

SAVITRIBAI PHULE PUNE UNIVERSITY
(Formerly University of Pune)



EXAMINATION CIRCULAR NO.478 OF. 2019

M.E.ENGINEERING (2017 Pattern)

Examination of OCT/NOV 2019

(Under Faculty of SCIENCE AND TECHNOLOGY : B)ENGINEERING)

INSTRUCTIONS FOR CANDIDATES

1. Candidates are required to be present at the examination centre, THIRTY MINUTES before the time fixed for 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. 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 program.
4. No request for any special concession such as a change in time or any day fixed for the University Examination on any ground shall be granted.
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.
9. Candidates must bring their own instruments and will not be allowed to borrow from each other under any circumstances.
10. Use of non-programmable battery operated electronic Calculator of Pocket-size is allowed. The exchange of Calculators is not allowed.
11. **Candidates of 2008 Pattern will have to appear for equivalent subject mention in 2013 pattern & 2017 pattern time table. This time table is of the subject of 2008 pattern for which equivalence is not given in 2013 pattern.**
12. The written examination will be conducted in the following order.

(CIVIL) (CONSTRUCTION MANAGEMENT)**SEM-I**

	2017 Course TIME-02.00 PM To 05.00 PM
Day & Date	Subject
Monday 09/12/2019	Applications of Statistical Methods in Construction (501021)
Thursday 12/12/2019	Management and Project Planning in Construction (501022)
Monday 16/12/2019	Construction Technology (501023)
Thursday 19/12/2019	TQM in Construction (501024)
Saturday 21/12/2019	Elective I (501025)

SEM-II

	2017 Course TIME-02.00 PM To 05.00 PM
Day & Date	Subject
Tuesday 10/12/2019	Construction Contracts Administration and Management (501027)
Friday 13/12/2019	Project Economics and Financial Management (501028)
Tuesday 17/12/2019	Operations Research (501029)
Friday 20/12/2019	Elective - II (501030)

SEM-III

	2017 Course TIME-02.00 PM To 05.00 PM
Day & Date	Subject
Wednesday 11/12/2019	Environment & Energy for Sustainable Construction (601033)
Saturday 14/12/2019	Research Methodology (601034)
Wednesday 18/12/2019	Open Elective (601035)

(CIVIL) (ENVIRONMENTAL ENGINEERING)**SEM-I**

	2017 Course TIME-02.00 PM To 05.00 PM
Day & Date	Subject
Monday 09/12/2019	Environmental Legislation and Management Systems (501061)
Thursday 12/12/2019	Environmental Chemistry & Microbiology (501062)
Monday 16/12/2019	Physico-Chemical Process For Water and Waste Water Treatment (501063)
Thursday 19/12/2019	Environmental Sanitation (501064)
Saturday 21/12/2019	Elective I (501065)

SEM-II

	2017 Course TIME-02.00 PM To 05.00 PM
Day & Date	Subject
Tuesday 10/12/2019	Industrial Waste Water Management (501067)
Friday 13/12/2019	Air Pollution and Control (501068)
Tuesday 17/12/2019	Solid Waste and Hazardous Waste Management (501069)
Friday 20/12/2019	Elective - II (501070)

SEM-III

	2017 Course TIME-02.00 PM To 05.00 PM
Day & Date	Subject
Wednesday 11/12/2019	Environmental Impact Assessment (601073)
Saturday 14/12/2019	Research Methodology (601074)
Wednesday 18/12/2019	Open Elective (601075)

(CIVIL) (GEOTECHNICAL ENGINEERING)**SEM-I**

	2017 Course TIME-02.00 PM To 05.00 PM
Day & Date	Subject
Monday 09/12/2019	Advance Soil Mechanics (501121)
Thursday 12/12/2019	Ground Improvement Techniques (501122)
Monday 16/12/2019	Rock Mechanics (501123)
Thursday 19/12/2019	Geo-environmental Engineering (501125)
Saturday 21/12/2019	Elective-I (501124)

SEM-II

	2017 Course TIME-02.00 PM To 05.00 PM
Day & Date	Subject
Tuesday 10/12/2019	Advance Foundation Engineering (501127)
Friday 13/12/2019	Construction Methods in Geotechnical (501128)
Tuesday 17/12/2019	Stability of Slopes & Earth Dam (501129)
Friday 20/12/2019	Elective - II (501130)

SEM-III

	2017 Course TIME-02.00 PM To 05.00 PM
Day & Date	Subject
Wednesday 11/12/2019	Geotechnical Earthquake Engineering (601133)
Saturday 14/12/2019	Research Methodology (601134)
Wednesday 18/12/2019	Open Elective - III (601135)

(CIVIL) (HYDRAULICS ENGINEERING)**SEM-I**

	2017 Course TIME-02.00 PM To 05.00 PM
Day & Date	Subject
Monday 09/12/2019	Fluid Mechanics (501041)
Thursday 12/12/2019	Irrigation and Drainage (501042)
Monday 16/12/2019	Planning and Management of Water Resources (501043)
Thursday 19/12/2019	Dam Engineering (501044)
Saturday 21/12/2019	Elective I (501045)

SEM-II

	2017 Course TIME-02.00 PM To 05.00 PM
Day & Date	Subject
Tuesday 10/12/2019	Open Channel Hydraulics (501047)
Friday 13/12/2019	Sediment Transport and River Mechanics (501048)
Tuesday 17/12/2019	Hydrology (501049)
Friday 20/12/2019	Elective - II (501050)

SEM-III

	2017 Course TIME-02.00 PM To 05.00 PM
Day & Date	Subject
Wednesday 11/12/2019	Optimization Techniques (601051)
Saturday 14/12/2019	Research Methodology (601052)
Wednesday 18/12/2019	Elective - III (601053)

(CIVIL) (STRUCTURE ENGINEERING)**SEM-I**

	2017 Course TIME-02.00 PM To 05.00 PM
Day & Date	Subject
Monday 09/12/2019	Theory of Elasticity & Plasticity (501001)
Thursday 12/12/2019	Structural Dynamics (501002)
Monday 16/12/2019	Advanced Design of Steel Structures (501003)
Thursday 19/12/2019	Numerical Methods in Structural Engineering (501004)
Saturday 21/12/2019	Elective I (501005)

SEM-II

	2017 Course TIME-02.00 PM To 05.00 PM
Day & Date	Subject
Tuesday 10/12/2019	Finite Element Method (501007)
Friday 13/12/2019	Theory of Plates and Shells (501008)
Tuesday 17/12/2019	Advanced Design of Concrete Structures (501009)
Friday 20/12/2019	Elective - II (501010)

SEM-III

	2017 Course TIME-02.00 PM To 05.00 PM
Day & Date	Subject
Wednesday 11/12/2019	Research Methodology (601013)
Saturday 14/12/2019	Analysis & Design of Earthquake Resistant Structures (601014)
Wednesday 18/12/2019	Elective - III (601015)

(CIVIL) (WATER RESOURCES & ENVIRONMENTAL ENGINEERING)**SEM-I**

	2017 Course TIME-02.00 PM To 05.00 PM
Day & Date	Subject
Monday 09/12/2019	Planning and Management of water Resources (501081)
Thursday 12/12/2019	Environmental Chemistry and Microbiology (501082)
Monday 16/12/2019	Fluid Mechanics (501083)
Thursday 19/12/2019	Advanced Water Treatment (501084)
Saturday 21/12/2019	Elective - I (501085)

SEM-II

	2017 Course TIME-02.00 PM To 05.00 PM
Day & Date	Subject
Tuesday 10/12/2019	Hydrology (501087)
Friday 13/12/2019	Open Channel Hydraulics (501088)
Tuesday 17/12/2019	Advanced Wastewater Treatment (501089)
Friday 20/12/2019	Elective - II (501090)

SEM-III

	2017 Course TIME-02.00 PM To 05.00 PM
Day & Date	Subject
Wednesday 11/12/2019	Optimization Techniques (601093)
Saturday 14/12/2019	Research Methodology (601094)
Wednesday 18/12/2019	Open Elective (601095)

(MECHANICAL) (DESIGN ENGINEERING)**SEM-I**

	2017 Course TIME-02.00 PM To 05.00 PM
Day & Date	Subject
Monday 09/12/2019	* Advanced Mathematics (507201)
Thursday 12/12/2019	Material Science and Mechanical Behavior of Materials (502202)
Monday 16/12/2019	Advanced Stress Analysis (502203)
Thursday 19/12/2019	** Research Methodology (502104)
Saturday 21/12/2019	** Elective - I (502205)

SEM-II

	2017 Course TIME-02.00 PM To 05.00 PM
Day & Date	Subject
Tuesday 10/12/2019	Analysis and Synthesis of Mechanisms (502207)
Friday 13/12/2019	Advanced Mechanical Vibrations (502208)
Tuesday 17/12/2019	Finite Element Method (502209)
Friday 20/12/2019	Elective - II (502210)

SEM-III

	2017 Course TIME-02.00 PM To 05.00 PM
Day & Date	Subject
Wednesday 11/12/2019	Optimization Techniques (602213)
Saturday 14/12/2019	Mechanical Measurements and Controls (602214)
Wednesday 18/12/2019	Elective - III (602215)

NOTE :-

* Common to Mechanical (Automotive Engg & CADM & E) - 2017 Credit Pattern

** Common to All Mechanical Branches - 2017 Credit Pattern

(MECHANICAL) (HEAT POWER ENGINEERING)**SEM-I**

	2017 Course TIME-02.00 PM To 05.00 PM
Day & Date	Subject
Monday 09/12/2019	* Advanced Mathematics and Numerical Methods (507101)
Thursday 12/12/2019	Advanced Thermodynamics and Combustion Technology (502102)
Monday 16/12/2019	Advanced Fluid Mechanics (502103)
Thursday 19/12/2019	** Research Methodology (502104)
Saturday 21/12/2019	** Elective - I (502105)

SEM-II

	2017 Course TIME-02.00 PM To 05.00 PM
Day & Date	Subject
Tuesday 10/12/2019	Advanced Heat Transfer (502107)
Friday 13/12/2019	Air Conditioning Technology (502108)
Tuesday 17/12/2019	Measurements and Controls (502109)
Friday 20/12/2019	Elective - II (502110)

SEM-III

	2017 Course TIME-02.00 PM To 05.00 PM
Day & Date	Subject
Wednesday 11/12/2019	Computational Fluid Dynamics (602113)
Saturday 14/12/2019	Design of Heat Transfer Equipments (602114)
Wednesday 18/12/2019	Elective - III (602115)

NOTE :-* **Common to Mechanical Energy Engineering - 2017 Credit Pattern**** **Common to All Mechanical Branches - 2017 Credit Pattern**

CHEMICAL ENGINEERING

SEM-I

2017 Course TIME-02.00 PM To 05.00 PM	
Day & Date	Subject
Monday 09/12/2019	Mathematical and Statistical Methods (509101)
Thursday 12/12/2019	Process Optimization (509102)
Monday 16/12/2019	Advanced Separation Processes (509103)
Thursday 19/12/2019	Research Methodology (509104)
Saturday 21/12/2019	Elective - I (509105)

SEM-II

2017 Course TIME-02.00 PM To 05.00 PM	
Day & Date	Subject
Tuesday 10/12/2019	Advanced Transport Phenomena (509107)
Friday 13/12/2019	Advanced Process Control (509108)
Tuesday 17/12/2019	Advanced Reaction Engineering (509109)
Friday 20/12/2019	Elective - II (509110)

SEM-III

2017 Course TIME-02.00 PM To 05.00 PM	
Day & Date	Subject
Wednesday 11/12/2019	Process Modeling and Simulation (509113)
Saturday 14/12/2019	Advanced Thermodynamics (509114)
Wednesday 18/12/2019	Elective - III (509115)

CHEMICAL ENGINEERING (ENVIRONMENTAL)**SEM-I**

	2017 Course TIME-2.00 PM To 05.00 PM
Day & Date	Subject
Monday 09/12/2019	Applied Statistics for Environmental Engineers (509131)
Thursday 12/12/2019	Environmental Management (509132)
Monday 16/12/2019	Environmental Chemistry (509133)
Thursday 19/12/2019	Research Methodology (509134)
Saturday 21/12/2019	Elective - I (509135)

SEM-II

	2017 Course TIME-2.00 PM To 05.00 PM
Day & Date	Subject
Tuesday 10/12/2019	Wastewater Treatment & Design (509137)
Friday 13/12/2019	Solid Waste Management (509138)
Tuesday 17/12/2019	Industrial Waste Treatment (509139)
Friday 20/12/2019	Elective - II (509140)

SEM-III

	2017 Course TIME-02.00 PM To 05.00 PM
Day & Date	Subject
Wednesday 11/12/2019	Remote Sensing & GIS Applications in Environmental Engineering (509143)
Saturday 14/12/2019	Industrial Pollution Prevention & Cleaner Production (509144)
Wednesday 18/12/2019	Elective - III (509145)

COMPUTER (COMPUTER ENGINEERING)**SEM-I**

	2017 Course TIME-02.00 PM To 05.00 PM
Day & Date	Subject
Monday 09/12/2019	Research Methodology (510101)
Thursday 12/12/2019	Bio-Inspired Optimization Algorithms (510102)
Monday 16/12/2019	Software Development and Version Control (510103)
Thursday 19/12/2019	Embedded and Real Time Operating Systems (510104)
Saturday 21/12/2019	Elective - I (510105)

SEM-II

	2017 Course TIME-02.00 PM To 05.00 PM
Day & Date	Subject
Tuesday 10/12/2019	Operation Research (510108)
Friday 13/12/2019	System Simulation and Modeling (510109)
Tuesday 17/12/2019	Machine Learning (510110)
Friday 20/12/2019	Elective - II (510111)

SEM-III

	2017 Course TIME-02.00 PM To 05.00 PM
Day & Date	Subject
Wednesday 11/12/2019	Fault Tolerant Systems (610101)
Saturday 14/12/2019	Information Retrieval (610102)
Wednesday 18/12/2019	Elective - III (610103)

COMPUTER (COMPUTER NETWORKS)**SEM-I**

	2017 Course TIME-02.00 PM To 05.00 PM
Day & Date	Subject
Monday 09/12/2019	Research Methodology (510201)
Thursday 12/12/2019	Network Security (510202)
Monday 16/12/2019	Wireless Sensor Networks (510203)
Thursday 19/12/2019	High Performance Networks (510204)
Saturday 21/12/2019	Elective - I (510205)

SEM-II

	2017 Course TIME-02.00 PM To 05.00 PM
Day & Date	Subject
Tuesday 10/12/2019	Operation Research (510208)
Friday 13/12/2019	Network Design and Analysis (510209)
Tuesday 17/12/2019	Data Algorithms (510210)
Friday 20/12/2019	Elective - II (510211)

SEM-III

	2017 Course TIME-02.00 PM To 05.00 PM
Day & Date	Subject
Wednesday 11/12/2019	Fault Tolerant Systems (610201)
Saturday 14/12/2019	Mobile Ad hoc Networks (610202)
Wednesday 18/12/2019	Elective - III (610203)

ELECTRICAL (CONTROL SYSTEMS)**SEM-I**

	2017 Course TIME-02.00 PM To 05.00 PM
Day & Date	Subject
Monday 09/12/2019	Optimization Techniques in Control System (503101)
Thursday 12/12/2019	Automation in Manufacturing (503102)
Monday 16/12/2019	Non Linear Control System (503103)
Thursday 19/12/2019	Research Methodology (503104)
Saturday 21/12/2019	Elective - I (503105)

SEM-II

	2017 Course TIME-02.00 PM To 05.00 PM
Day & Date	Subject
Tuesday 10/12/2019	Multivariable and Optimal Control System (503107)
Friday 13/12/2019	Control of Power Electronics Circuits (503108)
Tuesday 17/12/2019	Digital Signal Processing and its Applications (503109)
Friday 20/12/2019	Elective - II (503110)

SEM-III

	2017 Course TIME-02.00 PM To 05.00 PM
Day & Date	Subject
Wednesday 11/12/2019	Advanced Drives and Control (603101)
Saturday 14/12/2019	System Identification & Adaptive Control (603102)
Wednesday 18/12/2019	Elective - III (603103)

ELECTRICAL (POWER ELECTRONICS & DRIVES)**SEM-I**

	2017 Course TIME-02.00 PM To 05.00 PM
Day & Date	Subject
Monday 09/12/2019	Linear Systems Theory and Design (503301)
Thursday 12/12/2019	Modelling and Analysis of Electrical Machines (503302)
Monday 16/12/2019	Power Converters I (503303)
Thursday 19/12/2019	Research Methodology (503304)
Saturday 21/12/2019	Elective - I (503305)

SEM-II

	2017 Course TIME-02.00 PM To 05.00 PM
Day & Date	Subject
Tuesday 10/12/2019	AC and DC Drives (503307)
Friday 13/12/2019	Power Converters II (503308)
Tuesday 17/12/2019	Advanced Control Systems (503309)
Friday 20/12/2019	Elective - II (503310)

SEM-III

	2017 Course TIME-02.00 PM To 05.00 PM
Day & Date	Subject
Wednesday 11/12/2019	Special Applications of Power Electronics (603301)
Saturday 14/12/2019	Energy Management and Power Quality (603302)
Wednesday 18/12/2019	Elective - III (603303)

ELECTRICAL (POWER SYSTEMS)**SEM-I**

	2017 Course TIME-02.00 PM To 05.00 PM
Day & Date	Subject
Monday 09/12/2019	Computer Applications in Power Systems (503201)
Thursday 12/12/2019	Power Sector Economics and Management (503202)
Monday 16/12/2019	Power System Modeling (503203)
Thursday 19/12/2019	Research Methodology (503204)
Saturday 21/12/2019	Elective I (503205)

SEM-II

	2017 Course TIME-02.00 PM To 05.00 PM
Day & Date	Subject
Tuesday 10/12/2019	Power System Dynamics (503207)
Friday 13/12/2019	Power System Planning & Reliability (503208)
Tuesday 17/12/2019	HVDC and Flexible AC Transmission (503209)
Friday 20/12/2019	Elective - II (503210)

SEM-III

	2017 Course TIME-02.00 PM To 05.00 PM
Day & Date	Subject
Wednesday 11/12/2019	Advanced Power System Protection (603201)
Saturday 14/12/2019	Power Quality Assessment & Mitigation (603202)
Wednesday 18/12/2019	Elective - III (603203)

ELECTRONICS (DIGITAL SYSTEM)**SEM-I**

	2017 Course TIME-02.00 PM To 05.00 PM
Day & Date	Subject
Monday 09/12/2019	Analog & Digital CMOS Design (504101)
Thursday 12/12/2019	Multirate Signal Processing (504102)
Monday 16/12/2019	Embedded System Design (504103)
Thursday 19/12/2019	* Research Methodology (504104)
Saturday 21/12/2019	Elective I (504105)

SEM-II

	2017 Course TIME-02.00 PM To 05.00 PM
Day & Date	Subject
Tuesday 10/12/2019	Advanced DSP Processors (504107)
Friday 13/12/2019	PLD's and ASIC Design (504108)
Tuesday 17/12/2019	Image Processing and Computer Vision (504109)
Friday 20/12/2019	Elective - II (504110)

SEM-III

	2017 Course TIME-02.00 PM To 05.00 PM
Day & Date	Subject
Wednesday 11/12/2019	System on Chip Design (604101)
Saturday 14/12/2019	Wireless Sensor Network for IOT (604102)
Wednesday 18/12/2019	Elective - III (604103)

NOTE :-

* Common to Electronics Branch and E & TC All Branches - 2017 Credit Pattern

ELECTRONICS & TELECOMMUNICATION (COMMUNICATION NETWORK)**SEM-I**

	2017 Course TIME-02.00 PM To 05.00 PM
Day & Date	Subject
Monday 09/12/2019	Modelling and Simulation of Communication Networks (504501)
Thursday 12/12/2019	High Speed Communication Networks (504502)
Monday 16/12/2019	Network Security (504503)
Thursday 19/12/2019	* Research Methodology (504504)
Saturday 21/12/2019	Elective I (504505)

SEM-II

	2017 Course TIME-02.00 PM To 05.00 PM
Day & Date	Subject
Tuesday 10/12/2019	Traffic Analysis and QoS (504507)
Friday 13/12/2019	Broadband Wireless Technologies (504508)
Tuesday 17/12/2019	SDR and Cognitive Radio (504509)
Friday 20/12/2019	Elective - II (504510)

SEM-III

	2017 Course TIME-02.00 PM To 05.00 PM
Day & Date	Subject
Wednesday 11/12/2019	4G LTE Cellular Systems (604501)
Saturday 14/12/2019	Modern Communication Receiver Design & Technology (604502)
Wednesday 18/12/2019	Elective - III (604503)

***Common to E & TC All Branches and Electronics Branch - 2017 Credit Pattern**

ELECTRONICS & TELECOMMUNICATION (MICROWAVE)**SEM-I**

	2017 Course TIME-02.00 PM To 05.00 PM
Day & Date	Subject
Monday 09/12/2019	Electromagnetics and Antenna Theory (504301)
Thursday 12/12/2019	RF and Microwave Circuits (504302)
Monday 16/12/2019	Microwave Measurements (504303)
Thursday 19/12/2019	* Research Methodology (504104)
Saturday 21/12/2019	Elective I (504305)

SEM-II

	2017 Course TIME-02.00 PM To 05.00 PM
Day & Date	Subject
Tuesday 10/12/2019	Computational Electromagnetics (504307)
Friday 13/12/2019	RF and MMIC Technology (504308)
Tuesday 17/12/2019	Wireless Communication System (504309)
Friday 20/12/2019	Elective - II (504310)

SEM-III

	2017 Course TIME-02.00 PM To 05.00 PM
Day & Date	Subject
Wednesday 11/12/2019	EMI and EMC Techniques (604301)
Saturday 14/12/2019	Radar and Satellite Communication (604302)
Wednesday 18/12/2019	Elective - III (604103)

* Common to E & TC All Branches and Electronics Branch - 2017 Credit Pattern

ELECTRONICS & TELECOMMUNICATION (SIGNAL PROCESSING)**SEM-I**

2017 Course TIME-02.00 PM To 05.00 PM	
Day & Date	Subject
Monday 09/12/2019	Mathematics for Signal Processing (504401)
Thursday 12/12/2019	Digital Image and Video Processing (504402)
Monday 16/12/2019	Advanced Digital Signal Processing (504403)
Thursday 19/12/2019	* Research Methodology (504404)
Saturday 21/12/2019	Elective - I (504405)

SEM-II

2017 Course TIME-02.00 PM To 05.00 PM	
Day & Date	Subject
Tuesday 10/12/2019	Biomedical Signal Processing (504407)
Friday 13/12/2019	Speech Processing (504408)
Tuesday 17/12/2019	Computer Vision (504409)
Friday 20/12/2019	Elective - II (504410)

SEM-III

2017 Course TIME-02.00 PM To 05.00 PM	
Day & Date	Subject
Wednesday 11/12/2019	Statistical Signal Processing (604401)
Saturday 14/12/2019	Still Image and Video Compression (604402)
Wednesday 18/12/2019	Elective - III (604403)

* Common to E & TC All Branches and Electronics Branch - 2017 Credit Pattern

ELECTRONICS & TELECOMMUNICATION (VLSI & EMBEDDED SYSTEM)**SEM-I**

	2017 Course TIME-02.00 PM To 05.00 PM
Day & Date	Subject
Monday 09/12/2019	Digital CMOS Design (504201)
Thursday 12/12/2019	Reconfigurable Computing (504202)
Monday 16/12/2019	Embedded System Design (504203)
Thursday 19/12/2019	* Research Methodology (504204)
Saturday 21/12/2019	Elective I (504205)

SEM-II

	2017 Course TIME-02.00 PM To 05.00 PM
Day & Date	Subject
Tuesday 10/12/2019	Analog CMOS Design (504207)
Friday 13/12/2019	System on Chip (504208)
Tuesday 17/12/2019	Embedded Automotive Systems (504209)
Friday 20/12/2019	Elective - II (504210)

SEM-III

	2017 Course TIME-02.00 PM To 05.00 PM
Day & Date	Subject
Wednesday 11/12/2019	Testing and Verification of VLSI Circuits (604201)
Saturday 14/12/2019	ASIC Design (604202)
Wednesday 18/12/2019	Elective - III (604203)

* Common to E & TC All Branches and Electronics Branch - 2017 Credit Pattern

INFORMATION TECHNOLOGY**SEM-I**

	2017 Course TIME-02.00 PM To 05.00 PM
Day & Date	Subject
Monday 09/12/2019	Mathematical Foundation of Information Technology (514401)
Thursday 12/12/2019	Advance Software Engineering & Project Management (514402)
Monday 16/12/2019	Applied Algorithms (514403)
Thursday 19/12/2019	Research Methodology (514404)
Saturday 21/12/2019	Elective I (514405)

SEM-II

	2017 Course TIME-02.00 PM To 05.00 PM
Day & Date	Subject
Tuesday 10/12/2019	Cyber Security and Forensics (514407)
Friday 13/12/2019	Cloud and Data Technologies (514408)
Tuesday 17/12/2019	Information Technology Oriented Operations Research (514409)
Friday 20/12/2019	Elective - II (514410)

SEM-III

	2017 Course TIME-02.00 PM To 05.00 PM
Day & Date	Subject
Wednesday 11/12/2019	Mobile Ad-hoc Networks (5144013)
Saturday 14/12/2019	Advance Operating System (5144014)
Wednesday 18/12/2019	Elective - III (5144015)

INSTRUMENTATION & CONTROL (PROCESS INSTRUMENTATION)**SEM-I**

	2017 Course TIME-02.00 PM To 05.00 PM
Day & Date	Subject
Monday 09/12/2019	Mathematical Methods In Instrumentation (506101)
Thursday 12/12/2019	Transducer Design (506102)
Monday 16/12/2019	Industrial Automation (506103)
Thursday 19/12/2019	Research Methodology (506104)
Saturday 21/12/2019	Elective I (506105)

SEM-II

	2017 Course TIME-02.00 PM To 05.00 PM
Day & Date	Subject
Tuesday 10/12/2019	Process Dynamics and Control (506107)
Friday 13/12/2019	Embedded System Design (506108)
Tuesday 17/12/2019	Control System (506109)
Friday 20/12/2019	Elective - II (506110)

SEM-III

	2017 Course TIME-02.00 PM To 05.00 PM
Day & Date	Subject
Wednesday 11/12/2019	Advanced Signal Processing (606101)
Saturday 14/12/2019	Building Automation (606102)
Wednesday 18/12/2019	Elective - III (606103)

MECHANICAL (AUTOMOTIVE ENGINEERING)**SEM-I**

	2017 Course TIME-02.00 PM To 05.00 PM
Day & Date	Subject
Monday 09/12/2019	* Advanced Mathematics (507201)
Thursday 12/12/2019	Automotive Engine Design (502302)
Monday 16/12/2019	Automotive Safety and Regulations (502303)
Thursday 19/12/2019	** Research Methodology (502104)
Saturday 21/12/2019	** Elective - I (502305)

SEM-II

	2017 Course TIME-02.00 PM To 05.00 PM
Day & Date	Subject
Tuesday 10/12/2019	Engine Combustion Technology (502307)
Friday 13/12/2019	Noise Vibration and Harshness (502308)
Tuesday 17/12/2019	Automotive Chassis Design (502309)
Friday 20/12/2019	Elective - II (502310)

SEM-III

	2017 Course TIME-02.00 PM To 05.00 PM
Day & Date	Subject
Wednesday 11/12/2019	Vehicle Dynamics (602313)
Saturday 14/12/2019	Autotronics (602314)
Wednesday 18/12/2019	Elective - III (602315)

NOTE :-

* Common to Mechanical (Design & CADM & E) - 2017 Credit Pattern

** Common to All Mechanical Branches - 2017 Credit Pattern

MECHANICAL (COMPUTER AIDED DESIGN,MANUFACTURE & ENGINEERING)**SEM-I**

	2017 Course TIME-02.00 PM To 05.00 PM
Day & Date	Subject
Monday 09/12/2019	* Advance Mathematics (507201)
Thursday 12/12/2019	Advanced Machine Design (502402)
Monday 16/12/2019	Computer Aided Design (502403)
Thursday 19/12/2019	** Research Methodology (502104)
Saturday 21/12/2019	** Elective - I (502405)

SEM-II

	2017 Course TIME-02.00 PM To 05.00 PM
Day & Date	Subject
Tuesday 10/12/2019	Computer Integrated Manufacturing (502407)
Friday 13/12/2019	Industrial Product Design & Product Life Cycle Management (502408)
Tuesday 17/12/2019	Automated Manufacturing System Modelling (502409)
Friday 20/12/2019	Elective - II (502410)

SEM-III

	2017 Course TIME-02.00 PM To 05.00 PM
Day & Date	Subject
Wednesday 11/12/2019	Simulation Modeling (602413)
Saturday 14/12/2019	Optimization Techniques (602414)
Wednesday 18/12/2019	Elective - III (602415)

NOTE :-* **Common to Mechanical (Design and Automotive) - 2017 Credit Pattern**** **Common to All Mechanical Branches - 2017 Credit Pattern**

MECHANICAL (ENERGY ENGINEERING)**SEM-I**

	2017 Course TIME-02.00 PM To 05.00 PM
Day & Date	Subject
Monday 09/12/2019	* Advanced Mathematics and Numerical Methods (502501)
Thursday 12/12/2019	Advanced Thermodynamics (502502)
Monday 16/12/2019	Non-Conventional Energy Sources (502503)
Thursday 19/12/2019	** Research Methodology (502104)
Saturday 21/12/2019	** Elective - I (502505)

SEM-II

	2017 Course TIME-02.00 PM To 05.00 PM
Day & Date	Subject
Tuesday 10/12/2019	Advanced Heat Transfer (502507)
Friday 13/12/2019	Energy Conversion and Environment (502508)
Tuesday 17/12/2019	Advanced Fluid Mechanics (502509)
Friday 20/12/2019	Elective - II (502510)

SEM-III

	2017 Course TIME-02.00 PM To 05.00 PM
Day & Date	Subject
Wednesday 11/12/2019	Energy Management (602513)
Saturday 14/12/2019	Energy Systems Modeling and Optimization (602514)
Wednesday 18/12/2019	Elective - III (602515)

NOTE :-

* Common to Mechanical (Heat Power) - 2017 Credit Pattern

** Common to All Mechanical Branches - 2017 Credit Pattern

MECHANICAL (MECHATRONICS)**SEM-I**

	2017 Course TIME-02.00 PM To 05.00 PM
Day & Date	Subject
Monday 09/12/2019	System Modelling, Identification and Simulation (502801)
Thursday 12/12/2019	Control Systems - I (502802)
Monday 16/12/2019	Sensors, Transducers and Interfacing Techniques (502803)
Thursday 19/12/2019	** Research Methodology (502104)
Saturday 21/12/2019	** Elective - I (502805)

SEM-II

	2017 Course TIME-02.00 PM To 05.00 PM
Day & Date	Subject
Tuesday 10/12/2019	PLC Programming (502807)
Friday 13/12/2019	Control Systems - II (502808)
Tuesday 17/12/2019	Industrial Drives & Actuators (502809)
Friday 20/12/2019	Elective - II (502810)

SEM-III

	2017 Course TIME-02.00 PM To 05.00 PM
Day & Date	Subject
Wednesday 11/12/2019	Microcontroller Applications in Embedded Systems (602813)
Saturday 14/12/2019	Flexible Manufacturing Systems (602814)
Wednesday 18/12/2019	Elective - III (602815)

NOTE :-**** Common to All Mechanical Branches - 2017 Credit Pattern**

PRINTING ENGINEERING & GRAPHIC COMMUNICATION**SEM-I**

	2017 Course TIME-02.00 PM To 05.00 PM
Day & Date	Subject
Monday 09/12/2019	Probability, Statistics and Regression Analysis (508101)
Thursday 12/12/2019	Printing Technology Management (508102)
Monday 16/12/2019	Modern Trends in Printing (508103)
Thursday 19/12/2019	Research Methodology (508104)
Saturday 21/12/2019	Elective - I (508105)

SEM-II

	2017 Course TIME-02.00 PM To 05.00 PM
Day & Date	Subject
Tuesday 10/12/2019	Colour Science (508107)
Friday 13/12/2019	Web Handling on Press (508108)
Tuesday 17/12/2019	Substrate and Ink (508109)
Friday 20/12/2019	Elective - II (508110)

SEM-III

	2017 Course TIME-02.00 PM To 05.00 PM
Day & Date	Subject
Wednesday 11/12/2019	Printed Electronics and RFID (608101)
Saturday 14/12/2019	Advances in Converting and Packaging (608102)
Wednesday 18/12/2019	Elective - III (608103)

PRODUCTION (CAD/CAM)**SEM-I**

	2017 Course TIME-02.00 PM To 05.00 PM
Day & Date	Subject
Monday 09/12/2019	* Mathematics and Statistics (511101)
Thursday 12/12/2019	* Research Methodology (511102)
Monday 16/12/2019	Computer Aided Design (511301)
Thursday 19/12/2019	Computer Aided Manufacturing (511302)
Saturday 21/12/2019	Elective I (511303)

SEM-II

	2017 Course TIME-02.00 PM To 05.00 PM
Day & Date	Subject
Tuesday 10/12/2019	* Computer Integrated Manufacturing (511305)
Friday 13/12/2019	* Artificial Intelligence & Robotics (511306)
Tuesday 17/12/2019	Computation Techniques in CAD/CAM (511307)
Friday 20/12/2019	Elective - II (511308)

SEM-III

	2017 Course TIME-02.00 PM To 05.00 PM
Day & Date	Subject
Wednesday 11/12/2019	* Computational Intelligence in Tool Design (611101)
Saturday 14/12/2019	Computer Aided Production Planning (511311)
Wednesday 18/12/2019	Elective - III (511312)

NOTE :-

* Common to Production (Manufacturing & Automation) - 2017 Credit Pattern

PRODUCTION ENGINEERING (MANUFACTURING & AUTOMATION)**SEM-I**

2017 Course TIME-02.00 PM To 05.00 PM	
Day & Date	Subject
Monday 09/12/2019	* Mathematics & Statistics (511101)
Thursday 12/12/2019	* Research Methodology (511102)
Monday 16/12/2019	Advanced Manufacturing Processes (511103)
Thursday 19/12/2019	Industrial Automation (511104)
Saturday 21/12/2019	Elective I (511105)

SEM-II

2017 Course TIME-02.00 PM To 05.00 PM	
Day & Date	Subject
Tuesday 10/12/2019	* Computer Integrated Manufacturing (511305)
Friday 13/12/2019	* Artificial Intelligence & Robotics (511306)
Tuesday 17/12/2019	Additive Manufacturing (511109)
Friday 20/12/2019	Elective - II (511110)

SEM-III

2017 Course TIME-02.00 PM To 05.00 PM	
Day & Date	Subject
Wednesday 11/12/2019	* Computational Intelligence in Tool Design (611101)
Saturday 14/12/2019	Mechatronics (611102)
Wednesday 18/12/2019	Elective - III (611103)

NOTE :-

* Common to Production (CAD/CAM) - 2017 Credit Pattern

Ganeshkhind, Pune - 411 007

Ref.No/XCT/1581

Date:19/11/2019

Director

Board of Examinations and Evaluation