Sinhgad Academy of Engineering, Kondhwa (BK), Pune 411 048.			
28	44	Siddhant College of Engineering, Chakan - Talegoan Road, Sudumbare,			
		Dist: Pune - 412 109.			
29	45	Marathwada Mitra Mandal College of Engineering , Pune – 411 052.			
30	46	G.H. Raisoni College of Engineering, Wagholi, Pune 412 207.			

31	48	S.S.M.S. Padmabhushan Vasantdada Patil Inst. Of Tech, Bawadhan (Kd),			
		Pune – 411038.			
32	49	P.GM.T's Parvatibai Genba Moze College of Engineering, Wagholi, Pune -			
		412012.			
33	51	J.S.P.M's Imperial College of Engineering & Research, Pune Nagar Rd,			
		Wagholi, Pune-412012.			
34	52	S.C.E.S's Indira College of Engineering & Magt. Paranwadi Tal. Maval, Pune.			
35	53	Z.E.S's Dnyanganga college of Engineering & Research, S.N. 39, Narhe, Tal.			
		Haveli Dist – Pune 411 041.			
36	54	G.H. Raisoni Institute of Engineering & Technology, Gat No. 120 Pune-Nagar			
		Road., Wagholi, Pune412207			
37	55	Nutan Maharashtra Institute of Engg & Tech., Vishnupuri, Talegaon Station,			
		Tal: Maval, Dist: Pune - 410507			
38	57	STE'S SIT * Science, Nehre Ambegaon, Pune 411041.			
39	59	MMM'S Institute of Tech., Sr. No.35 Plot No. 516 Lohagaon, Tal: Haveli,			
		Dist: Pune -411032			
40	60	DPE'S Dhole Patil COE, 1248 Umbalenagar, Wagholi, Tal: Haveli, Dist: Pune			
41	63	Al-Amin Educational & Medical Foundation's College of Engineering,			
		Bhima Koregaon, Tal: Shirur, Dist: Pune – 412 216			
42	65	K.J.S. Edu. Society, Trinity COE, & Research, Sr.No.25/27, Undri-Pisoli,			
		Bopdeo Ghat Tal: Haveli, Dist: Pune			

# 2) AHMEDNAGAR:

1	9	Padmashri Dr. V. Vikhe Patil College of Engineering, Ahmednagar.			
2	<b>10</b> Amrutvahini College of Engineering, Sangamner, Dist. Ahmednagar				
3	11	<b>11</b> Pravra Rural College of Engineering, Pravaranagar (Loni), Dist. Ahmednagar.			
4	12	College of Engineering, Kopargaon, Dist. Ahmednagar.			
5	5 64 Vishwabharti Academy's COE Jamkhed Road, at Sarola Baddi, Dist:A'nagar				
6	66	SGR Edu. Foundation COE & Management ,Gat. No. 1030, at Chas A'nagar			

# 3) NASHIK:

1	13	K.K. Wagh College of Engineering, Nashik,	
2	27	P.R.E.S's., Sir .Vishveshwarayya Memorial College of Enggi., Chincholi, Tal.	
		Sinner, Dist. Nashik.	
3	29	N.D.M.V.P. Samaj's Karmaveer Adv. Baburao Ganpatrao Thakare, College of	
		Engineering, Gangapur, Nashik.	
4	41	S.N.J.B.'s Late Sou. Kantabai Bhavarlal Jain College of Engineering, Neminagar,	
		Chandwad, Nashik 423 101.	
5	47	M.E.T. College of Engineering, Adgaon, Nashik.	
6	50	S.N.D. College of Engineering, Nagar –Manmad Road, Babhulgaon, Yeola, Dist.	
		Nashik.	
7	58	Matoshree College of Engineering and Research, Eklahare, Nashik- 423 401	
8	61	Sabdeep Institute of Tech. & Research Centre, Mahirwani, Dist: Nashik	
9	62	Nashik Gramin S.P.M's Vally, COE & Research, at Anjaneri, Tal:	
		Trambakeshwar, Nashik.	

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

<b>B.E.</b> (Civil)
Time : 2.30 p.m. to 5.30 p.m.

Day & Date	B.E. (Civil) 2003 Course	B.E. (Civil) 1997 Course	
Tuesday, 15.05.2012	Hydrology & Irrigation (2003-401001)		
Thursday, 17.05.2012	Environmental Engg. II (2003-401002)		
Saturday 19.05.2012	Quantity Surveying Contracts & Tenders (2003-401003) *(2. 30 p.m. to 6. 30 p.m.)		
Tuesday 22.05.2012	Structural Design III (2003-401004) *( <b>2. 30 p.m. to 6. 30 p.m.</b> )		
Thursday, 24.05.2012	<ul> <li>Elective I (2003-401005)</li> <li>1. Systems Approach in Civil Engg.</li> <li>2. Architecture and Town Planning</li> <li>3. Advanced Geotechnical Engg.</li> <li>4. Finite Element Method</li> <li>5. Structural Design of Bridges</li> <li>6. Advanced Environ-mental Management</li> <li>7. Geoinformatics</li> </ul>	<ul> <li>Elective I (1997-401001)</li> <li>1. Matrix Methods of Structural Analysis</li> <li>2. System Approach in Civil Engineering</li> <li>3. Experimental Stress Analysis</li> <li>4. Construction Management</li> <li>*5. Advanced Surveying and Remote Sensing</li> <li>*(2. 30 p.m. to 6. 30 p.m.)</li> <li>6. Architecture and Town Planning</li> </ul>	
Saturday, 26.05.2012	Dams & Hydraulic Structures (2003-401008)		
Tuesday, 2905.2012	Transportation Engg. II (2003-401009)		
Thursday, 31.05.2012	Foundation Engg. (2003-401010)		
Saturday, 02.06.2012	<ul> <li>Elective - II (2003-401007)</li> <li>1) Advanced Concrete Tech</li> <li>2) Earthquake Engineering</li> <li>*3) Adv. transportation Engineering</li> <li>*(2. 30 p.m. to 6. 30 p.m.)</li> <li>4) Adv. Structured Design</li> <li>5) Construction Management</li> <li>6) Integrated Water Resources Planning &amp; Management</li> <li>7) Adv. Engineering Geology with rock Mechanics</li> </ul>	<ul> <li>Elective-II (1997-401008)</li> <li>1. Air Pollution</li> <li>2. Advanced Engineering Geology with Rock Mechanics</li> <li>*3. Advanced Transportation Engg.</li> <li>*(2. 30 p.m. to 6. 30 p.m.)</li> <li>4. Advanced Analysis and Design of the Structures</li> <li>5. Earth Structures</li> <li>6. Concrete Composites &amp; Precast Concrete</li> </ul>	

\* Please note the timing.

Day & Date	B.E. (Mechanical) 2003 Course	B.E. (Mechanical) 1997 Course	B.E. (Mechanical SW) 2003 Course	B.E. (Mechanical SW) 1997 Course
Tuesday, 15.05.2012	Mechanical System Design (2003-402041) *( <b>2.30 p.m. to 6.30 p.m.</b> )	Fluid Machinery (1997-402042) Refer T.E. Mech.2003 Course Time Table for date & time	Design Engineering (2003-402061) *( <b>2.30 p.m. to 6.30 p.m.</b> )	
Thursday, 17.05.2012	Dynamics of Machinery (2003-402042)		Dynamics of Machinery (2003-402042)	
Saturday 19.05.2012	Mechatronics (2003-402043)	Industrial Mgt. II (1997-411044) Refer T.E. Mech.(2003) Time Table for date & time		Fluid Machinery & Fluid power (1997-402062)
Tuesday 22.05.2012	Gas Turbines and Jet Propulsion (2003-402044)	Elective I (1997-402045) 1. Refrigeration & Air Conditioning (Refer T.E. Mech.(2003) for Date & Time table) 2. Tribology (Refer T.E. Mech.(2003) 3. Plant Engineering	Industrial Hydraulics & Pneumatics (2003-402062)	
Thursday, 24.05.2012	<ul> <li>Elective I (2003-402045)</li> <li>Product Design &amp; Development</li> <li>Material Engg. And their Processing</li> <li>Alternative Energy Sources</li> <li>Kinematic Analysis and Synthesis</li> <li>Operation Research</li> <li>Costing &amp; Cost Control</li> </ul>	Elective I (1997-4020-45) 1.Microprocessor Applications	<ul> <li>Elective I (2003-402063)</li> <li>1. Refrigeration &amp; Air Conditioning</li> <li>2. Robotics</li> <li>3. Tribology</li> <li>4. Automobile</li> <li>5. Computer Fluid Dynamics</li> </ul>	Elective I (1997-402065) 1.Microprocessor Applications
Saturday, 26.05.2012	CAD/CAM & Automation (2003-402047)		CAD/CAM & Automation (2003-402048)	Manufacturing Management (1997-402067)
Tuesday, 2905.2012	Power Plant Engg. (2003- 402048)			
Thursday, 31.05.2012	Industrial Fluid Power (2003-402049)			
Saturday, 02.06.2012	Elective II (2003-402050) 1. Robotics 2. Comp. Fluid Dynamics 3. Energy Management 4. Rapid Prototyping 5. Reliability Engg. 6. Automobile Engg.	Elective II (1997-402051) 1 Advanced M/C Design	Elective-III (2003-402065) 1. Industrial Engg. 2. Costing & Cost Control 3. Production Management 4. Machine Tools Design 5. Non-conventional Energy	Advanced M/C Designing (1997-402065)
Tuesday, 05.06.2012		Applied Thermodtnamics-III (1997–402043)		Applied Thermodthamics-III (1997-402043)

## B.E. (Mechanical)/B.E.(Mechanical Sandwich) Time : 2.30 p.m. to 5.30 p.m.

\* Please note the timing.

## **B.E. (Industrial Engineering)** Time : 2.30 p.m. to 5.30 p.m.

Day & Date	B.E. (Industrial Engineering) 2003 Course	B.E. (Industrial Engineering) 1997 Course
Tuesday, 15.05.2012	Quantitative Techniques (2003-411101)	Material Control (1997-411101)
Thursday, 17.05.2012	Business Accounting & Costing (2003-411102)	
Saturday 19.05.2012	Human Factors Engineering (2003-411103)	Work study Applications (1997-411103) Refer T.E. (Ind. Engg.) (2003) Time Table for Date & Time
Tuesday 22.05.2012	Logistics Warehousing (2003-411104)	
Thursday, 24.05.2012	<ul> <li>Elective I (2003-411105)</li> <li>1. Supply Chain Mgnt.</li> <li>2. Simulation Modeling &amp; Analysis</li> <li>3. Units Operation</li> <li>4. Project Management</li> </ul>	Elective I (1997-411105) 1.Safety Engineering
Saturday, 26.05.2012	Flexible Manufacturing System (2003-411108)	
Tuesday, 2905.2012	Advanced Manufacturing Processes (2003- 411109)	Industrial Engineering Applications in service Sector (1997-411109)
Thursday, 31.05.2012	Energy Management (2003-411110)	Development of Human Resources (411110)
Saturday, 02.06.2012	<ul> <li>Elective - II (2003-411111)</li> <li>1. Entrepreneurship Development</li> <li>2. Plastic Engineering</li> <li>3. Industrial &amp; Commercial Laws</li> <li>4. Material Logistic</li> </ul>	<ul> <li>Elective II (1997-411111)</li> <li>1. Production Design</li> <li>2. Computer Aided Manufacturing</li> <li>3. Environmental Engg.</li> <li>4. Industrial and Commercial Laws</li> </ul>

B.E. (Production Engineering/) B.E. (Produ. Sandwich)
Time : 2.30 p.m. to 5.30 p.m.

Day & Date	B.E. (Prod. Engg.) 2003 Course	B.E. (Prod. Engg.) 1997 Course	B.E. (Prod. Sandwich) 2003 Course	B.E. (Prod. Sandwich) 1997 Course
Tuesday, 15.05.2012	Production Management (2003-411081)		Mechatronics & Robotics (2003-411121)	
Thursday, 17.05.2012	Machine Tool Design (2003-411082)		Machine Tool Design (2003-411082)	
Saturday 19.05.2012	Manufacturing Automation and Control (2003-411083)		Manufacturing Automation and Control (2003-411083)	
Tuesday 22.05.2012	Operation Research (2003-411084)		Operation Research & Management (2003-411126)	
Thursday, 24.05.2012	Elective I (2003-411185) 1. Reliability Engineering 2. Powder Metallurgy 3. Plant Engg. and Maintenance 4. Material Handling Technology & Equipment Design	Elective I (1997-411085) 1. Materials Management 2. Advances in Material Sciences	Elective – I (2003)(411122) 1.Ergonomics 2. Financial Mgt. 3. Die & Mould Design 4. Adv. Product Technique 5.Reliability Engineering	Elective-I (1997-411085) 1. Powder Metallurgy 2. Advances in Material Sciences 3. Plant Engineering 4. Robotics & Its Industrial Appln.
Saturday, 26.05.2012	Material & Financial Management (2003-411087)	Industrial Relation & Manufacturers Management (1997-411125)		Industrial Relation & Manufacturers Management (1997-411125)
Tuesday, 2905.2012	Process Planning & Tools Selection (2003- 411088)			
Thursday, 31.05.2012	CAD/CAM/CIM (2003-411089)			
Saturday, 02.06.2012	<ul> <li>Elective II</li> <li>(2003-411090)</li> <li>1. Robotics</li> <li>2. Ergonomics and Human Factors in Engineering</li> <li>3. Adv. Material Processing</li> <li>4. Adv. Production Tech.</li> </ul>	Elective II (1997-411091) 1. Production Processes & Design 2. Case Studies in Production Management Operation Research Problems & Quality Control	<ul> <li>Elective II</li> <li>(2003-411125)</li> <li>Plant Engg. &amp; Facility Layout</li> <li>Supply Chain Mgnt.</li> <li>Industrial &amp; Commercial Law</li> <li>Project Management</li> </ul>	

## B.E. (Electrical)/B.E. (Electrical Sandwich) Time : 2.30 p.m. to 5.30 p.m.

Day & Date	B.E. (Electrical) 2003 Course	B.E. (Electrical) 1997 Course	B.E. (Elect. Sandwich) 2003 Course	B.E. (Elect. Sandwich) 1997 Course
Tuesday, 15.05.2012	Power System Operation & Control (2003-403141)			Microprocessor Techniques (1997-403161)
Thursday, 17.05.2012	Utilization of Electrical Energy (2003-403142)			Electrical Power II (1997-403162)
Saturday 19.05.2012	Industrial Drives & Control (2003-403144)	Control System I (1997-403144) Refer T.E. (Electrical) (2003) Time Table for Date & Time		Protective Systems & Switchgear (1997-403163)
Tuesday 22.05.2012	Control System II (2003-403145)	Design of Electrical Machines (1997-403145) Refer T.E. (Electrical) (2003) Time Table for Date & Time		
Thursday, 24.05.2012	Elective I (2003-403143) 1. Robotics & Automation 2. Power Quality 3. Illumination Engineering 4. Project Management 5. Restructuring & Deregulation			<ul> <li>Elective I (1997-403141)</li> <li>1. Energy Audit and Conservation</li> <li>2. Robotics&amp; Automation</li> <li>3. Electromechanical Energy Conversion</li> <li>4. Modern Power System Practice</li> </ul>
Saturday, 26.05.2012	Energy Management (2003-403147)			
Tuesday, 2905.2012	Switchgear & Protection (2003-403148)			
Thursday, 31.05.2012	Digital Control System (2003-403149)	Electrical Machine III (1997-403148) Refer T.E.(Electrical) 2003 Time Table for Date & Time		
Saturday, 02.06.2012	Elective II (2003-403150) 1. VLSI Design 2. High Voltage Engineering 3. Digital Signal Processing 4. ANN & Application in Electrical Engineering	Elective II (1997-403148) 1. Advanced Microprocessor Techines		

## B.E. (Electronics & Telecommunication) Time : 2.30 p.m. to 5.30 p.m.

Day &	B.E. (Electro. & Telecomm.)	B.E. (Electro. & Telecomm.)
Date	2003 Course	1997 Course
Tuesday,	Computer Network	Computer Architecture
15.05.2012	(2003-404214)	(1997-404181)
Thursday,	Voice Network	Digital Signal Processing
17.05.2012	(2003-404215)	(1997-404183)
Saturday	Electronics Product Design	Radiation & Microwave Techniques
19.05.2012	(2003-404216)	(1997-404182)
Tuesday 22.05.2012	VLSI Design (2003-404217)	Elective I (1997-404185) VLSI Design
Thursday, 24.05.2012	<ul> <li>Elective I (2003-404218)</li> <li>1. Embedded System Design</li> <li>2. Advanced Power Electronics</li> <li>3. Artificial Neural Networks</li> <li>4. Robotics and Industrial Automation</li> <li>5. Adv. Digital Signal Processing</li> </ul>	<ul> <li>Elective I (1997-404185)</li> <li>1. Advanced Power Electronics</li> <li>2. Systems Programming</li> <li>3. Robotics</li> <li>4. Information Technology</li> </ul>
Saturday, 26.05.2012	Electronics Measurement System (2003-404222)	
Tuesday,	Telecom. Networks & Management	Consumer Electronics
2905.2012	(2003-404223)	(404189)
Thursday, 31.05.2012	Optical & Microwave Communication (2003-404224)	Communication Network (1997-404188)
Saturday,	<ul> <li>Elective - II (2003-404225)</li> <li>1. Adv. Communication</li></ul>	<ul> <li>Elective II (404191)</li> <li>1. Fiber Optic Communication</li> <li>2. Agriculture Electronics</li> <li>3. Microwave Engg.</li> <li>4. Software Engg.</li> <li>5. PLC &amp; Industrial</li></ul>
02.06.2012	System <li>2. Digital Image Processing</li> <li>3. Biomedical Engineering</li> <li>4. System Programming &amp; Operating System</li>	Controllers <li>6. Image Processing</li>
Tuesday,	Elective - II (2003-404225)	Elective -I (1997-404185)
05.06.2012	Audio-Video Engg.	Auto-Video Engg.

#### **B.E.** (Electronics) Time : 2.30 p.m. to 5.30 p.m.

Day & Date	B.E. (Electronics) 2003 Course	B.E. (Electronics) 1997 Course
Tuesday, 15.05.2012	Computer Network (2003-404201)	Electronics Communication-II (1997-404201)
Thursday, 17.05.2012	Electronic Product Design (2003-404202)	
Saturday 19.05.2012	Advanced Power Electronics (2003-404203)	Digital Signal Processing & Application (1997-404203)
Tuesday 22.05.2012	VLSI Design (2003-404204)	VLSI Design (1997-404210)
Thursday, 24.05.2012	<ul> <li>Elective I (2003-404205)</li> <li>1. Embedded System Design</li> <li>2. Process Instrumentation</li> <li>3. Adv. D.S.P.</li> <li>4. Advanced Communication Engg.</li> <li>5. Software Engineering</li> </ul>	Elective I (1997-404205) 1. Process Instrumentation 2. Microwave Techniques 3. Medical Electronics I 4. Computer Interfacing 5. Informatics Technology
Saturday, 26.05.2012	Electronics Measurement System (2003-404209)	
Tuesday, 2905.2012	Management Information System (2003-404210)	Modern Electronics System (1997-404208)
Thursday, 31.05.2012	Biomedical Electronics (2003-404211)	Computer Based Simulation Modeling (1997-404209)
Saturday, 02.06.2012	<ul> <li>Elective - II(2003-404212)</li> <li>1. Real Time Operating Sys</li> <li>2. Artificial Intelligence</li> <li>3. Robotics &amp; Industrial Automation</li> <li>4. System Programming &amp; Operation System</li> <li>5 Digital Image Processing</li> </ul>	<ul> <li>Elective II (1997-404210)</li> <li>1. Optical Fiber Communication</li> <li>2. Power Electronics III</li> <li>3. Medical Electronics II</li> <li>4. Advanced Computer Programming</li> <li>5. Image Processing</li> </ul>
Tuesday, 05.06.2012		Elective-I (1997-404185) Audio-Video Engg.

## **B.E. (Industrial Electronics)** Time : 2.30 p.m. to 5.30 p.m.

Day & Date	<b>B.E. (Industrial Electronics)</b> 2003 Course	<b>B.E. (Industrial Electronics)</b> 1997 Course
Tuesday, 15.05.2012		Digital Signal Processing (1997-404221)
Thursday, 17.05.2012		Power Electronics Drives and Applications (1997-404222)
Saturday 19.05.2012		Power Electronics-II (1997-404202) Electronic System Design (1997-404223)
Tuesday 22.05.2012		Industrial Instrumentation (1997-404224)
Thursday, 24.05.2012		Elective I (1997-404225) 1. Information Technology 2. Micro Controller 3. Opto. Electronics 4. Data Communication 5. Electronics Circuits Modeling & Simulation 6. Advanced Computer Programming
Saturday, 26.05.2012		Computer Technique (1997-404227)
Tuesday, 2905.2012		Biomedical Engineering (1997-404228)
Thursday, 31.05.2012		Robotics & C.N.C. (1997-404229)
Saturday, 02.06.2012		Elective II (1997-404230) 1. A.C. Motor Drives 2. Software Engg. 3. Advanced Digital Control 4. Image Processing 5. Programmable Industrial Controllers 6. Agricultural Electronics Engineering
Tuesday, 05.06.2012		Elective I (1997-404185) Audio-Video Engg.

Day & Date	B.E. (Metallurgy) 2003 Course	B.E. (Metallurgy) 1997 Course	B.E. (Meta.Sandwich) 2003 Course	B.E. (Meta.Sandwich) 1997 Course
Tuesday, 15.05.2012		Industrial Organization & Management I (1997-405302)		Elective I (1997-405301) 1. Engineering Materials Technology 2. Corrosion & Corrosion Control 3. Energy Resources & Applications 4. Processes of Ore Formation
Thursday, 17.05.2012		Advanced Manu- facturing Processes (1997-405305)		Technical Control & Management (1997-405321)
Saturday 19.05.2012				Industrial Metallurgy II (1997-405322)
Tuesday 22.05.2012		Selection of Materials & Failure Analysis (1997-405304)		Selection of Materials & Failure Analysis (1997-405304)
Thursday, 24.05.2012		Elective II (1997-405308) 1. Metallurgy & Science of Welding 2. Powder Metallurgy 3. Composite Materials 4. Advanced Testing, Inspection and Quality Control		Furnace Technology (1997-405309)
Saturday, 26.05.2012		Furnace Technology (405309)		Structure of Metallurgy (1997-405322)
Tuesday, 2905.2012		Modern Materials Technology (405310)		
Thursday, 31.05.2012		Industrial Organization and Management II (405311)		
Saturday, 02.06.2012		Structural Metallurgy (1997 - 405303)		
Tuesday, 05.06.2012		Elective-I(405301) 1. Engineering Materials Technology 2. Corrosion & Corrosion Control 3. Energy Resources & Applications 4. Processes of Ore Formation		

# B.E. (Metallurgy)/ B.E.(Metallurgy Sandwich) Time : 2.30 p.m. to 5.30 p.m.

### B.E. (Instrumentation and Control) Time : 2.30 p.m. to 5.30 p.m.

Day & Date	B.E. (Instrumentation and Control) 2003 Course	B.E. (Instrumentation and Control) 1997 Course
Tuesday, 15.05.2012	Process Instrumentation - I (2003-406261)	
Thursday, 17.05.2012	Project Engineering & Management (2003-406262)	
Saturday 19.05.2012	Digital Control (2003-406263)	
Tuesday 22.05.2012		DCS & Communication protocols (1997-406265)
Thursday, 24.05.2012	<ul> <li>Elective I (2003-406264)</li> <li>1. Biomedical Instrumentation</li> <li>2. Instrumentation for Environmental Engg.</li> <li>3. Laser Application in Instrumentation</li> <li>4 Advanced Control System</li> <li>5. Building Automation – I</li> </ul>	<ul><li>Elective I (1997-406261)</li><li>1. Power Electronics</li><li>2. Reliability Engineering</li></ul>
Saturday, 26.05.2012	Process Instrumentation – II (2003-406267)	
Tuesday, 2905.2012	Computer Technology & Application (2003-406268)	
Thursday, 31.05.2012	Industrial Automation (2003- 406269)	
Saturday, 02.06.2012	Elective – II (2003-406270) 1.Adv. Biomedical Instrumentation 2.Power Plant Instrumentation 3.Fiber Optic Instrumentation 4.Process Modeling & Optimization 5.Building Automation – II	Elective II (1997-406268) 1. Process Modelling and Optimization 2. Instrumentation for Agaricultute & Food Processing
Tuesday, 05.06.2012		Instrumentation & System Design (1997-406271)

# B.E. (Printing Engineering & Communication Technology) Time : 2.30 p.m. to 5.30 p.m.

Day & Date	B.E. (Printing Engineering & Communication Technology) 2003 Course	B.E. (Printing Engineering & Communication Technology) 1997 Course
Tuesday, 15.05.2012	Costing & Estimating & Project Management, Operation Research (2003-408282)	
Thursday, 17.05.2012	Surface Preparation-II (2003-408283)	
Saturday 19.05.2012	Offset Machine-II (2003-408284)	
Tuesday 22.05.2012	Electronic Image Setting (2003-408285)	
Thursday, 24.05.2012	Elective I (2003-408281) 1. Newspaper Technology 2. Flexible Packaging 3. Security Printing	
Saturday, 26.05.2012	Technology of Grevere & Flexo Graphy. (2003-408288)	
Tuesday, 2905.2012	Assembly & Maintenance of Printing Machine (2003-408289)	
Thursday, 31.05.2012	Substrates & Ink Technology (2003-408290)	
Saturday, 02.06.2012	<ul> <li>Elective - II (2003-408287)</li> <li>1. Study of Materials &amp; Package Design</li> <li>2. Image Conversion &amp; Modification</li> <li>3. Study of Advt. &amp; Multimedia</li> <li>4. Information Technology</li> </ul>	

## **B.E. (Chemical)** Time : 2.30 p.m. to 5.30 p.m.

Day & Date	B.E. (Chemical) 2003 Course	B.E. (Chemical) 1997 Course
Tuesday, 15.05.2012	Process Dynamics and Control (2003-409342)	Mass Transfer II Refer to T.E. (Chemical) (309350) Time Table for Date & Time
Thursday, 17.05.2012	Chemical Reaction Engg. II (2003-409343)	
Saturday 19.05.2012	Chemical Process Synthesis (2003-409344)	
Tuesday 22.05.2012	Process Equipment Design II (2003-409345)	
Thursday, 24.05.2012	<ul> <li>Elective I (2003-409341)</li> <li>1. Environmental Engg.</li> <li>2. Bioprocess Engg.</li> <li>3. Energy Conservation</li> <li>4. Polymer Technology</li> <li>5. Catalysts</li> <li>6. Adv. Separation Processes</li> <li>7. Petroleum Refining</li> </ul>	
Saturday, 26.05.2012	Process Modeling & Simulation (2003-409349)	Plant Design & Project Engineering (1997-409347)
Tuesday, 2905.2012	Project Costing & Appraisal (2003-409350)	Process Modeling & Simulation (1997-409348)
Thursday, 31.05.2012	Chemical Plant Engineering (2003-409351)	Transport Phenomena (1997-405344)
Saturday, 02.06.2012	<ul> <li>Elective - II (2003-409348)</li> <li>1. Computer Aided process Control</li> <li>2. Food Technology</li> <li>3. Advanced Materials</li> <li>4. Industrial Hazards &amp; Safety</li> <li>5. Piping Design &amp; Engineering</li> <li>6. Fuel Cell Technology</li> <li>7. Petrochemical Engineering</li> </ul>	Process Dynamics and Control (1997-409350)

## **B.E.** (Polymer Engineering) Time : 2.30 p.m. to 5.30 p.m.

Day & Date	B.E. (Polymer Engineering) 2003 Course	B.E. (Polymer Engineering) 1997 Course
Tuesday, 15.05.2012	Polymer Structure & Property Relationship (2003-409361)	
Thursday, 17.05.2012	Polymer Processing Operations I (2003-409362)	
Saturday 19.05.2012	Polymer Composites & Blends (2003-404363)	
Tuesday 22.05.2012	Mould & Die Design (2003-409364) *( <b>2.30 p.m. to 6.30 p.m.</b> )	
Thursday, 24.05.2012	<ul> <li>Elective - I (2003-409366)</li> <li>1. Polymer Reaction Engg.</li> <li>2. Rubber Technology</li> <li>3. Surface Coating and Adhesive</li> <li>4. Advanced Polymer Rheology</li> </ul>	
Saturday, 26.05.2012	Product Design & Computer Application (2003-404368)	
Tuesday, 2905.2012	Polymer Processing Operations II (2003-409369)	
Thursday, 31.05.2012	Industrial Management & Process Economics (2003-409370)	
Saturday, 02.06.2012	Elective - II (2003-409367) 1. Specialty Polymer 2. Fiber Technology 3. Mechanics of Composites 4. Packing Technology	

\*Please note the Timing

## B.E. (Petroleum Engineering) Time : 2.30 p.m. to 5.30 p.m.

Day & Date	B.E. (Petroleum Engineering) 2003 Course	B.E. (Petroleum Engineering) 1997 Course
Tuesday, 15.05.2012	Reservoir Engineering I (2003-412381)	
Thursday, 17.05.2012	Petroleum Exploration (2003-412382)	
Saturday 19.05.2012	Formation Evaluation (2003-412383)	
Tuesday 22.05.2012	Natural Gas Engineering (2003-412384)	
Thursday, 24.05.2012	<ul> <li>Elective I (2003-412385)</li> <li>1. Refining and Petrochemical Technology</li> <li>2. Applied Computational Techniques</li> <li>3. Environment Safety &amp; Health in Petroleum Industries</li> </ul>	
Saturday, 26.05.2012	Reservoir Engineering II (2003-412388)	
Tuesday, 2905.2012	Petroleum Production Engineering II (2003-412389)	
Thursday, 31.05.2012	Oil Well Drilling Engineering (2003-412390)	
Saturday, 02.06.2012	<ul> <li>Elective - II (2003-412391)</li> <li>1. Petroleum Economics</li> <li>2. Integrated Reservoir Management</li> <li>3. Deepwater Technology</li> </ul>	

## B.E. (Petro-Chemical Engineering) Time : 2.30 p.m. to 5.30 p.m.

B.E. (Petro-Chemical Engineering) 2003 Course	<b>B.E. (Petro-Chemical Engineering)</b> 1997 Course
Refining Operation (2003-412401)	
Petrochemical Processes (2003-412402)	
Reaction Engineering II (2003-412403)	
Process Dynamics & Control (2003-412404)	
Elective I (2003-412405) 1. Environmental Engg. 2. Novel Separation Process 3. Interface and Colloid Science	
Refinery Process Design (2003-412407)	
Natural Gas Technology (2003-412408)	
Process Economics & Project Engineering (2003-412409)	
<ul> <li>Elective II (2003-412411)</li> <li>1. Catalysis Technology And Fluidization Engineering</li> <li>2. Biochemical Engineering</li> <li>3. Petroleum Exploration and Production</li> </ul>	
	2003 Course2003 CourseRefining Operation (2003-412401)Petrochemical Processes (2003-412402)Reaction Engineering II (2003-412403)Process Dynamics & Control (2003-412404)Elective I (2003-412405)1. Environmental Engg. 2. Novel Separation Process 3. Interface and Colloid ScienceRefinery Process Design (2003-412407)Natural Gas Technology (2003-412408)Process Economics & Project Engineering (2003-412409)Elective II (2003-412411) 1. Catalysis Technology And Fluidization Engineering 2. Biochemical Engineering

## B.E. (Computer Engineering) Time : 2.30 p.m. to 5.30 p.m.

Day & Date	B.E. (Computer Engineering) 2003 Course	B.E. (Computer Engineering) 1997 Course
Tuesday, 15.05.2012	Design & Analysis of Algorithms (2003-410441)	
Thursday, 17.05.2012	Operating Systems (2003-410242)	
Saturday 19.05.2012	Object Oriented Modeling & Design (2003-410443)	
Tuesday 22.05.2012	Principles of Compiler Design (2003-410444)	
Thursday, 24.05.2012	Elective- I (2003-410445) 1. Image Processing 2. Advanced Databases 3. Artificial Intelligence 4. Multimedia System	Elective- I (1997-410245) 1. Digital System Design
Saturday, 26.05.2012	Networks & Information Security (2003-410448)	
Tuesday, 2905.2012	Advanced Computer Architecture & Computing (2003-410449)	Project Planning & Management (1997-410250)
Thursday, 31.05.2012	Software Testing & Quality Assurance (2003-410450)	Multimedia Techniques (1997-410252)
Saturday, 02.06.2012	Elective - II (2003-410451) 1. Distributed System 2. Software Architecture 3. Embedded System 4. High Performance Networks	<ul> <li>Elective- II (1997-410251)</li> <li>1. Advanced Digital Signal Processing</li> <li>2. Advanced Unix Programming</li> <li>3. Object oriented Component &amp; Systems</li> </ul>
Tuesday, 05.06.2012		Computer Network (1997- 410241)

## **B.E. (Information Technology)** Time : 2.30 p.m. to 5.30 p.m.

Day & Date	B.E. (Information Technology) 2003 Course	B.E. (Information Technology) 1997 Course
Tuesday, 15.05.2012	Information System Security (2003-414441)	
Thursday, 17.05.2012	Advanced Database Management (2003-414442)	
Saturday 19.05.2012	Object Oriented Modeling & Design (2003-414443)	
Tuesday 22.05.2012	Software Testing & Quality Assurance (2003-414444)	
Thursday, 24.05.2012	<ul> <li>Elective-I (2003-414445)</li> <li>(1) Bio-informatics</li> <li>(2) Mobile Computing</li> <li>(3) GIS &amp; Remote Sensing</li> <li>(4) Org. Behaviour &amp; Mgnt.</li> </ul>	Elective-I (1997-410445) (1) Managerial Economics (2) ERP
Saturday, 26.05.2012	System Operation and Maintenance (2003-414448)	
Tuesday, 2905.2012	Distributed System (2003-414449	
Thursday, 31.05.2012	Information Retrieval (2003-414450)	
Saturday, 02.06.2012	Elective II (2003-414451) 1. Artificial Intelligence 2. Software Architecture 3. Real Time System 4. Embedded System	Elective-II (1997-410452) 1. Object Oriented Component Application 2. Multimedia Application

## B.E. (Biotechnology) Time : 2.30 p.m. to 5.30 p.m.

Day &	B.E. (Biotechnology)
Date	2003 Course
Tuesday, 15.05.2012	Enzyme and Fermentation Engineering (2003 – 416282)
Thursday,	Chemical Reaction Engineering – II
17.05.2012	(2003 – 409343)
Saturday	Bioprocess Equipment Design
19.05.2012	(2003 – 416283)
Tuesday	Novel Separation Techniques
22.05.2012	(2003 – 416284)
Thursday, 24.05.2012	<ul> <li>Elective I - (2003 - 416281)</li> <li>1) Pharmaceutical Biotechnology</li> <li>2) Environmental Biotechnology</li> <li>3) Cosmetic Biotechnology</li> <li>4) Metabolic Engg.</li> </ul>
Saturday,	Analytical Biotechnology
26.05.2012	(2003 – 416287)
Tuesday, 2905.2012	Bioinformatics and Regulations (2003 – 416288)
Thursday, 31.05.2012	Plant Engineering (2003 – 409289)
Saturday, 02.06.2012	<ul> <li>Elective II - (2003 - 416286)</li> <li>1) Biomaterials</li> <li>2) Food Technology</li> <li>3) Nano Biotechnology</li> <li>4) Biothicks &amp; Biosafety</li> </ul>

- **12.** The Practical/Oral/Project Examination will be conducted from 24.04.2012 to 09-05-2012.
- 13. Candidates are permitted to use the stencils at the time of examination.
- 14. Candidates appearing for the examination are expected to provide themselves with slide-rules. The exchange or loan of slide-rules, drawing instrument or other material in the examination hall is not permitted while the examination is in progress. Candidates must bring their own instruments and will not be allowed to borrow the same from each other under any circumstances.
- **15.** Use of non-programmable battery operated electronic calculator of pocket size is allowed. The exchange of calculator is not allowed.
- **16.** Candidates of B.E. (Part I) (1997 Courses) will have to appear for the equivalence Subject under 2003 Course wherever equivalence have been given under the concerned branches

Ganeshkhind, Pune-411007 Ref. / XCT / 470 Date : 18.04.2012 **Dr. (Capt.)C.M. Chitale** Controller of Examinations. (Additional Charge)