

SAVITRIBAI PHULE PUNE UNIVERSITY



Examination Circular No. 159 of 2014
Programme of B.E. 2008 Course (All Branches) Examinations, October, 2014

INSTRUCTIONS FOR CANDIDATES

1. Candidates are required to be present at respective college fifteen minutes before the time fixed for 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 Written Examination will be conducted in the following order :
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B.E. (CIVIL)
Time – 2.30 to 5.30 p.m.
SEMESTER – II

Day & Date	2008 Course
Wednesday, 29/10/2014	Quantity Surveying Contracts and Tenders (401009)
Thursday, 30/10/2014	Transportation Engineering – II (401010)
Friday, 31/10/2014	<u>Elective – III (401007)</u> a) Advanced Structural Design b) Advanced Foundation Engineering c) Advanced Engineering Geology with Rock Mechanics d) Advanced Environmental Management e) Construction Management
Saturday, 01/11/2014	<u>Elective – IV (401008)</u> a) Integrated Water Resources and Planning b) Advanced Transportation Engineering c) Statistical Analysis And Computational Methods in Civil Engg. <u>Open Elective (401008)</u> a) Finite Element Method in Civil Engg., b) Geoinformatics c) Hydropower Engineering d) Industrial Waste Water Management e) Mechanics of Waves f) Ferrocement Technology g) Plumbing Engineering h) Green Building Technology

SEMESTER – I

Day & Date	2008 Course
Monday, 03/11/2014	Environmental Engineering – II (401001)
Friday, 07/11/2014	Dams and Hydraulic Structures (401002)
Monday, 10/11/2014	Structure Design – III (401003) *(2:30 p.m. to 6:30 p.m.)
Wednesday, 12/11/2014	<u>Elective – I (401004)</u> a) Structural Design in Bridges b) System Approach in Civil Engineering c) Air Pollution and Control d) Architecture and Town Planning e) Advanced Geotechnical Engineering
Friday, 14/11/2014	<u>Elective – II (401005)</u> 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 to 5.30 p.m.
SEMESTER – II

Day & Date	2008 Course
Wednesday, 29/10/2014	Power Plant Engineering (402047)
Thursday, 30/10/2014	Mechanical System Design (402048) *(2.30 p.m. to 6.30 p.m.)
Friday, 31/10/2014	<u>Elective – III (402049)</u> a) Computational Fluid Dynamics b) Finite Element Method c) Robotics d) Advanced Air Conditioning and Refrigeration
Saturday, 01/11/2014	<u>Elective – IV (402050)</u> a) Industrial Heat Transfer Equipments b) Management Information System c) Reliability Engineering d) <u>Open Elective</u> i) Cryogenic Engineering ii) Product Lifecycle Management iii) Industrial Automation

SEMESTER – I

Day & Date	2008 Course
Monday, 03/11/2014	CAD/CAM Automation (402041)
Friday, 07/11/2014	Dynamics of Machinery (402042)
Monday, 10/11/2014	Industrial Fluid Power (402043)
Wednesday, 12/11/2014	<u>Elective – I (402044)</u> a) Energy Audit and Management b) Product Design and Development c) Design of Pumps, Blowers and Compressors d) Tribology
Friday, 14/11/2014	<u>Elective – II (402045)</u> a) Automobile Engineering b) Machine Tool Design c) Quantitative and decision making Techniques

* Please note the Timing

B.E. (MECHANICAL SANDWICH)**Time – 2.30 to 5.30 p.m.****SEMESTER – II**

Day & Date	2008 Course
Wednesday, 29/10/2014	-----
Thursday, 30/10/2014	-----
Friday, 31/10/2014	-----
Saturday, 01/11/2014	<u>Elective – IV (402066)</u> a) Costing & Cost Control b) Machine Tool Design c) Energy Management & Industrial Pollution

SEMESTER – I

Day & Date	2008 Course
Monday, 03/11/2014	Machine & Computer Aided Design (402061) *(2.30 p.m. to 6.30 p.m.)
Friday, 07/11/2014	Dynamics of Machinery (402042) (Common to Mechanical)
Monday, 10/11/2014	Industrial Hydraulics & Pneumatics (402062)
Wednesday, 12/11/2014	<u>Elective – II (402063)</u> a) Refrigeration & Air Conditioning b) Computational Fluid Dynamics c) Finite Element Method
Friday, 14/11/2014	<u>Elective – III(402064)</u> a) Automobile Engineering b) Operations Research c) Robotics

*** Please note the Timing**

B.E. (ELECTRICAL)
Time – 2.30 to 5.30 p.m.
SEMESTER – II

Day & Date	2008 Course
Wednesday, 29/10/2014	Switchgear and Protection (403147)
Thursday, 30/10/2014	Industrial Drives and Control (403148)
Friday, 31/10/2014	<u>Elective – III (403149)</u> a) VLSI Design b) High Voltage Engineering c) Digital Signal Processing d) ANN and its Applications in Electrical Engineering
Saturday, 01/11/2014	<u>Elective – IV (403150)</u> a) Modeling of Electrical System b) Renewable Energy System c) Digital Control System d) Introduction to Electrical Transportation Systems

SEMESTER – I

Day & Date	2008 Course
Monday, 03/11/2014	PLC and SCADA Applications (403141)
Friday, 07/11/2014	Power System Operation and Control (403142)
Monday, 10/11/2014	Control System – II (403145)
Wednesday, 12/11/2014	<u>Elective – I (403143)</u> a) Robotics and Automation b) Power Quality c) Illumination Engineering d) Project Management
Friday, 14/11/2014	<u>Elective – II (403144)</u> a) Restructuring and Deregulation b) Embedded System c) EHV Transmission d) Smart Grid

B.E. (ELECTRONICS & TELECOMMUNICATIONS)**Time – 2.30 to 5.30 p.m.****SEMESTER – II**

Day & Date	2008 Course
Wednesday, 29/10/2014	Telecommunication & Switching System (404187)
Thursday, 30/10/2014	Optical Fiber Communication (404188)
Friday, 31/10/2014	<u>Elective – III (404189)</u> a) Soft Computing b) Speech Processing c) Television and Video Engineering d) Test and Measurement Systems
Saturday, 01/11/2014	<u>Elective – IV (404190)</u> a) Artificial Intelligence b) Automotive Electronics c) Nanotechnology d) PLC and Industrial Process Automation e) Open Elective

SEMESTER – I

Day & Date	2008 Course
Monday, 03/11/2014	Electronics Product Design (404181)
Friday, 07/11/2014	VLSI Design & Technology (404182)
Monday, 10/11/2014	Computer Network (404183)
Wednesday, 12/11/2014	<u>Elective – I (404184)</u> a) Digital Image Processing b) Embedded System and RTOS c) Industrial Drives Control d) Microwave Communication and Radar
Friday, 14/11/2014	<u>Elective – II -(404185)</u> a) Entrepreneurship Development b) Joint Time Frequency Analysis c) Micro-electromechanical and system on chip(MEMS and SOC) d) Mobile Communication

B.E. (ELECTRONICS)
Time – 2.30 to 5.30 p.m.
SEMESTER – II

Day & Date	2008 Course
Wednesday, 29/10/2014	Computer Network & Security (404207)
Thursday, 30/10/2014	Process Automation (404208)
Friday, 31/10/2014	<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
Saturday, 01/11/2014	<u>Elective – IV (404210)</u> a) Advanced Communication System b) Automotive Electronic Systems c) Artificial Intelligence d) Nanotechnology in Electronics e) Open Elective

SEMESTER – I

Day & Date	2008 Course
Monday, 03/11/2014	Electronics System Design (404201)
Friday, 07/11/2014	VLSI Design (404202)
Monday, 10/11/2014	Embedded System (404203)
Wednesday, 12/11/2014	<u>Elective – I (404204)</u> a) Advanced Measurement Systems b) Advanced Power Electronics c) Biomedical Instrumentation d) Mechatronics
Friday, 14/11/2014	<u>Elective – II (404205)</u> 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 to 5.30 p.m.

SEMESTER – II

Day & Date	2008 Course
Wednesday, 29/10/2014	Computer Integrated Design and Manufacturing (411087)
Thursday, 30/10/2014	Processing Planning and Tool Selection (411088)
Friday, 31/10/2014	<u>Elective – III(411089)</u> a) Automobile Engineering b) Mechatronics c) Metal Working Tribology d) Finite Element Analysis
Saturday, 01/11/2014	<u>Elective – IV (411090)</u> a)World Class Manufacturing b) Intelligent Manufacturing Systems c) Total Quality Management d) Open Elective

SEMESTER – I

Day & Date	2008 Course
Monday, 03/11/2014	Machine Tool Design (411081)
Friday, 07/11/2014	Manufacturing Automation (411082)
Monday, 10/11/2014	Operations Research (411083)
Wednesday, 12/11/2014	<u>Elective – I (411084)</u> a) Plastic Engineering b) Industrial Robotics c) Powder Metallurgy d) Microprocessor Applications
Friday, 14/11/2014	<u>Elective – II (411085)</u> 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 to 5.30 p.m.

SEMESTER – II

Day & Date	2008 Course
Wednesday, 29/10/2014	-----
Thursday, 30/10/2014	-----
Friday, 31/10/2014	<u>Elective – III (411130)</u> a) Supply Chain Management b) Plant Engineering & Maintenance c) Industrial Relations & Human Resource Management d) Marketing Management
Saturday, 01/11/2014	-----

SEMESTER – I

Day & Date	2008 Course
Monday, 03/11/2014	Operations Research & Management (411121)
Friday, 07/11/2014	Mechatronics & Robotics (411122)
Monday, 10/11/2014	Advanced Production Technology (411123)
Wednesday, 12/11/2014	<u>Elective – I (411124)</u> a) Machine Tool Design b) Automobile Engineering c) Computer Integrated Manufacturing and Industrial Robotics d) Plastic Engineering
Friday, 14/11/2014	<u>Elective – II (411125)</u> 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 to 5.30 p.m.

SEMESTER – II

Day & Date	2008 Course
Wednesday, 29/10/2014	Reliability Engineering (411108)
Thursday, 30/10/2014	Energy Management ((411109)
Friday, 31/10/2014	<u>Elective – III (411110)</u> a) IE applications in Service Sector b) Supply Chain Management c) Manufacturing Automation d) Process Planning & Manufacturing Engineering
Saturday, 01/11/2014	<u>Elective - IV (411111)</u> a) *** Open Elective b) Plastics Engineering c) Manufacturing Strategies d) Quality Management

SEMESTER – I

Day & Date	2008 Course
Monday, 03/11/2014	Financial Management & Costing (411101)
Friday, 07/11/2014	Project Management (411102)
Monday, 10/11/2014	Quantitative Techniques (411103)
Wednesday, 12/11/2014	<u>Elective – I (411104)</u> a) Advanced Ergonomics b) Logistics & Warehousing Management c) Material Forming d) Human Resource Management
Friday, 14/11/2014	<u>Elective – II (411105)</u> a) Industrial Laws b) World class Manufacturing c) Machine Tool Technology d) Development of Professional Skills

B.E. (PRINTING ENGINEERING)

Time – 2.30 to 5.30 p.m.

SEMESTER – II

Day & Date	2008 Course
Wednesday, 29/10/2014	Package Design and Technology (408289)
Thursday, 30/10/2014	Print Production Planning and Control (408290)
Friday, 31/10/2014	<u>Elective – III (408287)</u> a) Electronic Publishing b) Printing Machine Maintenance c) Image Conversion & Modification
Saturday, 01/11/2014	<u>Elective – IV (408288)</u> a) Flexible Packaging b) Entrepreneurship in Printing c) Open Elective

SEMESTER – I

Day & Date	2008 Course
Monday, 03/11/2014	Technology of Gravure (408283)
Friday, 07/11/2014	Digital Imaging and Printing (408284)
Monday, 10/11/2014	Advertising and Multimedia (408285)
Wednesday, 12/11/2014	<u>Elective - I (408281)</u> a) Quality Control Techniques in Printing b) Commercial Graphic Design c) Screen Printing Techniques
Friday, 14/11/2014	<u>Elective – II (408282)</u> a) Security Printing b) Newspaper Technology c) Open Elective (Self Study)

B.E. (INFORMATION TECHNOLOGY)

Time – 2.30 to 5.30 p.m.

SEMESTER – II

Day & Date	2008 Course
Wednesday, 29/10/2014	Distributed System (414448)
Thursday, 30/10/2014	Information Retrieval (414449)
Friday, 31/10/2014	<u>Elective – III (414450)</u> a) Real Time System b) Software Architecture c) Advanced Graphics d) Advanced Computer Networks
Saturday, 01/11/2014	<u>Elective - IV (414451)</u> a) Bio Informatics b) Neural Network and Expert System c) Geo Informatics Systems d) Open Elective i) Business Intelligence

SEMESTER – I

Day & Date	2008 Course
Monday, 03/11/2014	Information Assurance and Security (414441)
Friday, 07/11/2014	Object Oriented Modeling & Design (410443)
Monday, 10/11/2014	Software Testing and Quality Assurance (414442)
Wednesday, 12/11/2014	<u>Elective – I (414443)</u> a) Advanced Database Management b) Artificial Intelligence c) Computer Design d) Advanced Operating Systems
Friday, 14/11/2014	<u>Elective – II (414444)</u> a) Embedded System b) Mobile Computing c) Multimedia Systems

B.E. (COMPUTER ENGINEERING)

Time – 2.30 to 5.30 p.m.

SEMESTER – II

Day & Date	2008 Course
Wednesday, 29/10/2014	Distributed Operating Systems (410448)
Thursday, 30/10/2014	Advanced Computer Architecture (410449)
Friday, 31/10/2014	<u>Elective- III (410450)</u> a) Pattern Recognition b) High Performance Networks c) Neural Networks d) Advanced Databases
Saturday, 01/11/2014	<u>Elective – IV (410451)</u> a) VLSI & Digital Systems Design b) Operations Research c) Cloud Computing d) Information Security e) Open Elective

SEMESTER – I

Day & Date	2008 Course
Monday, 03/11/2014	Design & Analysis of Algorithms (410441)
Friday, 07/11/2014	Principles of Compiler Design (410442)
Monday, 10/11/2014	Object Oriented Modeling & Design (410 443)
Wednesday, 12/11/2014	<u>Elective – I (410444)</u> a) Image Processing b) Design & Analysis of Computer Networks c) Artificial Intelligence d) Software Architecture
Friday, 14/11/2014	<u>Elective – II (410445)</u> a) Multimedia Systems b) Mobile Computing c) Embedded Systems d) Software Testing & Quality Assurance

B.E. (PETROCHEMICAL ENGINEERING)

Time – 2.30 to 5.30 p.m.

SEMESTER – II

Day & Date	2008 Course
Wednesday, 29/10/2014	Refinery Process Design (412408)
Thursday, 30/10/2014	Plant Design and Process Economics (412409)
Friday, 31/10/2014	<u>Elective – III(412410)</u> a) Process Modeling and Simulation b) Fine Chemical Industries c) Colloidal and Interface Science d) Renewable Energy Sources
Saturday, 01/11/2014	<u>Elective – IV (412411)</u> a) Petroleum Exploration and Production Operations b) Catalyst Science and Technology c) Polymer Reaction Engineering d) Open Elective

SEMESTER – I

Day & Date	2008 Course
Monday, 03/11/2014	Reaction Engineering – II (412401)
Friday, 07/11/2014	Process Dynamics and Control (412402)
Monday, 10/11/2014	Environmental Engineering (412403)
Wednesday, 12/11/2014	<u>Elective – I (412404)</u> a) Biochemical Engineering b) Novel Separation Processes c) Elements of Fluidization Engineering d) Green Chemistry
Friday, 14/11/2014	<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 to 5.30 p.m.

SEMESTER – II

Day & Date	2008 Course
Wednesday, 29/10/2014	Improved Oil Recovery and Reservoir Simulation (412387)
Thursday, 30/10/2014	Petroleum Production Engineering – II (412388)
Friday, 31/10/2014	<u>Elective – III (412389)</u> a) Advanced Drilling Engineering b) Deepwater Technology c) Transport of Oil and Gas d) Environment Technology and Safety in Petroleum Industry
Saturday, 01/11/2014	<u>Elective – IV (412390)</u> a) Petroleum Economics b) Petroleum Production Enhancement and Optimization c) Well Control Methods d) Open Elective

SEMESTER – I

Day & Date	2008 Course
Monday, 03/11/2014	Reservoir Engineering II (412381)
Friday, 07/11/2014	Petroleum Formation Evaluation (412382)
Monday, 10/11/2014	Well Engineering and Design (412383)
Wednesday, 12/11/2014	<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, 14/11/2014	<u>Elective-II (412385)</u> a) Petroleum Refining Technology b) Petroleum Product Analysis c) Non Conventional Hydrocarbon Resources d) Carbon Management in Petroleum Industry

B.E. (CHEMICAL ENGINEERING)**Time – 2.30 to 5.30 p.m.****SEMESTER – II**

Day & Date	2008 Course
Wednesday, 29/10/2014	Process Modeling and Simulation (409351)
Thursday, 30/10/2014	Process Engineering Costing & Plant Design (409352)
Friday, 31/10/2014	<u>Elective – III (409349)</u> a) Artificial Intelligence In Chemical Engineering b) Energy Conservation In Chemical Process Industries c) Chemical Process Safety d) Food Technology
Saturday, 01/11/2014	<u>Elective – IV (409350)</u> 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

SEMESTER – I

Day & Date	2008 Course
Monday, 03/11/2014	Process Dynamics and Control (409343)
Friday, 07/11/2014	Chemical Reaction Engineering – II (409344)
Monday, 10/11/2014	Chemical Engineering Design – II (409345)
Wednesday, 12/11/2014	<u>Elective – I (409341)</u> a) Environmental Engineering b) Membrane Technology c) Bioprocess Engineering d) Corrosion Engineering
Friday, 14/11/2014	<u>Elective – II (409342)</u> 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 to 5.30 p.m.

SEMESTER – II

Day & Date	2008 Course
Wednesday, 29/10/2014	Product Design & Polymer Testing (409368)
Thursday, 30/10/2014	Mold & Die Design – II (409369)
Friday, 31/10/2014	<u>Elective – III (409370)</u> a) Polymer Physics and Characterization b) Processing of Composites c) Specialty Polymers & Applications
Saturday, 01/11/2014	<u>Elective – IV (409371)</u> a) Advanced Polymer Rheology b) Rubber Technology c) Polymer Thermodynamics and Bends d) Open Elective

SEMESTER – I

Day & Date	2008 Course
Monday, 03/11/2014	Polymer Compounding (409361)
Friday, 07/11/2014	Mold & Die Design – I (409362)
Monday, 10/11/2014	Polymer Processing Operation – II (409363)
Wednesday, 12/11/2014	<u>Elective – I (409364)</u> a) Fiber Technology b) Mechanics of Composites c) Polymer Reaction Engineering
Friday, 14/11/2014	<u>Elective – II (409365)</u> a) Production Planning and Control b) Surface Coating and Adhesives c) Packaging Technology

* Please note the Timing

B.E. (INSTRUMENTATION & CONTROL ENGINEERING)

Time – 2.30 to 5.30 p.m.

SEMESTER – II

Day & Date	2008 Course
Wednesday, 29/10/2014	Process Dynamics and Control (406267)
Thursday, 30/10/2014	Industrial Automation (406268)
Friday, 31/10/2014	<u>Elective – III (406269)</u> a) Advanced Biomedical Instrumentation b) Fiber Optic Instrumentation c) Process Modeling and Optimization d) Building Automation - II
Saturday, 01/11/2014	<u>Elective – IV (406270)</u> a) Instrumentation in Agriculture b) Micro Electro Mechanical Systems c) Digital Image Processing d) Open Elective

SEMESTER – I

Day & Date	2008 Course
Monday, 03/11/2014	Process Instrumentation (406261)
Friday, 07/11/2014	Digital Control (406262)
Monday, 10/11/2014	Project Engineering and Management (406263)
Wednesday, 12/11/2014	<u>Elective – I (406264)</u> a) Biomedical Instrumentation b) Laser based Instrumentation c) Advanced Control Systems d) Building Automation – I
Friday, 14/11/2014	<u>Elective – II (406265)</u> a) Environmental Instrumentation b) Nano Instrumentation c) Advanced Digital Signal Processing d) Automobile Instrumentation

B.E. (BIOTECHNOLOGY)**Time – 2.30 to 5.30 p.m.****SEMESTER – II**

Day & Date	2008 Course
Wednesday, 29/10/2014	Bioprocess Modeling and Simulation (415469)
Thursday, 30/10/2014	Plant Engineering & Project Costing (415470)
Friday, 31/10/2014	<u>Elective – III (415467)</u> a) Food Biotechnology b) Agricultural Biotechnology c) Introduction to Systems Biology
Saturday, 01/11/2014	<u>Elective – IV (415468)</u> a) Management and Entrepreneurship b) IPR., Bioethics and Regulations c) Industrial Organization and Management

SEMESTER – I

Day & Date	2008 Course
Monday, 03/11/2014	Bioseparation II (415463)
Friday, 07/11/2014	Instrumentation and Process Control (415464)
Monday, 10/11/2014	Bioprocess Equipment Design (415465)
Wednesday, 12/11/2014	<u>Elective – I (415461)</u> a) Environmental Biotechnology b) Chemoinformatics and Structural Biology c) Bio-therapeutics Technology
Friday, 14/11/2014	<u>Elective – II (415462)</u> a) Bioenergy and Renewable Resources b) Biomaterials c) Stem Cell Biology and Regenerative Medicine

B.E. (AUTOMOBILE ENGINEERING)**Time: 2.30 p.m. to 5.30 p.m.****SEMESTER – II**

Day & Date	Automobile Engineering (2008 Course)
Wednesday, 29/10/2014	Alternative Fuels and Emission Control (416495)
Thursday, 30/10/2014	Vehicle Performance and Testing (416496)
Friday, 31/10/2014	<u>Elective – III (416497)</u> a) Computational Fluid Dynamics b) Finite Element Analysis c) Hydraulics and Pneumatics d) Product Development and Costing
Saturday, 01/11/2014	<u>Elective – IV (416498)</u> a) Transport Management and Motor Industry b) Energy Engineering and Management c) Hybrid, Electric and Fuel-cell Vehicles d) Open Elective

SEMESTER – I

Day & Date	Automobile Engineering (2008 Course)
Monday, 03/11/2014	Automotive Refrigeration and Air Conditioning (416488)
Friday, 07/11/2014	Machine and Vehicle Dynamics (416489)
Monday, 10/11/2014	Automotive System Design (416490)
Wednesday, 12/11/2014	<u>Elective – I (416491)</u> a) Automotive Aerodynamics and Styling b) Tribology c) CAD-CAM and Automation d) Automotive NVH
Friday, 14/11/2014	<u>Elective – II (416492)</u> a) Automotive Materials b) Vehicle Safety c) Off Road Vehicles d) Auxiliary Engine Systems

11. The Practical/Oral/Project Examination will be conducted from 06.10.2014 to 18-10-2014.
12. Candidates are permitted to use the stencils at the time of examination.
13. 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.
14. Use of non-programmable battery operated electronic calculator of pocket size is allowed. The exchange of calculator is not allowed.

Ganeshkhind, Pune-411007
Ref. / XCT / 894
Date: 23/09/2014

Dr.V.B.Gaikwad
Controller of Examinations