



## THE INSTITUTION OF ENGINEERS (INDIA)

### WINTER 2019 Examination

The Winter 2019 Examinations of Sections 'A' and 'B' shall be conducted at 70 Examination Centres in India and abroad during **December 7-13, 2019**.

**Applications submitted during the period mentioned hereunder shall only be considered for Winter 2019 Examinations.**

Candidates not applied / applied but not appeared at Summer 2019 Examination	From August 19 to September 23, 2019
Candidates appeared at Summer 2019 Examination	From September 24 to October 31, 2019

#### Examination fee

	For India and Nepal (Rs.)	For Overseas Centres (US \$)
<b>Section A (Diploma), Section A (Non-diploma) &amp; Section B</b>	<b>Rs .3000</b>	<b>US\$ 225</b> (Through Demand Draft only)

**Maximum number of subjects that a student can appear in one term: 4 subjects**

**The programme for Winter 2019 examination is given below**

# PROGRAMME OF WINTER 2019 EXAMINATION

DAY (DATE OF EXAMINATION)	SESSION	SECTION A	
		NON-DIPLOMA SCHEME	DIPLOMA SCHEME
FIRST DAY (SATURDAY) 07.12.2019	1000 h to 1300 h	<b>AN 201</b> Fundamentals of Design and Manufacturing	<b>AD 301</b> Fundamentals of Design and Manufacturing
	1430 h to 1730 h		
SECOND DAY (SUNDAY) 08.12.2019	1000 h to 1300 h	<b>AN 202</b> Material Science and Engineering	<b>AD 302</b> Material Science and Engineering
	1430 h to 1730 h		
THIRD DAY (MONDAY) 09.12.2019	1000 h to 1300 h	<b>AN 203</b> Computing and Informatics	<b>AD 303</b> Computing and Informatics
	1430 h to 1730 h		
FOURTH DAY (TUESDAY) 10.12.2019	1000 h to 1300 h	<b>AN 204</b> Society and Environment	<b>AD 304</b> Society and Environment
	1430 h to 1730 h		
FIFTH DAY (WEDNESDAY) 11.12.2019	1000 h to 1300 h	<b>AN 205</b> Mechanical Science	
	1430 h to 1730 h	<b>AN 206</b> Engineering Physics and Chemistry	
SIXTH DAY (THURSDAY) 12.12.2019	1000 h to 1300 h	<b>AN 207</b> Engineering Drawing and Graphics	
	1430 h to 1730 h	<b>AN 208</b> Electronics and Instrumentation	
SEVENTH DAY (FRIDAY) 13.12.2019	1000 h to 1300 h	<b>AN 209</b> Engineering Mathematics	
	1430 h to 1730 h	<b>AN 210</b> Electrical Science	

SECTION B	
CHEMICAL ENGINEERING (BRANCH CODE 04)	CIVIL ENGINEERING (BRANCH CODE 05)
<b>CH 411</b> Mass Transfer Operations <b>CH 421</b> Fuels and Combustion	<b>CV 411</b> Advanced Structural Analysis <b>CV 421</b> Principles of Environmental Engineering
	<b>CV 431</b> Transportation Engineering
<b>CH 412</b> Heat Transfer Operations <b>CH 422</b> Biochemical Engineering	<b>CV 432</b> Traffic and Transportation Systems
<b>CH 432</b> Petrochemical Engineering	<b>CV 425</b> Waste Management and Environmental Impact Assessment
<b>IC 402</b> Engineering Management	
<b>CH 431</b> Polymer Materials and Technology	<b>CV 412</b> Design of RCC and Prestressed Concrete Structures <b>CV 422</b> Environmental Engineering -- Processes and Management
<b>CH 403</b> Chemical Reaction Engineering	<b>CV 403</b> Civil Engineering Materials and Construction Practices
<b>CH 404</b> Transport Phenomena	<b>CV 404</b> Geotechnical and Foundation Engineering
<b>CH 413 / 423</b> Mechanical Operations <b>CH 433</b> Industrial Pollution and Control	<b>CV 413</b> Design of Steel Structures <b>CV 423</b> Air Pollution and Its Control <b>CV 433</b> Town Planning and Urban Development
<b>CH 405</b> Chemical Engineering Thermodynamics	<b>CV 405</b> Water Resources Systems
<b>CH 406</b> Chemical Process Principles	<b>CV 406</b> Principles of Geoinformatics
<b>CH 414</b> Fluid Mechanics <b>CH 424</b> Chemical Process Technology <b>CH 434</b> Fertilizer Technology	<b>CV 414</b> Structural Dynamics <b>CV 424 / 434</b> Design of Water and Wastewater Treatment Systems
<b>CH 415 / 425 / 435</b> Instrumentation and Control	<b>CV 415</b> Seismic Design of Structures <b>CV 435</b> Construction Management Systems
<b>CH 407</b> Chemical Engineering Equipment Design	<b>CV 407</b> Analysis and Design of Structures

# PROGRAMME OF WINTER 2019 EXAMINATION

DAY (DATE OF EXAMINATION)	SESSION	SECTION B			
		COMPUTER SCIENCE AND ENGINEERING (BRANCH CODE 06)	ELECTRICAL ENGINEERING (BRANCH CODE 07)	ELECTRONICS AND COMMUNICATION ENGINEERING (BRANCH CODE 08)	MECHANICAL ENGINEERING (BRANCH CODE 11)
FIRST DAY (SATURDAY) 07.12.2019	1000 h to 1300 h	<b>CP 411</b> Graph Theory and Combinatorics <b>CP 421</b> Parallel Processing	<b>EL 411</b> Energy Systems <b>EL 421</b> Advanced Aspects of Electrical Machines	<b>EC 411</b> Broadcast and Television Engineering <b>EC 421</b> Digital Hardware Design	<b>MC 423</b> Analysis and Synthesis of Mechanisms and Machines <b>MC 431</b> Manufacturing Science
	1430 h to 1730 h	<b>CP 431</b> Pattern Recognition and Image Processing	<b>EL 431</b> Control Theory	<b>EC 431</b> Sensors and Transducers	<b>MC 411</b> Refrigeration and Air-conditioning
SECOND DAY (SUNDAY) 08.12.2019	1000 h to 1300 h	<b>CP 415</b> Database Management Systems <b>CP 435</b> Software Engineering	<b>EL 414</b> Power System Performance	<b>EC 415</b> Computer Networks and Communication <b>EC 425</b> Software Engineering	<b>MC 421</b> Design of Mechanical Systems
	1430 h to 1730 h		<b>EL 424</b> Electrical Power Utilisation <b>EL 434</b> Instrumentation Systems	<b>EC 432</b> Industrial Instrumentation and Computer Control	<b>MC 413</b> Non-conventional Energy Systems <b>MC 433</b> Tool and Die Design
THIRD DAY (MONDAY) 09.12.2019	1000 h to 1300 h	<b>IC 402</b> Engineering Management			
	1430 h to 1730 h	<b>CP 412 / 422</b> Computer Networks <b>CP 432</b> Theory of Computation	<b>EL 412 / 422 / 432</b> Power Electronics	<b>EC 413</b> Microwave Engineering <b>EC 423</b> IC Design Techniques <b>EC 433</b> Biomedical Electronics	<b>MC 412</b> Power Plant Engineering <b>MC 422</b> Optimisation-Theory and Applications <b>MC 432</b> Computer Aided Manufacturing
FOURTH DAY (TUESDAY) 10.12.2019	1000 h to 1300 h	<b>CP 403</b> Data Structures	<b>EL 403</b> Power Systems	<b>EC 403</b> Communication Engineering	<b>MC 403</b> Mechanics of Solids
	1430 h to 1730 h	<b>CP 404</b> Programming Languages	<b>EL 404</b> Circuit and Field Theory	<b>EC 404</b> Circuit Theory and Control	<b>MC 434</b> Manufacturing Automation
FIFTH DAY (WEDNESDAY) 11.12.2019	1000 h to 1300 h	<b>CP 413 / 423 / 433</b> Operating Systems	<b>EL 413</b> High Voltage Engineering and Power Apparatus <b>EL 423</b> Electrical Drives <b>EL 433</b> Process Control Systems	<b>EC 435</b> Control Systems	<b>MC 404</b> Mechanics of Fluids
	1430 h to 1730 h	<b>CP 405</b> Pulse and Digital Circuits	<b>EL 405</b> Electrical Machines	<b>EC 412</b> Radar and Antenna Engineering <b>EC 422</b> Pulse and Digital Circuits	<b>MC 415</b> Turbomachinery <b>MC 425</b> Computer Aided Engineering Design <b>MC 435</b> Production Management
SIXTH DAY (THURSDAY) 12.12.2019	1000 h to 1300 h	<b>CP 406</b> Computer Architecture	<b>EL 406</b> Measurements and Control	<b>EC 406</b> Electronic Circuits	<b>MC 406</b> Manufacturing Technology
	1430 h to 1730 h	<b>CP 425</b> Microprocessors and Microcontrollers	<b>EL 415/425/435</b> Microprocessors and Microcontrollers	<b>EC 405</b> Microprocessors and Microcontrollers	<b>MC 405</b> Thermal Science and Engineering
SEVENTH DAY (FRIDAY) 13.12.2019	1000 h to 1300 h	<b>CP 414</b> Artificial Intelligence <b>CP 424 / 434</b> Computer Graphics		<b>EC 414</b> Optical and Satellite Communication <b>EC 424</b> Solid State Physics and Semiconductor Devices <b>EC 434</b> Signal Processing	<b>MC 414</b> Internal Combustion Engines <b>MC 424</b> Design of Machine Tools
	1430 h to 1730 h	<b>CP 407</b> Systems Analysis and Design	<b>EL 407</b> Design of Electrical Systems	<b>EC 407</b> Design of Electronic Devices and Circuits	<b>MC 407</b> Design of Machine Elements

# PROGRAMME OF WINTER 2019 EXAMINATION

DAY (DATE OF EXAMINATION)	SESSION	SECTION B			
		MATERIALS AND METALLURGICAL ENGINEERING (BRANCH CODE 12)	MINING ENGINEERING (BRANCH CODE 13)	PRODUCTION ENGINEERING (BRANCH CODE 14)	TEXTILE ENGINEERING (BRANCH CODE 15)
FIRST DAY (SATURDAY) 07.12.2019	1000 h to 1300 h	<b>MM 411</b> Mineral Engineering	<b>MN 411</b> Advanced Mine Ventilation <b>MN 421</b> Mine Systems Engineering	<b>PR 411</b> Manufacturing Science <b>PR 421</b> Facility Planning, Design and Maintenance	<b>TX 411</b> Advanced Yarn Manufacture
	1430 h to 1730 h	<b>MM 432</b> Welding and Allied Processes	<b>MN 431</b> Advanced Rock Mechanics	<b>PR 431</b> Materials Management	<b>TX 421</b> Advanced Fabric Manufacture and Design
SECOND DAY (SUNDAY) 08.12.2019	1000 h to 1300 h	<b>MM 412</b> Fuels, Furnaces and Refractories <b>MM 422</b> Electrometallurgy and Corrosion	<b>MN 412</b> Environmental Pollution and Control in Mines <b>MN 422</b> Economics of Mining Enterprises	<b>PR 425</b> Work Study and Ergonomics	
	1430 h to 1730 h		<b>MN 432</b> Advanced Methods of Mining	<b>PR 413</b> Tool and Die Design	<b>TX 431</b> Advanced Chemical Processing and Finishing
THIRD DAY (MONDAY) 09.12.2019	1000 h to 1300 h	<b>IC 402</b> Engineering Management			
	1430 h to 1730 h	<b>MM 421 / 431</b> Polymer Materials and Technology	<b>MN 414 / 434</b> Mine Surveying	<b>PR 412/432</b> Computer Aided Manufacturing <b>PR 422</b> Project Management	<b>TX 412</b> Modern Yarn Production and Control Systems <b>TX 422</b> Non-woven, Knitting and Industrial Fabrics <b>TX 432</b> Garment Technology
FOURTH DAY (TUESDAY) 10.12.2019	1000 h to 1300 h	<b>MM 403</b> Metallurgical Thermodynamics and Kinetics	<b>MN 403</b> Mining Geology and Development of Mineral Deposits	<b>PR 403</b> Mechanics of Solids	<b>TX 403</b> Textile Fibres and Testing
	1430 h to 1730 h	<b>MM 404</b> Extractive Metallurgy	<b>MN 404</b> Exploitation of Mineral Deposits	<b>PR 404</b> Manufacturing Automation	<b>TX 404</b> Yarn Manufacture
FIFTH DAY (WEDNESDAY) 11.12.2019	1000 h to 1300 h	<b>MM 413</b> Ferrous Extractive Metallurgy <b>MM 423/433</b> Advanced Physical Metallurgy	<b>MN 413</b> Electrical Equipment and Instrumentation in Mines <b>MN 423</b> Geostatistics <b>MN 433</b> Mine Planning and Excavation	<b>PR 423/433</b> Quality Management	<b>TX 413/423</b> Engineering Design of Textile Structures <b>TX 433</b> Chemistry and Technology of Man-made Fibres
	1430 h to 1730 h	<b>MM 405</b> Mechanical Behaviour of Materials	<b>MN 405</b> Mining Machinery and Material Handling	<b>PR 405</b> Production Management	<b>TX 405</b> Fabric Manufacture and Design
SIXTH DAY (THURSDAY) 12.12.2019	1000 h to 1300 h	<b>MM 406</b> Physical Metallurgy	<b>MN 406</b> Mine Ventilation and Environmental Hazards	<b>PR 406</b> Manufacturing Technology	<b>TX 406</b> Chemical Processing and Finishing
	1430 h to 1730 h	<b>MM 414</b> Non-ferrous Extractive Metallurgy <b>MM 424</b> Materials Characterisation <b>MM 434</b> Foundry Engineering	<b>MN 424</b> Quality, Reliability and Safety in Mines	<b>PR 415</b> Inspection and Product Control <b>PR 424 / 434</b> Operations Research	<b>TX 414 / 424</b> Textile Machinery and Maintenance <b>TX 434</b> Energy Conservation, Environmental and Pollution Control
SEVENTH DAY (FRIDAY) 13.12.2019	1000 h to 1300 h	<b>MM 415</b> Instrumentation and Control <b>MM 425</b> Ceramic Materials <b>MM 435</b> Mechanical Working Processes	<b>MN 415 / 425 / 435</b> Mine Management and Legislation	<b>PR 414</b> Design of Machine Tools <b>PR 435</b> Operations Planning and Control	<b>TX 415 / 425 / 435</b> Mill Organisation, Process Economics and Quality Control
	1430 h to 1730 h	<b>MM 407</b> Metallurgical Design	<b>MN 407</b> Geomechanics and Mine Design	<b>PR 407</b> Design of Machine Elements	<b>TX 407</b> Design and Mechanisms of Textile Machines