SAVITRIBAI PHULE PUNE UNIVERSITY

(Formerly University of Pune)

EXAMINATION CIRCULAR NO. 210 OF. 2022
BACHELOR OF ENGINEERING (2019 PATTERN)
Examination of INSEM SEPT./OCT-2022
(Under Faculty of SCIENCE AND TECHNOLOGY: B)ENGINEERING)
INSTRUCTIONS FOR CANDIDATES

- Candidates are required to be present at the examination centre, THIRTY MINUTES before the stipulated time.

- Candidates are forbidden from taking any material into the examination hall that can be treated as a malpractice.

- Candidates are requested to see the Notice Board at their center of examination regularly for changes if any that may be notified later in the program.

- No request shall be granted for change in time or date for the University Examination on any ground.

- Candidates are requested to note the Day, Date and Time of Paper.

- Candidates are permitted to use stencils at the time of examination.

- The exchanges of side-rules, drawing instruments of other materials used in the examination hall is not permitted at the time of examination. Candidates must bring their own instruments and will not be allowed to borrow from each other under any circumstances.

- Use of non-programmable battery operated electronic pocket size Calculator is allowed. The exchange of Calculators is not allowed. Electronics
  Devices including mobile are not allowed at the time of examination.

- The written examination will be conducted in the following order.

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B.E. (AUTOMOBILE ENGINEERING)

SEMESTER-VII

Time – 2.00 p.m to 3.00 p.m.

Day & Date	SUBJECT (2019 Course)	SUBJECT CODE
Monday, 03/10/2022	Automotive Testing and Certification	416481
Tuesday, 04/10/2022	Machine and Vehicle Dynamics	416482
Friday, 07/10/2022	(ELECTIVE - III) Artificial Intelligence and Machine Learning	416484 A
	(ELECTIVE - III) Automotive Control Systems	416484 B
	(ELECTIVE - III) Internet of Things**	402044 E
Monday, 10/10/2022	(ELECTIVE - IV) Finite Elements Analysis	416485 A
	(ELECTIVE - IV) Computational Fluid Dynamics	416485 B

**NOTE: ** COMMON WITH MECHANICAL ENGINEERING

B.E. (BIOTECHNOLOGY ENGINEERING)

SEMESTER-VII

Time – 2.00 p.m to 3.00 p.m.

Day & Date	SUBJECT (2019 Course)	SUBJECT CODE
Monday, 03/10/2022	Biochemical Engineering	415461
Tuesday, 04/10/2022	Bioinformatics	415462
Friday, 07/10/2022	(ELECTIVE - III) Bioprocess Equipment Design	415463 A
	(ELECTIVE - III) Environmental Biotechnology	415463 B
	(ELECTIVE - III) Genomics	415463 C
Monday, 10/10/2022	(ELECTIVE - IV) Bioenergy and Renewable Resources	415464 A
	(ELECTIVE - IV) Nanotechnology	415464 B
	(ELECTIVE - IV) Stem Cell Biology and Regenerative Medicine	415464 C

B.E. (CHEMICAL ENGINEERING)

SEMESTER-VII

Time – 2.00 p.m to 3.00 p.m.

Day & Date	SUBJECT (2019 Course)	SUBJECT CODE
Monday, 03/10/2022	Process Dynamics and Control	409341
Tuesday, 04/10/2022	Chemical Reaction Engineering- II	409342
Thursday, 06/10/2022	Chemical Engineering Design	409343
Friday, 07/10/2022	(ELECTIVE - III) Environmental Engineering	409344 A
	(ELECTIVE - III) Membrane Technology	409344 B
	(ELECTIVE - III) Industrial Piping	409344 C
	(ELECTIVE - III) Petroleum Refining	409344 D
Monday, 10/10/2022	(ELECTIVE - IV) Chemical Process Synthesis	409345 A
	(ELECTIVE - IV) Industrial Management &Entrepreneurship	409345 B
	(ELECTIVE - IV) Green Technology	409345 C
	(ELECTIVE - IV) Advance Separation Processes	409345 D

B.E. (CIVIL)

SEMESTER-VII

Time – 2.00 p.m to 3.00 p.m.

Day & Date	SUBJECT (2019 Course)	SUBJECT CODE
Monday, 03/10/2022	Foundation Engineering	401001
Tuesday, 04/10/2022	Transportation Engineering	401002
Friday, 07/10/2022	(ELECTIVE - III) Coastal Engineering	401003 A
	(ELECTIVE - III) Advanced Design of Concrete Structures	401003 B
	(ELECTIVE - III) Integrated Water Resources Planning & Management	401003 C
	(ELECTIVE - III) Finite Element Method	401003 D
	(ELECTIVE - III) Data Analytics	401003 E
	(ELECTIVE - III) Operation Research	401003 F
Monday, 10/10/2022	(ELECTIVE - IV) Air Pollution and Control	401004 A
	(ELECTIVE - IV) Advanced Design of Steel Structures	401004 B
	(ELECTIVE - IV) Statistical Analysis and Computational Method	401004 C
	(ELECTIVE - IV) Airport and Bridge Engineering	401004 D
	(ELECTIVE - IV) Design of Prestressed Concrete Structures	401004 E
	(ELECTIVE - IV) Formwork and Plumbing Engineering	401004 F

B.E. (COMPUTER ENGINEERING)

SEMESTER-VII

Time – 2.00 p.m to 3.00 p.m.

Day & Date	SUBJECT (2019 Course)	SUBJECT CODE
Monday, 03/10/2022	Design and Analysis of Algorithms	410241
Tuesday, 04/10/2022	Machine Learning	410242
Thursday, 06/10/2022	Block chain Technology	410243
Friday, 07/10/2022	(ELECTIVE - III) Pervasive Computing	410244 A
	(ELECTIVE - III) Multimedia Techniques	410244 B
	(ELECTIVE - III) Cyber Security and Digital Forensics	410244 C
	(ELECTIVE - III) Object Oriented Modeling and Design	410244 D
	(ELECTIVE - III) Digital Signal Processing	410244 E
Monday, 10/10/2022	(ELECTIVE - IV) Information Retrieval	410245 A
	(ELECTIVE - IV) GPU Programming and Architecture	410245 B
	(ELECTIVE - IV) Mobile Computing	410245 C
	(ELECTIVE - IV) Software Testing and Quality Assurance	410245 D
	(ELECTIVE - IV) Compilers	410245 E

B.E. (MECHANICAL)

SEMESTER-VII

Time – 2.00 p.m to 3.00 p.m.

Day & Date	SUBJECT (2019 Course)	SUBJECT CODE
Monday, 03/10/2022	Heating Ventilation Air-Conditioning and Refrigeration	402041
Tuesday, 04/10/2022	Dynamics of Machinery	402042
Friday, 07/10/2022	(ELECTIVE - III) Automobile Design	402044 A
	(ELECTIVE - III) Design of Heat Transfer Equipments	402044 B
	(ELECTIVE - III) Modern Machining Processes	402044 C
	(ELECTIVE - III) Industrial Engineering	402044 D
	(ELECTIVE - III) Internet of Things	402044 E
	(ELECTIVE - III) Computational Fluid Dynamics	402044 F
Monday, 10/10/2022	(ELECTIVE - IV) Product Design and Development	402045 A
	(ELECTIVE - IV) Experimental Methods in Thermal Engineering	402045 B
	(ELECTIVE - IV) Additive Manufacturing	402045 C
	(ELECTIVE - IV) Operations Research	402045 D
	(ELECTIVE - IV) Augmented Reality and Virtual Reality	402045 E

B.E. (ELECTRICAL)

SEMESTER-VII

Time – 2.00 p.m to 3.00 p.m.

Day & Date	SUBJECT (2019 Course)	SUBJECT CODE
Monday, 03/10/2022	Power System Operation & Control	403141
Tuesday, 04/10/2022	Advanced Control System	403142
Friday, 07/10/2022	(ELECTIVE - III) PLC and SCADA	403143 A
	(ELECTIVE - III) Power Quality Management	403143 B
	(ELECTIVE - III) High Voltage Engineering	403143 C
	(ELECTIVE - III) Robotics and Automation	403143 D
Monday, 10/10/2022	(ELECTIVE - IV) Alternate Energy System	403144 A
	(ELECTIVE - IV) Electrical & Hybrid Vehicle	403144 B
	(ELECTIVE - IV) Special-purpose Machines	403144 C
	(ELECTIVE - IV) HVDC & FACTS	403144 D

B.E. (ELECTRONICS)

SEMESTER-VII

Time – 2.00 p.m to 3.00 p.m.

Day & Date	SUBJECT (2019 Course)	SUBJECT CODE
Monday, 03/10/2022	VLSI Design	404201
Tuesday, 04/10/2022	Advanced Power Electronics	404202
Thursday, 06/10/2022	Electronic System Design	404203
Friday, 07/10/2022	(ELECTIVE - III) Speech Processing *	404184 A
	(ELECTIVE - III) Internet of Things	404204 A
	(ELECTIVE - III) Software Defined Radio	404204 B
	(ELECTIVE - III) Testing and Verification for SOC design	404204 C
	(ELECTIVE - III) Java Script*	404184 C
Monday, 10/10/2022	(ELECTIVE - IV) Mobile Communication	404205 A
	(ELECTIVE - IV) Embedded Systems	404205 B
	(ELECTIVE - IV) Optimization Techniques	404205 C
	(ELECTIVE - IV) Low power CMOS*	404185 D
	(ELECTIVE - IV) Smart Antennas*	404185 E

NOTE: * COMMON WITH E&TC.

B.E. (ELECTRONICS & TELECOMMUNICATIOINS)

SEMESTER-VII

Time – 2.00 p.m to 3.00 p.m.

Day & Date	SUBJECT (2019 Course)	SUBJECT CODE
Monday, 03/10/2022	Radiation & Microwave Theory	404181
Tuesday, 04/10/2022	VLSI Design and Technology	404182
Thursday, 06/10/2022	Cloud Computing	404183
Friday, 07/10/2022	(ELECTIVE - III) Speech Processing	404184 A
	(ELECTIVE - III) PLC SCADA & Automation	404184 B
	(ELECTIVE - III) JAVA Script	404184 C
	(ELECTIVE - III) Embedded & RTOS	404184 D
	(ELECTIVE - III) Modernized IoT	404184 E
Monday, 10/10/2022	(ELECTIVE - IV) Data Mining	404185 A
	(ELECTIVE - IV) Electronic Product Development	404185 B
	(ELECTIVE - IV) Deep Learning	404185 C
	(ELECTIVE - IV) Low Power CMOS	404185 D
	(ELECTIVE - IV) Smart Antennas	404185 E

B.E. (INFORMATION TECHNOLOGY)

SEMESTER-VII

Time – 2.00 p.m to 3.00 p.m.

Day & Date	SUBJECT (2019 Course)	SUBJECT CODE
Monday, 03/10/2022	Information and Storage Retrieval	414441
Tuesday, 04/10/2022	Software Project Management	414442
Thursday, 06/10/2022	Deep Learning	414443
Friday, 07/10/2022	(ELECTIVE - III) Mobile Computing	414444 A
	(ELECTIVE - III) High Performance Computing	414444 B
	(ELECTIVE - III) Multimedia Technology	414444 C
	(ELECTIVE - III) Smart Computing	414444 D
Monday, 10/10/2022	(ELECTIVE - IV) Bioinformatics	414445 A
	(ELECTIVE - IV) Introduction to DevOps	414445 B
	(ELECTIVE - IV) Computer Vision	414445 C
	(ELECTIVE - IV) Wireless Communications	414445 D

B.E. INSTRUMENTATION & CONTROL

SEMESTER-VII

Time – 2.00 p.m to 3.00 p.m.

Day & Date	SUBJECT (2019 Course)	SUBJECT CODE
Monday, 03/10/2022	Process Control Techniques	406261
Tuesday, 04/10/2022	Project Engineering and Management	406262
Friday, 07/10/2022	(ELECTIVE - III) Digital Image Processing	406263 A
	(ELECTIVE - III) Data Analytics	406263 B
	(ELECTIVE - III) Wireless Sensor Networks	406263 C
	(ELECTIVE - III) Process Modelling and Optimization	406263 D
Monday, 10/10/2022	(ELECTIVE - IV) Cloud Computing	406264 A
	(ELECTIVE - IV) Soft Computing	406264 B
	(ELECTIVE - IV) Automotive Instrumentation	406264 C
	(ELECTIVE - IV) Advanced Control System	406264 D

B.E. PRINTING TECHNOLOGY

SEMESTER-VII

Time – 2.00 p.m to 3.00 p.m.

Day & Date	SUBJECT (2019 Course)	SUBJECT CODE
Monday, 03/10/2022	Gravure Printing Techniques	408283
Tuesday, 04/10/2022	Digital Printing Techniques	408284
Friday, 07/10/2022	(ELECTIVE - III) Paper Board and Corrugation Package Technology	408281 A
	(ELECTIVE - III) Polymer Science	408281 B
Monday, 10/10/2022	(ELECTIVE - IV) Multimedia Advertising	408282 A
	(ELECTIVE - IV) Process Optimization and Total Quality Management in Printing	408282 B

B.E. PRODUCTION ENGINEERING

SEMESTER-VII

Time – 2.00 p.m to 3.00 p.m.

Day & Date	SUBJECT (2019 Course)	SUBJECT CODE
Monday, 03/10/2022	Automation and Control Engineering	411081
Tuesday, 04/10/2022	Operations Research	411082
Friday, 07/10/2022	(ELECTIVE - III) Simulation, Modeling and Digital Twin	411083 A
	(ELECTIVE - III) Total Quality management	411083 B
	(ELECTIVE - III) Artificial Intelligence in Manufacturing	411083 C
	(ELECTIVE - III) World Class Manufacturing	411083 D
Monday, 10/10/2022	(ELECTIVE - IV) Plant Maintenance and industrial safety	411084 A
	(ELECTIVE - IV) Surface Engineering	411084 B
	(ELECTIVE - IV) Reverse Engineering	411084 C
	(ELECTIVE - IV) Entrepreneurship and Innovations	411084 D

B.E. PRODUCTION SANDWICH ENGINEERING

SEMESTER-VII

Time – 2.00 p.m to 3.00 p.m.

Day & Date	SUBJECT (2019 Course)	SUBJECT CODE
Monday, 03/10/2022	Manufacturing Automation	411121
Tuesday, 04/10/2022	Operations Research	411122
Friday, 07/10/2022	(ELECTIVE - III) Additive Manufacturing	411123 A
	(ELECTIVE - III) Industrial Robotics	411123 B
	(ELECTIVE - III) Reliability Engineering	411123 C
	(ELECTIVE - III) Micro-Electro mechanical systems	411123 D
Monday, 10/10/2022	(ELECTIVE - IV) Creative Product Design	411124 A
	(ELECTIVE - IV) Mechatronics	411124 B
	(ELECTIVE - IV) CAD/CAM	411124 C
	(ELECTIVE - IV) Data analytics	411124 D

B.E. HONORS / MINORS

SEMESTER-VII

Time – 2.00 p.m to 3.00 p.m.

Day & Date	SUBJECT (2019 Course)	SUBJECT CODE
Tuesday, 11/10/2022	Traffic and Transportation Planning	401401
	Work Method Statement Making	401301
	Sustainable Packaging	408214
	Smart Contracts & Cryptocurrency	404181
	Industrial Robotics & Automation	404181
	Additive Manufacturing System Design	402014
	Modelling and Simulation of EHV	402034
	Electrical Energy Systems	402024
	System modelling and simulation	402044
	Machine Learning	410301
	Internet of Things and Embedded Security	410401
	Machine Learning and Data Science	410501
	Machine Learning for Internet of Things	410601
	Virtual Reality in Game Development	410701

Ganeshkhind, Pune-411007
Ref. / XCT / 607
Date: 16/09/2022

Director
Board of Examinations & Evaluation

SAVITRIBAI PHULE PUNE UNIVERSITY

(Formerly University of Pune)

EXAMINATION CIRCULAR NO. 211 OF. 2022
THIRD YEAR ENGINEERING (2019 PATTERN)
Examination of INSEM SEPT./OCT-2022
(Under Faculty of SCIENCE AND TECHNOLOGY: B)ENGINEERING)
INSTRUCTIONS FOR CANDIDATES

- Candidates are required to be present at the examination centre, THIRTY MINUTES before the stipulated time.

- Candidates are forbidden from taking any material into the examination hall that can be treated as a malpractice.

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- Use of non-programmable battery operated electronic pocket size Calculator is allowed. The exchange of Calculators is not allowed. Electronics Devices including mobile are not allowed at the time of examination.

- The written examination will be conducted in the following order.

AUTOMOBILE

SEM-I

Day & Date	2019 Course TIME 11.00 a.m. To 12.00 noon
Monday, 03/10/2022	Numerical & Optimization Methods (316481)
Tuesday, 04/10/2022	Heat Transfer (316482)
Thursday, 06/10/2022	Design of Machine Components (316483)
Friday, 07/10/2022	Automobile Electrical and Electronics (316484)
Monday, 10/10/2022	**ELECTIVE-I** Advanced Forming & Joining Processes (302045-A)**
	ELECTIVE-I Machining Science and Technology (302045-B) **

Note :- ** *Common with Mechanical Engineering*

CHEMICAL

SEM-I

Day & Date	2019 Course TIME 11.00 a.m. To 12.00 noon
Monday, 03/10/2022	Mass Transfer-I (309341)
Tuesday, 04/10/2022	Chemical Technology -II (309342)
Thursday, 06/10/2022	Chemical Engineering Mathematics (309343)
Friday, 07/10/2022	Chemical Engineering Thermodynamics (309344)
Monday, 10/10/2022	**ELECTIVE-I** Chemical Industry Management (409345A)
	ELECTIVE-I Food Technology (309345 B)
	ELECTIVE-I Polymer Engineering (309345 C)
	ELECTIVE-I Downstream Processing (309345 D)

CIVIL

SEM-I

Day & Date	2019 Course TIME 11.00 a.m. To 12.00 noon
Monday, 03/10/2022	Hydrology and Water Resources Engineering (301001)
Tuesday, 04/10/2022	Water Supply Engineering (301002)
Thursday, 06/10/2022	Design of Steel Structures (301003)
Friday, 07/10/2022	Engineering Economics and Financial Management (301004)
Monday, 10/10/2022	**ELECTIVE-I** Advanced Fluid Mechanics and Hydraulic Machines (301005 a)
	ELECTIVE-I Research Methodology and IPR (301005 b)
	ELECTIVE-I Construction Management. (301005 c)
	ELECTIVE-I Advanced Concrete Technology (301005 d)
	ELECTIVE-I Matrix Methods of Structural Analysis (301005 e)
	ELECTIVE-I Advanced Mechanics of Structures (301005 f)

COMPUTER

Day & Date	2019 Course TIME 11.00 a.m. To 12.00 noon
Monday, 03/10/2022	Database Management Systems (310241) *
Tuesday, 04/10/2022	Theory of Computation (310242)
Thursday, 06/10/2022	Systems Programming and Operating System (310243)
Friday, 07/10/2022	Computer Networks and Security (310244)
Monday, 10/10/2022	**ELECTIVE-I** Internet of Things and Embedded Systems (310245 A)
	ELECTIVE-I Human Computer Interface (310245 B)
	ELECTIVE-I Distributed Systems (310245 C)
	ELECTIVE-I Software Project Management (310245 D)

Note :- *Common with Artificial Intelligence and Data Science Engineering*

ELECTRICAL

Day & Date	2019 Course TIME 11.00 a.m. To 12.00 noon
Monday, 03/10/2022	Industrial and Technology Management (303141)
Tuesday, 04/10/2022	Power Electronics (303142)
Thursday, 06/10/2022	Electrical Machines-II (303143)
Friday, 07/10/2022	Electrical Installation Design and Condition Based Maintenance (303144)
Monday, 10/10/2022	**ELECTIVE-I** Advanced Microcontroller and Embedded System (303145 A)
	ELECTIVE-I Digital Signal Processing (303145 B)
	ELECTIVE-I Open Elective (303145 C)

ELECTRONICS

Day & Date	2019 Course TIME 11.00 a.m. To 12.00 noon
Monday, 03/10/2022	Power and Industrial Electronics (304201)
Tuesday, 04/10/2022	Electromagnetic Waves and Propagation Theory (404202)
Thursday, 06/10/2022	Database Management (304183) *
Friday, 07/10/2022	Microcontrollers and Applications (304204)
Monday, 10/10/2022	**ELECTIVE-I** Instrumentation systems (304205)
	ELECTIVE-I Machine Learning (304205)
	ELECTIVE-I Fundamentals of JAVA Programming (304185) *
	ELECTIVE-I Data Communication (304205)
	ELECTIVE-I Computer Networks (304205)
Note :- * *Common with E&TC Engineering*	

ELECTRONICS & TELECOMMUNICATION

SEM-I

Day & Date	2019 Course TIME 11.00 a.m. To 12.00 noon
Monday, 03/10/2022	Digital Communication (304181)
Tuesday, 04/10/2022	Electromagnetic Field Theory (304182)
Thursday, 06/10/2022	Database Management (304183) *****
Friday, 07/10/2022	Microcontrollers (304184)
Monday, 10/10/2022	**ELECTIVE-I** Digital Signal Processing (304185)
	ELECTIVE-I Electronic Measurements (304185)
	ELECTIVE-I Fundamentals of JAVA Programming (304185) *****
	ELECTIVE-I Computer Networks (304185)

Note :- *** Common with Electronics Engineering**

INFORMATION TECHNOLOGY

Day & Date	2019 Course TIME 11.00 a.m. To 12.00 noon
Monday, 03/10/2022	Theory of Computation (314441)
Tuesday, 04/10/2022	Operating Systems (314442)
Thursday, 06/10/2022	Machine Learning (314443)
Friday, 07/10/2022	Human Computer Interaction (314444)
Monday, 10/10/2022	**ELECTIVE-I** Design and Analysis of Algorithm (314445 A)
	ELECTIVE-I Advanced Database and Management System (314445 B)
	ELECTIVE-I Design Thinking (314445 C)
	ELECTIVE-I Internet of Things (314445 D)

INSTRUMENTATION & CONTROL

Day & Date	2019 Course TIME 11.00 a.m. To 12.00 noon
Monday, 03/10/2022	Embedded Systems (306261)
Tuesday, 04/10/2022	Industrial Automation-I (306262)
Thursday, 06/10/2022	Modern Control Theory (306263)
Friday, 07/10/2022	Operating System (306264)
Monday, 10/10/2022	**ELECTIVE-I** Mechatronics & Robotics (306265 A)
	ELECTIVE-I Data Science (306265 B)
	ELECTIVE-I Power Electronics (306265 C)
	ELECTIVE-I Bio-Medical Instrumentation (306265 D)

MECHANICAL

SEM-I

Day & Date	2019 Course TIME 11.00 a.m. To 12.00 noon
Monday, 03/10/2022	Numerical & Statistical Methods (302041) *
Tuesday, 04/10/2022	Heat & Mass Transfer (302042) *
Thursday, 06/10/2022	Design of Machine Elements (302043) *
Friday, 07/10/2022	Mechatronics (302044) *
Monday, 10/10/2022	**ELECTIVE-I** Advanced Forming & Joining Processes (302045-A) **
	ELECTIVE-I Machining Science & Technology (302045-B) **

NOTE:- *** Common With Mechanical Sandwich Engineering**
        **** Common with Automobile Engineering**

MECHANICAL-SANDWICH

Day & Date	2019 Course TIME 11.00 a.m. To 12.00 noon
Monday, 03/10/2022	Numerical & Statistical Methods (302041) *
Tuesday, 04/10/2022	Heat & Mass Transfer (302042) *
Thursday, 06/10/2022	Design of Machine Elements (302043) *
Friday, 07/10/2022	Mechatronics (302044) *
Monday, 10/10/2022	Fundamentals of Computer Aided Engineering (302061)

NOTE:- *Common With Mechanical Engineering*

B. Tech. Biotechnology

SEM-I

Day & Date	2019 Course TIME 11.00 a.m. To 12.00 noon
Monday, 03/10/2022	Analytical Techniques (315461)
Tuesday, 04/10/2022	Material Balances and Stoichiometry (315462)
Thursday, 06/10/2022	Genetic Engineering (315463)
Friday, 07/10/2022	Introduction to Immunology (315464)
Monday, 10/10/2022	**ELECTIVE-I** Enzyme Technology (315465 A)
	ELECTIVE-I Good Laboratory Practices and Good Manufacturing Practices (315465 B)
	ELECTIVE-I Agricultural Biotechnology (315465 C)

Printing

Day & Date	2019 Course TIME 11.00 a.m. To 12.00 noon
Monday, 03/10/2022	Print Statistics (308281)
Tuesday, 04/10/2022	Offset Printing Techniques (308282)
Thursday, 06/10/2022	Color Science and Measurement (308283)
Friday, 07/10/2022	Ink Technology (308284)
Monday, 10/10/2022	**ELECTIVE-I** Cyber Security (308286 A)
	ELECTIVE-I Wood, Glass and Metal Based Packaging (308286 B)
	ELECTIVE-I Engineering Ethics (308286 C)

Production

SEM-I

Day & Date	2019 Course TIME 11.00 a.m. To 12.00 noon
Monday, 03/10/2022	Engineering Metrology and Instrumentation (311081 (A)
Tuesday, 04/10/2022	Material Forming Technology (311082 (A)
Thursday, 06/10/2022	Machining Science and Technology (311083 (A)
Friday, 07/10/2022	Kinematics and Design of Machines (311084 (A)
Monday, 10/10/2022	**ELECTIVE-I** Finite Element Analysis (311085 (A)-I)
	ELECTIVE-I Advances in Manufacturing Processes (311085 (A)-II)
	ELECTIVE-I Mechatronics (311085 (A)-III)
	ELECTIVE-I Supply Chain Management (311085 (A)-IV)

Production Sandwich

SEM-I

Day & Date	2019 Course TIME 11.00 a.m. To 12.00 noon
Monday, 03/10/2022	Manufacturing Technology (Self Study) [311122] (A)

Electronics and Computer Engineering

SEM-I

Day & Date	2019 Course TIME 11.00 a.m. To 12.00 noon
Monday, 03/10/2022	Database Management Systems [310341]
Tuesday, 04/10/2022	Advanced Java Programming [310342]
Thursday, 06/10/2022	Data Communication [310343]
Friday, 07/10/2022	Microcontroller and Applications [310344]
Monday, 10/10/2022	**ELECTIVE-I** Distributed Systems [310345 A]
	ELECTIVE-I Block Chain Technology [310345 B]
	ELECTIVE-I Digital Signal Processing [310345 C]
	ELECTIVE-I Sensors and Applications [310345 D]

Mechatronics Engineering

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SEM-I

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Day & Date	2019 Course TIME 11.00 a.m. To 12.00 noon
Monday, 03/10/2022	Machine Design [317541]
Tuesday, 04/10/2022	Manufacturing Processes [317542]
Thursday, 06/10/2022	Control System [317543]
Friday, 07/10/2022	Digital Signal Processing [317544]
Monday, 10/10/2022	Microcontrollers [317545]

Robotics and Automation Engineering

SEM-I

Day & Date	2019 Course TIME 11.00 a.m. To 12.00 noon
Monday, 03/10/2022	Embedded systems in Robotics [311501] (A)
Tuesday, 04/10/2022	Hydraulics and Pneumatics [311502] (A)
Thursday, 06/10/2022	Robot Kinematics and Dynamics [311503] (A)
Friday, 07/10/2022	Sensors Technology [311504] (A)
Monday, 10/10/2022	**ELECTIVE-I** Statistics and Numerical Methods [311505] (A)-I
	ELECTIVE-I Finite Element Analysis [311505] (A)-II
	ELECTIVE-I Industrial Robotics and Material handling Systems [311505] (A)-III
	ELECTIVE-I Intelligent Manufacturing System [311505] (A)-IV

Artificial Intelligence and Data Science

SEM-I

Day & Date	2019 Course TIME 11.00 a.m. To 12.00 noon
Monday, 03/10/2022	Data Base Management System [310241] *
Tuesday, 04/10/2022	Computer Networks [317521]
Thursday, 06/10/2022	Web Technology [310252]
Friday, 07/10/2022	Artificial Intelligence [310253]
Monday, 10/10/2022	**ELECTIVE-I** Embedded Systems & Security [317522] (A)
	ELECTIVE-I Design Thinking [314445] (C)
	ELECTIVE-I Pattern Recognition [317522] (B)
	ELECTIVE-I Human Computer Interface [310245] (B)

Note :- *** Common with Computer Engineering***

Artificial Intelligence and Machine Learning

SEM-I

Day & Date	2019 Course TIME 11.00 a.m. To 12.00 noon
Monday, 03/10/2022	Design and analysis of Algorithm [318541]
Tuesday, 04/10/2022	IoT with Artificial Intelligence [318542]
Thursday, 06/10/2022	Web Technology [318543]
Friday, 07/10/2022	Management & Entrepreneurship for IT Industry [318544]
Monday, 10/10/2022	**ELECTIVE-I** Robotics [318545] (A)
	ELECTIVE-I Pattern Recognition [318545] (B)
	ELECTIVE-I Information Security [318545] (C)
	ELECTIVE-I Business Intelligence [318545] (D)

Day & Date	Honors / Minors	TIME 11.00 a.m. To 12.00 noon
Tuesday, 11/10/2022	Artificial Intelligence And Machine	Computational Statistics (310301)
	Cyber Security	Information and Cyber Security (310401)
	Data Science	Data Science and Visualization (310501)
	Internet of Things	Embedded Systems and Internet of Things (310601)
	Virtual Reality And Augmented Reality	Virtual Reality (310701)
	Systems Engineering	Foundations of systems & systems engineering (302041MJ)
	Energy Management in Utility Systems	Energy Management (302021MJ)
	Electric Vehicles	e-Vehicle Technology (302031MJ)
	3D Printing	Additive Manufacturing Technology (302011MJ)
	Robotics	Principles of Robotics (304181 HR)
	Block Chain Technology	Introduction to Block chain (304181 HBCT)
	Metro Construction	Surveying in Metro construction (301301)
	Architecture and Town Planning	Urban Housing and Infrastructure Planning (301401)
	Advanced Packaging Technology	Internet of Things (308211)

Ganeshkhind, Pune - 411 007

Ref.No/ XCT / 609

Date: 17 / 09 / 2022   **Director**

                                               Board of Examinations and Evaluation