

GATE 2018 Online Test Series - Electronics and Communication Engineering

Test No	Type of test	Test Live from	Test details	Test Syllabus	Difficulty level	No of questions	Max Marks	Test duration
1			Networks-I	Fundamentals	Easy	20	40	60 min
2			Networks-II	DC Network Theorems & Two port Networks	Easy	20	40	60 min
3			Networks-III	Inductors & Capacitors, DC Transients	Easy	20	40	60 min
4			Networks-IV	AC Circuits, Graph theory	Easy	20	40	60 min
5			Basic Electronics Engineering-I	Basics of Semiconductors, Basics of Diodes	Easy	20	40	60 min
6			Basic Electronics Engineering-II	Transistors(BJT,JFET,MOSFET), Basics of IC's, Bipolar MOS and CMOS IC's, Opto Electronics and its applications	Easy	20	40	60 min
7			Basic Electronics Engineering-III	Oscillators, Operational amplifiers and its applications	Easy	20	40	60 min
8			Analog Circuits-I	Small Signal modelling of diodes, BJT, JFET,MOSFET and Diode circuit applications	Easy	20	40	60 min
9			Analog Circuits-II	Biasing and Stability of BJT, JFET Single stage, multi stage amplifiers, analysis and design	Easy	20	40	60 min
10			Analog Circuits-III	Feedback amplifiers analysis and design, Active Filters, Timers, Multipliers, Waveshaping	Easy	20	40	60 min
11			Digital Circuits-I	Number system, Boolean Algebra, Logic Gates, KMAP	Easy	20	40	60 min
12			Digital Circuits-II	Digital Circuits	Easy	20	40	60 min
13			Digital Circuits-III	Digital IC families and A/D , D/A converters, Memories	Easy	20	40	60 min
14			Signals and Systems-I	Fundamentals, Classification of Continuous Time & Discrete Time, LTIO Systems, application of Signals & Systems	Easy	20	40	60 min
15			Signals and Systems-II	Transforms & their Applications (Fourier Series, Fourier Transforms, Laplace, Z- Transforms)	Easy	20	40	60 min
16			Control Systems-I	Fundamentals, Block diagram, Signal Flow Graph	Easy	20	40	60 min
17			Control Systems-II	Time Response Analysis	Easy	20	40	60 min
18			Control Systems-III	Frequency Responce Analysis	Easy	20	40	60 min

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Section Test -
Partial Syllabus

7th June 2017
Onwards

Control Systems-IV	State Space Analysis, Controllability, Observability, PID & Industrial Controllers	Easy	20	40	60 min
Analog & Digital Communication systems-I	Analog Communications(AM,FM,Receivers, Noise of analog communications)	Easy	20	40	60 min
Analog & Digital Communication systems-II	Digital Communications(ASK,FSK,PCM,DPCM,TDMA,FDMA,CD	Easy	20	40	60 min
Analog & Digital Communication systems-III	Random Signals, Information theory	Easy	20	40	60 min
Electromagnetics-I	Electrostatics, Magnetostatics, Maxwell equation	Easy	20	40	60 min
Electromagnetics-II	Basics of Vector Calculus, Plane Waves, Wave equation, Skin depth	Easy	20	40	60 min
Electromagnetics-III	Transmission lines	Easy	20	40	60 min
Electromagnetics-IV	Antennas, Wave Guides	Easy	20	40	60 min
Materials Science-I	Bonding in Solids, Crystallography and crystal structures	Easy	20	40	60 min
Materials Science-II	Dielectric and Magnetic Properties	Easy	20	40	60 min
Materials Science-III	Conductive Materials, Superconductivity, Ceramic materials and Nano Materials	Easy	20	40	60 min
Electronic Measurements and Instrumentation-I	Basic Concepts and Error Analysis, static and dynamic characteristics of measuring instruments ,	Easy	20	40	60 min
Electronic Measurements and Instrumentation-II	Power and Energy Measurement, Measurement of Resistance, Inductance and Capacitance	Easy	20	40	60 min
Electronic Measurements and Instrumentation-III	Electronic Instruments(C.R.O, Digital Voltmeter, Q meter)	Easy	20	40	60 min
Electronic Measurements and Instrumentation-IV	Measurements of Non-Electrical Quantity, Basics of Data Acquisition Systems	Easy	20	40	60 min
Basic Electrical Engineering-I	Induction machines and Transformer	Easy	20	40	60 min
Basic Electrical Engineering-II	Synchronous Machines, DC Machines	Easy	20	40	60 min
Basic Electrical Engineering-III	Electrical Power sources, Basics of Batteries and their uses	Easy	20	40	60 min
Advanced Communication Topics-I	Communication Networks, Cellular networks,TCP/TCP/IP protocols, OSI models/security	Easy	20	40	60 min
Advanced Communication Topics-II	Microwave and Satellite communications, Fibre-Optic Communications	Easy	20	40	60 min

39			Advanced Electronics Topics-I	VLSI Technology and Design, Design for testability, DSP and Digital Filters, design, Speech/audio and Radar	Easy	20	40	60 min
40			Advanced Electronics Topics-II	Microprocessors and Microcontrollers, embeddeds	Easy	20	40	60 min
41			Computer Organization and Architecture-I	Computer Organization	Easy	20	40	60 min
42			Computer Organization and Architecture-II	Operating Systems	Easy	20	40	60 min
43			Computer Organization and Architecture-III	Database Management Systems	Easy	20	40	60 min
44			GS-1	General Principles of Design, Drawing, Importance of Safety, Basics of Project Management	Easy	20	40	60 min
45			GS-2	Standards and Quality practices in production, construction, maintenance and services, Basics of	Easy	20	40	60 min
46			GS-3	Basics of Material Science and Engineering, Ethics and values in Engineering profession	Easy	20	40	60 min
47			GS-4	General Aptitude, Numerical Analysis and Engineering Mathematics	Easy	20	40	60 min
48			GS-5	Current issues of national and international importance, Information and Communication	Easy	20	40	60 min
MT-1	Mock Tests	15th Nov'17	Paper -1	General Studies- Full Syllabus	Moderate	100	200	120 min
			Paper-2	Core Engg Full Syllabus		150	300	180 min
MT-1		29th Nov'17	Paper -1	General Studies- Full Syllabus	Moderate	100	200	120 min
			Paper-2	Core Engg Full Syllabus		150	300	180 min
MT-3		13th Dec'17	Paper -1	General Studies- Full Syllabus	Moderate	100	200	120 min
			Paper-2	Core Engg Full Syllabus		150	300	180 min

