

# **SAVITRIBAI PHULE PUNE UNIVERSITY**

**(Formerly University of Pune)**



**EXAMINATION CIRCULAR NO. 226 OF. 2025**

**THIRD YEAR ENGINEERING (2019 PATTERN)**

**Insem Examination of Winter session - 2025**

**(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.

## **AUTOMOBILE**

### **SEM-I**

<b>Day &amp; Date</b>	<b>2019 Course Time : 11:00 AM To 12:00 NOON</b>
Tuesday, 19/08/2025	Numerical & Optimization Methods (316481)
Wednesday, 20/08/2025	Heat Transfer (316482)
Thursday, 21/08/2025	Design of Machine Components (316483)
Friday, 22/08/2025	Automobile Electrical and Electronics (316484)
Saturday, 23/08/2025	<b>ELECTIVE-I</b> Advanced Forming & Joining Processes (302045-A)*
	<b>ELECTIVE-I</b> Machining Science and Technology (302045-B)*

Note :- \* Common with Mechanical

## **CHEMICAL**

### **SEM-I**

<b>Day &amp; Date</b>	<b>2019 Course Time : 11:00 AM To 12:00 NOON</b>
Tuesday, 19/08/2025	Mass Transfer-I (309341)
Wednesday, 20/08/2025	Chemical Technology -II (309342)
Thursday, 21/08/2025	Chemical Engineering Mathematics (309343)
Friday, 22/08/2025	Chemical Engineering Thermodynamics (309344)
Saturday, 23/08/2025	<b>ELECTIVE-I</b> Chemical Industry Management (409345A)
	<b>ELECTIVE-I</b> Food Technology (309345 B)
	<b>ELECTIVE-I</b> Polymer Engineering (309345 C)
	<b>ELECTIVE-I</b> Downstream Processing (309345 D)

**CIVIL****SEM-I**

<b>Day &amp; Date</b>	<b>2019 Course Time : 11:00 AM To 12:00 NOON</b>
Tuesday, 19/08/2025	Hydrology and Water Resources Engineering (301001)
Wednesday, 20/08/2025	Water Supply Engineering (301002)
Thursday, 21/08/2025	Design of Steel Structures (301003) # (Time : 11:00 AM To 12:15 PM)
Friday, 22/08/2025	Engineering Economics and Financial Management (301004)
Saturday, 23/08/2025	<b>ELECTIVE-I</b> Advanced Fluid Mechanics and Hydraulic Machines (301005 a)
	<b>ELECTIVE-I</b> Research Methodology and IPR (301005 b)
	<b>ELECTIVE-I</b> Construction Management. (301005 c)
	<b>ELECTIVE-I</b> Advanced Concrete Technology (301005 d)
	<b>ELECTIVE-I</b> Matrix Methods of Structural Analysis (301005 e)
	<b>ELECTIVE-I</b> Advanced Mechanics of Structures (301005 f)

**Note :- # Please Note the time**

**COMPUTER****SEM-I**

<b>Day &amp; Date</b>	<b>2019 Course Time : 11:00 AM To 12:00 NOON</b>
Tuesday, 19/08/2025	Database Management Systems (310241) * #
Wednesday, 20/08/2025	Theory of Computation (310242) #
Thursday, 21/08/2025	Systems Programming and Operating System (310243) #
Friday, 22/08/2025	Computer Networks and Security (310244)
Saturday, 23/08/2025	<b>ELECTIVE-I</b> Internet of Things and Embedded Systems (310245 A) #
	<b>ELECTIVE-I</b> Human Computer Interface (310245 B) #
	<b>ELECTIVE-I</b> Distributed Systems (310245 C) #
	<b>ELECTIVE-I</b> Software Project Management (310245 D) #

**Note :- \* Common with A.I.D.S. / # Common with Computer Science**

## **ELECTRICAL**

### **SEM-I**

<b>Day &amp; Date</b>	<b>2019 Course Time : 11:00 AM To 12:00 NOON</b>
Tuesday, 19/08/2025	Industrial and Technology Management (303141)
Wednesday, 20/08/2025	Power Electronics (303142)
Thursday, 21/08/2025	Electrical Machines-II (303143)
Friday, 22/08/2025	Electrical Installation Design and Condition Based Maintenance (303144)
Saturday, 23/08/2025	<b>ELECTIVE-I</b> Advanced Microcontroller and Embedded System (303145 A)
	<b>ELECTIVE-I</b> Digital Signal Processing (303145 B)
	<b>ELECTIVE-I</b> Open Elective (303145 C)

## **ELECTRONICS**

### **SEM-I**

<b>Day &amp; Date</b>	<b>2019 Course Time : 11:00 AM To 12:00 NOON</b>
Tuesday, 19/08/2025	Power and Industrial Electronics (304201)
Wednesday, 20/08/2025	Electromagnetic Waves and Propagation Theory (304202)
Thursday, 21/08/2025	Database Management (304183) *
Friday, 22/08/2025	Microcontrollers and Applications (304204)
Saturday, 23/08/2025	<b>ELECTIVE-I</b> Instrumentation systems (304205 )
	<b>ELECTIVE-I</b> Machine Learning (304205 )
	<b>ELECTIVE-I</b> Fundamentals of JAVA Programming (304185) *
	<b>ELECTIVE-I</b> Data Communication (304205 )
	<b>ELECTIVE-I</b> Computer Networks (304205 )
<b>Note :-</b> * Common with E&TC	

## **ELECTRONICS & TELECOMMUNICATION**

### **SEM-I**

<b>Day &amp; Date</b>	<b>2019 Course Time : 11:00 AM To 12:00 NOON</b>
Tuesday, 19/08/2025	Digital Communication (304181) #
Wednesday, 20/08/2025	Electromagnetic Field Theory (304182)
Thursday, 21/08/2025	Database Management (304183) * \$
Friday, 22/08/2025	Microcontrollers (304184) # \$
Saturday, 23/08/2025	<b>ELECTIVE-I</b> Digital Signal Processing (304185 )
	<b>ELECTIVE-I</b> Electronic Measurements (304185 )
	<b>ELECTIVE-I</b> Fundamentals of JAVA Programming (304185 ) *
	<b>ELECTIVE-I</b> Computer Networks (304185 )
<b>Note :-</b> * Common with Electronics / # Electronics Engineering (VLSI Design and Technology) \$ Electronics & Communication – Advanced Communication Technology	

## **INFORMATION TECHNOLOGY**

### **SEM-I**

<b>Day &amp; Date</b>	<b>2019 Course Time : 11:00 AM To 12:00 NOON</b>
Tuesday, 19/08/2025	Theory of Computation (314441)
Wednesday, 20/08/2025	Operating Systems (314442)
Thursday, 21/08/2025	Machine Learning (314443)
Friday, 22/08/2025	Human Computer Interaction (314444)
Saturday, 23/08/2025	<b>ELECTIVE-I</b> Design and Analysis of Algorithm (314445 A)
	<b>ELECTIVE-I</b> Advanced Database and Management System (314445 B)
	<b>ELECTIVE-I</b> Design Thinking (314445 C)
	<b>ELECTIVE-I</b> Internet of Things (314445 D)

## **INSTRUMENTATION & CONTROL**

### **SEM-I**

<b>Day &amp; Date</b>	<b>2019 Course Time : 11:00 AM To 12:00 NOON</b>
Tuesday, 19/08/2025	Embedded Systems (306261)
Wednesday, 20/08/2025	Industrial Automation-I (306262)
Thursday, 21/08/2025	Modern Control Theory (306263)
Friday, 22/08/2025	Operating System (306264)
Saturday, 23/08/2025	<b>ELECTIVE-I</b> Mechatronics & Robotics (306265 A)
	<b>ELECTIVE-I</b> Data Science (306265 B)
	<b>ELECTIVE-I</b> Power Electronics (306265 C)
	<b>ELECTIVE-I</b> Bio-Medical Instrumentation (306265 D)

## **MECHANICAL**

### **SEM-I**

<b>Day &amp; Date</b>	<b>2019 Course Time : 11:00 AM To 12:00 NOON</b>
Tuesday, 19/08/2025	Numerical & Statistical Methods (302041) *
Wednesday, 20/08/2025	Heat & Mass Transfer (302042) *
Thursday, 21/08/2025	Design of Machine Elements (302043) *
Friday, 22/08/2025	Mechatronics (302044) *
Saturday, 23/08/2025	<b>ELECTIVE-I</b> Advanced Forming & Joining Processes (302045-A) **
	<b>ELECTIVE-I</b> Machining Science & Technology (302045-B) **

NOTE:- \* **Common to Mechanical Sandwich Engineering**  
\*\* **Common to Automobile Engineering**

## **MECHANICAL-SANDWICH**

### SEM-I

Day & Date	2019 Course Time : 11:00 AM To 12:00 NOON
Tuesday, 19/08/2025	Numerical & Statistical Methods (302041) *
Wednesday, 20/08/2025	Heat & Mass Transfer (302042) *
Thursday, 21/08/2025	Design of Machine Elements (302043) *
Friday, 22/08/2025	Mechatronics (302044) *
Saturday, 23/08/2025	Fundamentals of Computer Aided Engineering (302061)

NOTE:- \* **Common to Mechanical Engineering**

## **B. Tech. Biotechnology**

### SEM-I

Day & Date	2019 Course Time : 11:00 AM To 12:00 NOON
Tuesday, 19/08/2025	Analytical Techniques (315461)
Wednesday, 20/08/2025	Material Balances and Stoichiometry (315462)
Thursday, 21/08/2025	Genetic Engineering (315463)
Friday, 22/08/2025	Introduction to Immunology (315464)
Saturday, 23/08/2025	<b>ELECTIVE-I</b> Enzyme Technology (315465 A)
	<b>ELECTIVE-I</b> Good Laboratory Practices and Good Manufacturing Practices (315465 B)
	<b>ELECTIVE-I</b> Agricultural Biotechnology (315465 C )

**Printing**  
SEM-I

Day & Date	2019 Course Time : 11:00 AM To 12:00 NOON
Tuesday, 19/08/2025	Print Statistics (308281)
Wednesday, 20/08/2025	Offset Printing Techniques (308282)
Thursday, 21/08/2025	Color Science and Measurement (308283)
Friday, 22/08/2025	Ink Technology (308284)
Saturday, 23/08/2025	<b>ELECTIVE-I</b> Cyber Security (308286 A)
	<b>ELECTIVE-I</b> Wood, Glass and Metal Based Packaging (308286 B)
	<b>ELECTIVE-I</b> Engineering Ethics (308286 C )

**Production**  
SEM-I

Day & Date	2019 Course Time : 11:00 AM To 12:00 NOON
Tuesday, 19/08/2025	Engineering Metrology and Instrumentation (311081) (A)
Wednesday, 20/08/2025	Material Forming Technology (311082) (A)
Thursday, 21/08/2025	Machining Science and Technology (311083 )(A)
Friday, 22/08/2025	Kinematics and Design of Machines (311084 )(A)
Saturday, 23/08/2025	<b>ELECTIVE-I</b> Finite Element Analysis (311085) (A)-I)
	<b>ELECTIVE-I</b> Advances in Manufacturing Processes (311085) (A)-II)
	<b>ELECTIVE-I</b> Mechatronics (311085) (A)-III )
	<b>ELECTIVE-I</b> Supply Chain Management (311085 )(A)-IV )



# Production Sandwich

## SEM-I

Day & Date	2019 Course Time : 11:00 AM To 12:00 NOON
Tuesday, 19/08/2025	Manufacturing Technology (Self Study) (311122 )(A)

# Automation and Robotics

## SEM-I

Day & Date	2019 Course Time : 11:00 AM To 12:00 NOON
Tuesday, 19/08/2025	Design of Robot Elements (302521 )
Wednesday, 20/08/2025	Robot Kinematics and Dynamics (302522 )
Thursday, 21/08/2025	Computer Aided Engineering and Manufacturing (302523 )
Friday, 22/08/2025	Signal Processing and Conditioning (302524 )
Saturday, 23/08/2025	<b>ELECTIVE-I</b> Advanced Forming & Joining Processes (302525-A )
	<b>ELECTIVE-I</b> Optimization Techniques (302525-B)

# Electronics and Computer Engineering

## SEM-I

Day & Date	2019 Course Time : 11:00 AM To 12:00 NOON
Tuesday, 19/08/2025	Database Management Systems [310341]
Wednesday, 20/08/2025	Advanced Java Programming [310342]
Thursday, 21/08/2025	Data Communication [310343]
Friday, 22/08/2025	Microcontroller and Applications [310344]
Saturday, 23/08/2025	<b>ELECTIVE-I</b> Distributed Systems [310345 A]
	<b>ELECTIVE-I</b> Block Chain Technology [310345 B]
	<b>ELECTIVE-I</b> Digital Signal Processing [310345 C]
	<b>ELECTIVE-I</b> Sensors and Applications [310345 D]

# Mechatronics Engineering

## SEM-I

Day & Date	2019 Course Time : 11:00 AM To 12:00 NOON
Tuesday, 19/08/2025	Machine Design [317541]
Wednesday, 20/08/2025	Manufacturing Processes [317542]
Thursday, 21/08/2025	Control System [317543]
Friday, 22/08/2025	Digital Signal Processing [317544]
Saturday, 23/08/2025	Microcontrollers [317545]

# Robotics and Automation Engineering

## SEM-I

Day & Date	2019 Course Time : 11:00 AM To 12:00 NOON
Tuesday, 19/08/2025	Embedded systems in Robotics [311501] (A)
Wednesday, 20/08/2025	Hydraulics and Pneumatics [311502] (A)
Thursday, 21/08/2025	Robot Kinematics and Dynamics [311503] (A)
Friday, 22/08/2025	Sensors Technology [311504] (A)
Saturday, 23/08/2025	<b>ELECTIVE-I</b> Statistics and Numerical Methods [311505] (A)-I
	<b>ELECTIVE-I</b> Finite Element Analysis [311505] (A)-II
	<b>ELECTIVE-I</b> Industrial Robotics and Material handling Systems [311505] (A)-III
	<b>ELECTIVE-I</b> Intelligent Manufacturing System [311505] (A)-IV

# Artificial Intelligence and Data Science

## SEM-I

Day & Date	2019 Course Time : 11:00 AM To 12:00 NOON
Tuesday, 19/08/2025	Data Base Management System [310241] *
Wednesday, 20/08/2025	Computer Networks [317521]
Thursday, 21/08/2025	Web Technology [310252]
Friday, 22/08/2025	Artificial Intelligence [310253]
Saturday, 23/08/2025	<b>ELECTIVE-I</b> Embedded Systems & Security [317522] (A)
	<b>ELECTIVE-I</b> Design Thinking [314445] (C)
	<b>ELECTIVE-I</b> Pattern Recognition [317522] (B)
	<b>ELECTIVE-I</b> Human Computer Interface [310245] (B)

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

# Artificial Intelligence and Machine Learning

## SEM-I

Day & Date	2019 Course Time : 11:00 AM To 12:00 NOON
Tuesday, 19/08/2025	Design and analysis of Algorithm [318541]
Wednesday, 20/08/2025	IoT with Artificial Intelligence [318542]
Thursday, 21/08/2025	Web Technology [318543]
Friday, 22/08/2025	Management & Entrepreneurship for IT Industry [318544]
Saturday, 23/08/2025	<b>ELECTIVE-I</b> Robotics [318545] (A)
	<b>ELECTIVE-I</b> Pattern Recognition [318545] (B)
	<b>ELECTIVE-I</b> Information Security [318545] (C)
	<b>ELECTIVE-I</b> Business Intelligence [318545] (D)

# Computer Science and Design

## SEM-I

Day & Date	2019 Course Time : 11:00 AM To 12:00 NOON
Tuesday, 19/08/2025	Software Engineering and Project Management [318241]
Wednesday, 20/08/2025	Theory of Computation [318242]
Thursday, 21/08/2025	Database System Design [318243]
Friday, 22/08/2025	Design and analysis of Algorithm [318244]
Saturday, 23/08/2025	<b>ELECTIVE-I</b> Internet of Things [318245] (A)
	<b>ELECTIVE-I</b> Pattern Recognition [318245] (B)
	<b>ELECTIVE-I</b> Distributed Systems [318245] (C)
	<b>ELECTIVE-I</b> Data Mining and warehousing [318245] (D)

# Computer Science and Engineering in Data Science

## SEM-I

Day & Date	2019 Course Time : 11:00 AM To 12:00 NOON
Tuesday, 19/08/2025	Data Warehousing & Mining [310641]
Wednesday, 20/08/2025	Computer Networks and Security [310244]
Thursday, 21/08/2025	Artificial Intelligence [310643]
Friday, 22/08/2025	Theory of Computation [310242]
Saturday, 23/08/2025	<b>ELECTIVE-I</b> Human Computer Interface [310645 A]
	<b>ELECTIVE-I</b> Internet of Things and Embedded System [310645 B]
	<b>ELECTIVE-I</b> Software Modeling and Design [310645 C]
	<b>ELECTIVE-I</b> Pattern Recognition [310645 D]

# Computer Science

## SEM-I

Day & Date	2019 Course Time : 11:00 AM To 12:00 NOON
Tuesday, 19/08/2025	Database Management Systems [310241]*
Wednesday, 20/08/2025	Theory of Computation [310242]*
Thursday, 21/08/2025	Systems Programming and Operating System [310243]*
Friday, 22/08/2025	TCP/IP Networking [310544]
Saturday, 23/08/2025	<b>ELECTIVE-I</b> Internet of Things and Embedded Systems [310245]*
	<b>ELECTIVE-I</b> Human Computer Interface [310245]*
	<b>ELECTIVE-I</b> Distributed Systems [310245]*
	<b>ELECTIVE-I</b> Software Project Management [310245]*

Note: \* : These are the subjects common with TE Computer Engineering

## Electronics Engineering (VLSI Design and Technology)

### SEM-I

Day & Date	2019 Course Time : 11:00 AM To 12:00 NOON
Tuesday, 19/08/2025	Digital Communication [304181]*
Wednesday, 20/08/2025	Computer Architecture [304401]
Thursday, 21/08/2025	Analog and Digital CMOS Design [304402]
Friday, 22/08/2025	Microcontrollers [304184]*
Saturday, 23/08/2025	<b>ELECTIVE-I</b> Database Management [304403]
	<b>ELECTIVE-I</b> Design for testability [304403]
	<b>ELECTIVE-I</b> Statistics and Numerical Techniques [304403]
	<b>ELECTIVE-I</b> Computer Networks [304403]

\* These courses are common with TE (E&TC) Engg 2019 Pattern

## Electronics & Communication - Advanced Communication Technology

### SEM-I

Day & Date	2019 Course Time : 11:00 AM To 12:00 NOON
Tuesday, 19/08/2025	Cellular Networks [304301]
Wednesday, 20/08/2025	Radiation and Microwave Techniques [304302]
Thursday, 21/08/2025	Database Management [304183]*
Friday, 22/08/2025	Microcontrollers [304184]*
Saturday, 23/08/2025	<b>ELECTIVE-I</b> Electronic Measurements [304303]
	<b>ELECTIVE-I</b> Fundamentals of JAVA Programming [304303]
	<b>ELECTIVE-I</b> Computer Networks [304303]
	<b>ELECTIVE-I</b> Network Security [304303]

\* These subjects are common with TE (E&TC) Engg 2019 Pattern

## **HONORS / MINORS**

### **SEM-I**

<b>Day &amp; Date</b>	<b>Honors / Minors</b>	<b>Time : Time : 11:00 AM To 12:00 NOON</b>
<b>Monday, 25/08/2025</b>	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/ Exam/Coord/692**

**Date: 06 / 08 / 2025**

**Director**

**Board of Examinations and Evaluation**