58 /S-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. 58 of 2012 Revised Programme of B.E. 2008 Course (All Branches) Examinations, November, 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 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. PUNE:

Sr.No.	College Code	Centers and Places of the Examinations
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	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 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 Engineering,Pune 411037 also)

25	40	J.S.P.M.'s Jayawantrao Sawant College of Engineering, Handewadi Road,
25		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 Maharashatra Institute of Engineering & Tech., Vishnupuri, Talegaon Station, Tal. Maval, Dist. Pune. 410 507.
38	57	STE'S SIT & Science, Nehre Ambegaon, Pune. 411 041.
39	59	MMM'S Institute of Tech., Sr. No. 35 Plot No. 516 Lohagaon, Tal. Haveli, Dist. Pune. 411 032.
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	10	Amrutvahini College of Engineering, Sangamner, Dist. Ahmednagar
3	11	Pravra Rural College of Engineering, Pravaranagar (Loni), Dist. Ahmednagar.
4	12	College of Engineering, Kopargaon, Dist. Ahmednagar.
5	64	Vishwabharti Academy's COE, Jamkhed Road, at. Sarola Baddi. Dist. Ahmedmagar.
6	66	SGR Edu. Foundation COE' & Management, Gat. No. 1030, at. Chas, Ahmednagar.

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 Reasearch, Eklahare, Nashik. 423 401.
8	<mark>61</mark>	Sandeep Institute of Tech. & Research Center, Mahirawani, Dist. Nashilk.
9	<mark>62</mark>	Nashik Gramin S.P.M.'s Bharma Vally, COE, & Research, at. Anjaneri, Tal. Trambakeshwar, Nashik.

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

B.E. (CIVIL)

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

<u>SEMESTER – II</u>

	C: 1 (2000 C)
Day & Date	Civil (2008 Course)
D : 1	
Friday	Quantity Surveying Contracts and Tenders (401009)
02.11.2012	
Saturday	Transportation Engineering – II (401010)
03.11.2012	
Monday	<u>Elective – III (401007)</u>
05.11.2012	a)Advanced Structural Design
	b)Advanced Foundation Engineering
	c)Advanced Engineering Geology with Rock Mechanics
	d)Advanced Environmental Management
	e)Construction Management
Tuesday	Elective – IV (401008)
06.11.2012	a) Integrated Water Resources and Planning
	b) Advaced Transportation Engineering
	c) Statistical Analysis And Computational Methods in Civil Engg.
	Open Elective (401008)
	a) Finite Element Method in Civil Engg.,
	b) Geoinformatics
	c) Hydropower Engineering
	d) Industrial Waste Water Management
	e) Mechanics of Waves
	e) Mechanics of Waves

<u>SEMESTER – I</u>

Day & Date	Civil (2008 Course)
Wednesday 07.11.2012	Environmental Engineering – II (401001)
Friday 09.11.2012	Dams and Hydraulic Structures (401002)
Monday 19.11.2012	Structure Design – III (401003) *(2:30 p.m. to 6:30 p.m.)
Wednesday 21.112012	Elective – I (401004)a) Structural Design in Bridgesb) System Approach in Civil Engineeringc) Air Pollution and Controld) Architecture and Town Planninge) Advanced Geotechnical Engineering
Friday 23.11.2012	Elective – II (401005) a) Matrix Methods of Structural Analysis b) Hydroinformatics c) TQM & MIS in Civil Engineering d) Earthquake Engineering e) Advanced concrete Technology

* Please note the Timing

B.E. (MECHANICAL)

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

<u>SEMESTER – II</u>

Day & Date	Mechanical (2008 Course)
Friday	Power Plant Engineering (402047)
02.11.2012	
Saturday	Mechanical System Design (402048) *(2.30 p.m. to 6.30 p.m.)
03.11.2012	
Monday	Elective – III (402049)
05.11.2012	a)Computational Fluid Dynamics
	b)Finite Element Method
	c)Robotics
	d)Advanced Air Conditioning and Refrigeration
Tuesday	Elective – IV (402050)
06.11.2012	a) Industrial Heat Transfer Equipments
	b) Management Information System
	c)Reliability Engineering
	d)Open Elective
	i)Cryogenic Engineering
	ii)Product Lifecycle Management
	iii)Industrial Automation

* Please note the Timing

Day & Date	Mechanical (2008 Course)
Wednesday 07.11.2012	CAD/CAM Automation (402041)
Friday 09.11.2012	Dynamics of Machinery (402042)
Monday 19.11.2012	Industrial Fluid Power (402043
Wednesday 21.11.2012	Elective – I (402044)a) Energy Audit and Managementb) Product Design and Developmentc) Design of Pumps, Blowers and Compressorsd) Tribology
Friday 23.11.2012	Elective – II (402045) a) Automobile Engineering b) Machine Tool Design c) Quantitative and decision making Techniques

B.E. (MECHANICAL SANDWICH)

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

<u>SEMESTER – II</u>

Day & Date	Mechanical Sandwich (2008 Course)
Friday	
02.11.2012	
Saturday	
03.11.2012	
Monday	
05.11.2012	
Tuesday	Elective – IV (402066)
06.11.2012	a) Costing & Cost Control
	b) Machine Tool Design
	c) Energy Management & Industrial Pollution

<u>SEMESTER – I</u>

Day & Date	Mechanical Sandwich (2008 Course)
Wednesday	Machine & Computer Aided Design (402061)
07.11.2012 Friday	*(2.30 p.m. to 6.30 p.m.) Dynamics of Machinery (402042)
09.11.2012	(Common to Mechanical)
Monday 19.11.2012	Industrial Hydraulics & Pneumatics (402062)
Wednesday	<u>Elective – II (402063)</u>
21.11.2012	a) Refrigeration & Air Conditioning
	b) Computational Fluid Dynamics
	c) Finite Element Method
Friday	<u>Elective – III(402064)</u>
23.11.2012	a) Automobile Engineering
	b) Operations Research
	c) Robotics

* Please note the Timing

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

<u>SEMESTER – II</u>

Day & Date	Electrical (2008 Course)
Friday 02.11.2012	Switchgear and Protection (403147)
Saturday 03.11.2012	Industrial Drives and Control (403148)
Monday 05.11.2012	 <u>Elective – III (403149)</u> a) VLSI Design b) High Voltage Engineering c) Digital Signal Processing d) ANN and its Applications in Electrical Engineering
Tuesday 06.11.2012	Elective – IV (403150) a) Modeling of Electrical System b) Renewable Energy System c) Digital Control System Open Elective

Day & Date	Electrical (2008 Course)
Wednesday 07.11.2012	PLC and SCADA Applications (403141)
Friday 09.11.2012	Power System Operation and Control (403142)
Monday 19.11.2012	Control System – II (403145)
Wednesday 21.11.2012	Elective – I (403143) a) Robotics and Automation b) Power Quality c) Illumination Engineering d) Project Management
Friday 23.11.2012	Elective – II (403144) a) Restructuring and Deregulation b) Embedded System c) EHV Transmission d) Smart Grid

B.E. (ELECTRONICS & TELECOMMUNICATIONS)

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

<u>SEMESTER – II</u>

Day & Date	E & TC (2008 Course)
Friday 02.11.2012	Telecommunication & Switching System (404187)
Saturday 03.11.2012	Optical Fiber Communication (404188)
Monday 05.11.2012	Elective – III (404189) a) Soft Computing b) Speech Processing c) Television and Video Engineering d) Test and Measurement Systems
Tuesday 06.11.2012	Elective – IV (404190) a) Artificial Intelligence b) Automotive Electronics c) Nanotechnology d) PLC and Industrial Process Automation e) Open Elective

Day & Date	E & TC (2008 Course)
Wednesday 07.11.2012	Electronics Product Design (404181)
Friday 09.11.2012	VLSI Design & Technology (404182)
Monday 19.11.2012	Computer Network (404183)
Wednesday 21.11.2012	<u>Elective – I (404184)</u> a) Digital Image Processing b) Embedded System and RTOS c) Industrial Drives Control d) Microwave Communication and Radar
Friday 23.11.2012	Elective – II -(404185)a) Entrepreneurship Developmentb) Joint Time Frequency Analysisc) Micro-electromechanical and system on chip(MEMS and SOC)d) Mobile Communication

B.E. (ELECTRONICS)

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

<u>SEMESTER – II</u>

Day & Date	Electronics (2008 Course)
Friday 02.11.2012	Computer Network & Security (404207)
Saturday 03.11.2012	Process Automation (404208)
Monday 05.11.2012	<u>Elective – III (404209)</u> a) Audio and Video Engineering b) Image Processing and Machine Vision c) Optical and Microwave Communication d) Soft Computing Tools
Tuesday 06.11.2012	Elective – IV (404210) a) Advanced Communication System b) Automotive Electronic Systems c) Artificial Intelligence d) Nanotechnology in Electronics e) Open Elective

Day & Date	Electronics(2008 Course)
Wednesday 07.11.2012	Electronics System Design (404201)
Friday 09.11.2012	VLSI Design (404202)
Monday 19.11.2012	Embedded System (404203)
Wednesday	Elective – I (404204)
21.11.2012	a) Advanced Measurement Systems
	b) Advanced Power Electronics
	c) Biomedical Instrumentation
	d) Mechatronics
Friday	<u>Elective – II (404205)</u>
23.11.2012	a) Advanced Computer Architecture
	b) Entrepreneurship and Business Planning
	c) SOC (System on Chip)
	d) Robotics and Automation

B.E. (PRODUCTION ENGINEERING)

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

<u>SEMESTER – II</u>

Day & Date	Production Engineering (2008 Course)
Friday 02.11.2012	Computer Integrated Design and Manufacturing (411087)
Saturday 03.11.2012	Processing Planning and Tool Selection (411088)
Monday 05.11.2012	<u>Elective – III(411089</u>) a) Automobile Engineering b) Mechatronics c) Metal Working Tribology d) Finite Element Analysis
Tuesday 06.11.2012	Elective – IV (411090)a)World Class Manufacturingb) Intelligent Manufacturing Systemsc) Total Quality Managementd) Open Elective

Day & Date	Production Engineering (2008 Course)
Wednesday 07.11.2012	Machine Tool Design (411081)
Friday 09.11.2012	Manufacturing Automation (411082)
Monday 19.11.2012	Operations Research (411083)
Wednesday	<u>Elective – I (411084)</u>
21.11.2012	a) Plastic Engineering
	b) Industrial Robotics
	c) Powder Metallurgy
	d) Microprocessor Applications
Friday	<u>Elective – II (411085)</u>
23.11.2012	a) Ergonomics and Human Factors in Engineering
	b) Material & Logistic Management
	c) Simulation and Modeling
	d) Plant Engineering and Maintenance

B.E. (PRODUCTION – SANDWICH)

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

<u>SEMESTER – II</u>

Day & Date	Production- Sandwich (2008 Course)
Friday	
02.11.2012	
Saturday	
03.11.2012	
Monday	<u>Elective – III (411130)</u>
05.11.2012	a) Supply Chain Management
	b) Plant Engineering & Maintenance
	c) Industrial Relations & Human Resource Management
	d) Marketing Management
Tuesday	
06.11.2012	

Day & Date	Production- Sandwich (2008 Course)
Wednesday 07.11.2012	Operations Research & Management (411121)
Friday 09.11.2012	Mechatronics & Robotics (411122)
Monday 19.11.2012	Advanced Production Technology (411123)
Wednesday 21.11.2012	Elective – I (411124) a) Machine Tool Design b) Automobile Engineering c) Computer Integrated Manufacturing and Industrial Robotics d). Plastic Engineering
Friday 23.11.2012	Elective – II (411125) a) Ergonomice and Human Factors in Engineering b) Materials Management & Logistics c) Financial Management & Cost Control d) Product Development

B.E. (INDUSTRIAL ENGINEERING) Time: 2.30 p.m. to 5.30 p.m.

<u>SEMESTER – II</u>

Day & Date	Industrial Engineering (2008 Course)
Friday	Reliability Engineering (411108)
02.11.2012 Saturday 03.11.2012	Energy Management ((411109)
Monday	Elective – III (411110)
05.11.2012	a) IE applications in Service Sector
	b) Supply Chain Management
	c) Manufacturing Automation
	d) Process Planning & Manufacturing Engineering
Tuesday	Elective - IV (411111)
06.11.2012	a) *** Open Elective
	b) Plastics Engineering
	c) Manufacturing Strategies
	d) Quality Management

Day & Date	Industrial Engineering (2008 Course)
Wednesday 07.11.2012	Financial Management & Costing (411101)
Friday 09.11.2012	Project Management (411102)
Monday 19.11.2012	Quantitative Techniques (411103)
Wednesday 21.11.2012	Elective – I (411104) a) Advanced Ergonomics b) Logistics & Warehousing Management c) Material Forming d) Human Resource Management
Friday 23.11.2012	Elective – II (411105) a) Industrial Laws b) World class Manufacturing c) Machine Tool Technology d) Development of Professional Skills

B.E. (PRINTING ENGINEERING) Time: 2.30 p.m. to 5.30 p.m.

<u>SEMESTER – II</u>

	Printing Engineering (2008 Course)
Day & Date	
Friday	Package Design and Technology (408289)
02.11.2012	
Saturday	Print Production Planning and Control (408290)
03.11.2012	
Monday	Elective – III (408287)
05.11.2012	a) Electronic Publishing
	b) Printing Machine Maintenance
	c) Image Conversion & Modification
Tuesday	<u>Elective – IV (408288)</u>
06.11.2012	a) Flexible Packaging
	b) Entrepreneurship in Printing
	c) Open Elective

Day & Date	Printing Engineering (2008 Course)
Wednesday 07.11.2012	Technology of Gravure (408283)
Friday 09.11.2012	Digital Imaging and Printing (408284)
Monday 19.11.2012	Advertising and Multimedia (408285)
Wednesday 21.11.2012	Elective - I (408281) a) Quality Control Techniques in Printing b) Commercial Graphic Design c) Screen Printing Techniques
Thursday 23.11.2012	Elective – II (408282) a) Security Printing b) Newspaper Technology c) Open Elective (Self Study)

B.E. (INFORMATION TECHNOLOGY) Time: 2.30 p.m. to 5.30 p.m.

<u>SEMESTER – II</u>

Day & Date	Information Technology (2008 Course)
Friday 02.11.2012	Distributed System (414448)
Saturday 03.11.2012	Information Retrieval (414449)
Monday 05.11.2012	Elective – III (414450) a) Real Time System b) Software Architecture c) Advanced Graphics d) Advanced Computer Networks
Tuesday 06.11.2012	 d) Advanced Computer Networks Elective - IV (414451) a) Bio Informatics b) Neural Network and Expert System c) Geo Informatics Systems d) Open Elective i) Business Intelligence

Day & Date	Information Technology (2008 Course)
Wednesday 07.11.2012	Information Assurance and Security (414441)
Friday 09.11.2012	Object Oriented Modeling & Design (410443)
Monday 19.11.2012	Software Testing and Quality Assurance(414442)
Wednesday 21.11.2012	Elective – I (414443) a) Advanced Database Management b) Artificial Intelligence c) Computer Design d) Advanced Operating Systems
Friday 23.11.2012	<u>Elective – II (414444)</u> a) Embedded System b) Mobile Computing c) Multimedia Systems

B.E. (COMPUTER ENGINEERING) Time: 2.30 p.m. to 5.30 p.m.

SEMESTER-II

Day & Date	Computer Engineering (2008 Course)
Friday 02.11.2012	Distributed Operating Systems (410448)
Saturday 03.11.2012	Advanced Computer Architecture (410449)
Monday 05.11.2012	Elective- III (410450) a) Pattern Recognition b) High Performance Networks c) Neural Networks d) Advanced Databases
Tuesday 06.11.2012	Elective – IV (410451) a) VLSI & Digital Systems Design b) Operations Research c) Cloud Computing d) Information Security e) Open Elective

Day & Date	Computer Engineering (2008 Course)
Wednesday 07.11.2012	Design & Analysis of Algorithms (410441)
Friday 09.11.2012	Principles of Compiler Design (410442)
Monday 19.11.2012	Object Oriented Modeling & Design (410443)
Wednesday 21.11.2012	Elective – I (410444) a) Image Processing b) Design & Analysis of Computer Networks c) Artificial Intelligence d) Software Architecture
Friday 23.11.2012	Elective – II (410445) a) Multimedia Systems b) Mobile Computing c) Embedded Systems d) Software Testing & Quality Assurance

B.E. (PETROCHEMICAL ENGINEERING) Time: 2.30 p.m. to 5.30 p.m.

<u>SEMESTER – II</u>

Day & Date	Petrochemical Engineering (2008 Course)
Friday	Refinery Process Design (412408)
02.11.2012 Saturday 03.11.2012	Plant Design and Process Economics (412409)
Monday 05.11.2012	Elective – III(412410) a) Process Modeling and Simulation
05.11.2012	b) Fine Chemical Industries
	c) Colloidal and Interface Scienced) Renewable Energy Sources
Tuesday 06.11.2012	Elective – IV (412411)a) Petroleum Exploration and Production Operations
	b) Catalyst Science and Technologyc) Polymer Reaction Engineering
	d) Open Elective

Day & Date	Petrochemical Engineering (2008 Course)
Wednesday 07.11.2012	Reaction Engineering – II (412401)
Friday 09.11.2012	Process Dynamics and Control (412402)
Monday 19.11.2012	Environmental Engineering (412403)
Wednesday 21.11.2012	<u>Elective – I (412404)</u> a) Biochemical Engineering b) Novel Separation Processes c) Elements of Fluidization Engineering d) Green Chemistry
Friday 23.11.2012	<u>Elective – II (412405)</u> a) Optimization Techniques for Process Industries b) Emerging feed stocks and Technologies for Petrochemicals c) Natural Gas Technology d) Health, Safety and Environment in Process Industry

B.E. (PETROLEUM ENGINEERING) Time: 2.30 p.m. to 5.30 p.m.

<u>SEMESTER – II</u>

Day & Date	Petroleum Engineering (2008 Course)
Friday	Improved Oil Recovery and Reservoir Simulation(412387)
02.11.2012	Improved On Recovery and Reservon Simulation (412387)
Saturday	Petroleum Production Engineering – II (412388)
03.11.2012 Monday	Elective – III (412389)
05.11.2012	a) Advanced Drilling Engineering
	b) Deepwater Technology
	c) Transport of Oil and Gas
	d) Environment Technology and Safety in Petroleum Industry
Tuesday	<u>Elective – IV (412390)</u>
06.11.2012	a) Petroleum Economics
	b) Petroleum Production Enhancement and Optimization
	c) Well Control Methods
	d) Open Elective

Day & Date	Petroleum Engineering (2008 Course)
Wednesday 07.11.2012	Reservoir Engineering II (412381)
Friday 09.11.2012	Petroleum Formation Evaluation (412382)
Monday 19.11.2012	Well Engineering and Design (412383)
Wednesday 21.11.2012	 <u>Elective – I (412384)</u> a) Petroleum Exploration b) Advanced Instrumentation and Process Control in Petroleum Industry c) Programming Database Management and Information Systems in Petroleum Industry d) Mathematical Methods and Modeling in Petroleum Exploration and Production
Friday 23.11.2012	Elective-II (412385)a) Petroleum Refining Technologyb) Petroleum Product Analysisc) Non Conventional Hydrocarbon Resourcesd) Carbon Management in Petroleum Industry

B.E. (CHEMICAL ENGINEERING) Time: 2.30 p.m. to 5.30 p.m.

<u>SEMESTER – II</u>

Day & Date	Chemical Engineering (2008 Course)
Friday 02.11.2012	Process Modelling and Simulation (409351)
Saturday 03.11.2012	Process Engineering Costing & Plant Design (409352)
Monday 05.11.2012	Elective – III (409349)a) Artificial Intelligence In Chemical Engineeringb) Energy Conservation In Chemical Process Industriesc) Chemical Process Safetyd) Food Technology
Tuesday 06.11.2012	 Elective – IV (409350) a) Standardization and Quality Assurance in Chemical Process Industry b) Catalysis c) Nanotechnology d) Fuel Cell Technology e) Petrochemical Engineering f) Computer Aided Process Control g) Open Elective

Day & Date	Chemical Engineering (2008 Course)
Wednesday 07.11.2012	Process Dynamics and Control (409343)
Friday 09.11.2012	Chemical Reaction Engineering – II (409344)
Monday 19.11.2012	Chemical Engineering Design – II (409345)
Wednesday 21.11.2012	<u>Elective – I (409341)</u> a) Environmental Engineering b) Membrane Technology c) Bioprocess Engineering d) Corrosion Engineering
Friday 23.11.2012	Elective – II (409342) a) Chemical Process Synthesis b) Advanced Materials c) Polymer Technology d) Piping Design & Engineering e) Advanced Separation Processes f) Petroleum Refining

B.E. (POLYMER ENGINEERING) Time: 2.30 p.m. to 5.30 a.m.

<u>SEMESTER – II</u>

Day & Date	Polymer Engineering (2008 Course)
Friday	Product Design & Polymer Testing (409368)
02.11.2012	
Saturday	Mold & Die Design – II (409369)
03.11.2012	
Monday	Elective – III (409370)
05.11.2012	a) Polymer Physics and Characterization
	b) Processing of Composites
	c) Specialty Polymers & Applications
Tuesday	<u>Elective – IV (409371)</u>
06.11.2012	a) Advanced Polymer Rheology
	b) Rubber Technology
	c) Polymer Thermodynamics and Bends
	d) Open Elective

Day & Date	Polymer Engineering (2008 Course)
Wednesday 07.11.2012	Polymer Compounding (409361)
Friday 09.11.2012	Mold & Die Design – I (409362)
Monday 19.11.2012	Polymer Processing Operation – II (409363)
Wednesday 21.11.2012	Elective – I (409364) a) Fiber Technology b) Mechanics of Composites c) Polymer Reaction Engineering
Friday 23.11.2012	Elective – II (409365) a) Production Planning and Control b) Surface Coating and Adhensives c) Packaging Technology

B.E. (INSTRUMENTATION AND CONTROL ENGINEERING) Time: 2.30 p.m. to 5.30 p.m.

<u>SEMESTER – II</u>

Day & Date	Instrumentation and Control Engineering (2008 Course)
Friday	Process Dynamics and Control (406267)
02.11.2012	
Saturday	Industrial Automation (406268)
03.11.2012	
Monday	<u>Elective – III (406269)</u>
05.11.2012	a) Advanced Biomedical Instrumentation
	b) Fiber Optic Instrumentation
	c) Process Modeling and Optimization
	d) Building Automation - II
Tuesday	<u>Elective – IV (406270)</u>
06.11.2012	a) Instrumentation in Agriculture
	b) Micro Electro Mechanical Systems
	c) Digital Image Processing
	d) Open Elective

Day & Date	Instrumentation and Control Engineering (2008 Course)
Wednesday 07.11.2012	Process Instrumentation (406261)
Friday 09.11.2012	Digital Control (406262)
Monday 19.11.2012	Project Engineering and Management (406263)
Wednesday	Elective – I (406264)
21.11.2012	a) Biomedical Instrumentation
	b) Laser based Instrumentation
	c) Advanced Control Systems
	d) Building Automation – I
Friday	<u>Elective – II (406265)</u>
23.11.2012	a) Environmental Instrumentation
	b) Nano Instrumentation
	c) Advanced Digital Signal Processing
	d) Automobile Instrumentation

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

<u>SEMESTER – II</u>

Day & Date	Biotechnology (2008 Course)
Friday 02.11.2012	Bioprocess Modeling and Simulation (415469)
Saturday 03.11.2012	Plant Engineering & Project Costing (415470)
Monday 05.11.2012	Elective – III (415467) a) Food Biotechnology b) Agricultural Biotechnology c) Introduction to Systems Biology
Tuesday 06.11.2012	Elective – IV (415468) a) Management and Entrepreneurship b) IPR,. Bioethics and Regulations c) Industrial Organization and Management

Day & Date	Biotechnology (2008 Course)
Wednesday 07.11.2012	Bioseparation II (415463)
Friday 09.11.2012	Instrumentation and Process Control (415464)
Monday 19.11.2012	Bioprocess Equipment Design (415465)
Wednesday 21.11.2012	Elective – I (415461) a) Environmental Biotechnology b) Chemoinformatics and Structural Biology c) Bio-therapeutics Technology
Friday 23.11.2012	Elective – II (415462) a) Bioenergy and Renewable Resources b) Biomaterials c) Stem Cell Biology and Regenerative Medicine

- **12.** The Practical/Oral/Project Examination will be conducted from 15.10.2012 to 31.10.2012
- **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.

Ganeshkhind, Pune-411007 Ref. / XCT/1098 Date : 15/10/2012 Dr.Sampada Joshi Controller of Examination