



# IES MASTER

Institute for Engineers (IES/GATE/PSUs)

## ESE-2019 Conventional Test Schedule, Electronics & Telecomm. Eng.

Date	Topic
17th Mar 2019	N.T. : ACT-1, ADC-1, ADC-3 R.T. :
24th Mar 2019	N.T. : NT-1, MI-1, CS-2 R.T. : ACT-1, ADC-1, ADC-3
31st Mar 2019	N.T. : EMT-1, MI-2, BEE-1 R.T. : NT-1, CS-2, ADC-1
07th Apr 2019	N.T. : BEX-1, COMM-1, COMM-2 R.T. : EMT-1, MI-2, BEE-1
14th Apr 2019	N.T. : MAT-1, AET-1, CS-1 R.T. : BEX-1, COMM-1, COMM-2, MI-1
21st Apr 2019	N.T. : CO-1, AET-2, BEX-3 R.T. : MAT-1, CS-1, ADC-3
28th Apr 2019	N.T. : BEX-2, MI-3, CS-3 R.T. : CO-1, AET-1, BEX-3
05th May 2019	N.T. : MAT-2, BEE-2, NT-2 R.T. : BEX-2, MI-3, CS-3, AET-2
12th May 2019	N.T. : CO-2, ADC-4, EMT-2 R.T. : MAT-2, BEE-2, NT-2, AET-1, BEX-3
19th May 2019	N.T. : ADC-2, ACT-2, EMT-3 R.T. : CO-2, ADC-4, BEX-2, MI-3, CS-3
26th May 2019	N.T. : NT-3, COMM-3 R.T. : BEX-1, BEX-3, CS-2, EMT-3, ACT-2, ADC-2
02nd Jun 2019	Full Length-1 (Test Paper-1 + Test Paper-2)
09th Jun 2019	Full Length-2 (Test Paper-1 + Test Paper-2)
16th Jun 2019	Full Length-3 (Test Paper-1 + Test Paper-2)

### Test Type

### Timing

### Day

Conventional Test	10:00 A.M. to 1:00 P.M.	Sunday
Conventional Full Length Test Paper-1	10:00 A.M. to 1:00 P.M.	Tuesday
Conventional Full Length Test Paper-2	02:00 P.M. to 5:00 P.M.	Tuesday

Note : The timing of the test may change on certain dates. Prior information will be given in this regard.

\*N.T. : New Topic. \*R.T. : Revision Topic

Call us : 8010009955, 011-41013406 or Mail us : [info@iesmaster.org](mailto:info@iesmaster.org)

# Subject Code Details

<b>Basic Electronics Engineering (BEX)</b>	<b>BEX-1</b>	<b>BEX-2</b>		<b>BEX-3</b>
	<ul style="list-style-type: none"> <li>◆ Basics of Semiconductors</li> <li>◆ Diode : Basics, Characteristics &amp; its types</li> <li>◆ BJT, JFET, MOSFET-Basic Structure &amp; Characteristics</li> </ul>	<ul style="list-style-type: none"> <li>◆ Transistor Amplifiers</li> <li>◆ Oscillators &amp; Other circuits</li> <li>◆ Basic of Linear ICs</li> <li>◆ Operational Amplifier &amp; their applications</li> </ul>		<ul style="list-style-type: none"> <li>◆ Basics of ICs; Bipolar, MOS &amp; CMOS ICs</li> <li>◆ Optical Sources / Detectors</li> <li>◆ Basics of Optoelectronics &amp; Applications</li> </ul>
<b>Basic Electrical Engineering (BEE)</b>	<b>BEE-1</b>		<b>BEE-2</b>	
	<ul style="list-style-type: none"> <li>◆ Single Phase AC circuits</li> <li>◆ Transformer</li> <li>◆ DC Machine</li> </ul>		<ul style="list-style-type: none"> <li>◆ Induction Machine</li> <li>◆ Synchronous Machine</li> <li>◆ Electrical Power Sources, Basics of Batteries &amp; its uses</li> </ul>	
<b>Material Science (MAT)</b>	<b>MAT-1</b>		<b>MAT-2</b>	
	<ul style="list-style-type: none"> <li>◆ Crystalline Structure</li> <li>◆ Dielectric properties of matter</li> <li>◆ Ceramic materials</li> <li>◆ Magnetic properties of materials</li> </ul>		<ul style="list-style-type: none"> <li>◆ Insulating laminates for electronics</li> <li>◆ Conductors &amp; Superconductors</li> <li>◆ Semiconductor &amp; Optical materials</li> <li>◆ Nano materials Nano-optical / Magnetic / Electronic materials</li> </ul>	
<b>Electronic Measurement and Instrumentation (MI)</b>	<b>MI-1</b>	<b>MI-2</b>		<b>MI-3</b>
	<ul style="list-style-type: none"> <li>◆ Error analysis &amp; basics of measurement</li> <li>◆ Basic measuring instruments</li> </ul>	<ul style="list-style-type: none"> <li>◆ Measurement of Resistance</li> <li>◆ AC Bridges</li> <li>◆ Potentiometer</li> <li>◆ Cathode Ray Oscilloscope (CRO)</li> <li>◆ Q-meter</li> </ul>		<ul style="list-style-type: none"> <li>◆ Basics of electronic measurements</li> <li>◆ Digital &amp; electronic voltmeter</li> <li>◆ Digital frequency meter</li> <li>◆ Transducers &amp; Displays</li> <li>◆ Basics of Telemetry</li> <li>◆ Data Acquisition System</li> </ul>
<b>Network Theory (NT)</b>	<b>NT-1</b>		<b>NT-2</b>	
	<ul style="list-style-type: none"> <li>◆ Network elements</li> <li>◆ Network theorems</li> <li>◆ 2-port networks</li> </ul>		<ul style="list-style-type: none"> <li>◆ Transient and Steady State Response</li> <li>◆ Steady State Sinusoidal analysis</li> <li>◆ Resonance</li> </ul>	
<b>Analog and Digital Circuits (ADC)</b>	<b>ADC-1</b>	<b>ADC-2</b>	<b>ADC-3</b>	<b>ADC-4</b>
	<ul style="list-style-type: none"> <li>◆ Small Signal equivalent of Diodes, BJTs and FETs</li> <li>◆ Different Diode Circuits</li> <li>◆ Biasing and Stability of BJTs &amp; JFET amplifier circuits</li> </ul>	<ul style="list-style-type: none"> <li>◆ Analysis / Design of amplifiers signal &amp; multi-stage</li> <li>◆ Feedback &amp; its uses</li> <li>◆ Active filters, timers, multipliers, wave shaping</li> </ul>	<ul style="list-style-type: none"> <li>◆ Boolean Algebra &amp; Logic Gates</li> <li>◆ Combinational circuits : Design &amp; Applications</li> </ul>	<ul style="list-style-type: none"> <li>◆ Sequential circuits: Design &amp; Applications</li> <li>◆ Design IC Logic families</li> <li>◆ A/D &amp; D/A converters</li> </ul>
<b>Among and Digital Communication (COMM)</b>	<b>COMM-1</b>		<b>COMM-2</b>	
	<ul style="list-style-type: none"> <li>◆ Analog Communication Systems</li> </ul>		<ul style="list-style-type: none"> <li>◆ Digital Communication Systems</li> </ul>	
<b>Control Systems (CS)</b>	<b>CS-1</b>		<b>CS-2</b>	
	<ul style="list-style-type: none"> <li>◆ Signals and Systems</li> <li>◆ System Realization</li> <li>◆ Transforms &amp; their Applications</li> </ul>		<ul style="list-style-type: none"> <li>◆ Basics of Control Systems</li> <li>◆ Block Diagram &amp; Signal Flow Graphs</li> <li>◆ Time Response Analysis</li> <li>◆ Routh Hurwitz criteria &amp; Root Locus Technique</li> </ul>	
<b>Computer Organization and Architecture (CO)</b>	<b>CO-1</b>		<b>CO-2</b>	
	<ul style="list-style-type: none"> <li>◆ Basics of Computer Organization</li> <li>◆ Operating Systems</li> </ul>		<ul style="list-style-type: none"> <li>◆ Database Management Systems</li> <li>◆ Data Structure and Programming</li> </ul>	
<b>Electromagnetics (EMT)</b>	<b>EMT-1</b>		<b>EMT-2</b>	
	<ul style="list-style-type: none"> <li>◆ Elements of Vector Calculus</li> <li>◆ Electrostatics</li> <li>◆ Magnetostatics</li> </ul>		<ul style="list-style-type: none"> <li>◆ Maxwell's Equations</li> <li>◆ Electromagnetic Wave propagation through different media</li> <li>◆ Transmission Lines</li> </ul>	
<b>Advanced Electronics Topics (AET)</b>	<b>AET-1</b>		<b>AET-2</b>	
	<ul style="list-style-type: none"> <li>◆ VLSI Technology</li> <li>◆ VLSI Design</li> <li>◆ Mealy and Moore circuit design</li> <li>◆ Pipeline concept and functions</li> <li>◆ Designs for tesatblty and examples</li> </ul>		<ul style="list-style-type: none"> <li>◆ Digital Signals Processing</li> <li>◆ Digital Filters</li> <li>◆ Speech / Audio / Radar Signal Processing</li> <li>◆ Microprocessors and Microcontrollers</li> <li>◆ Embedded Systems</li> </ul>	
<b>Advanced communication Topics (ACT)</b>	<b>ACT-1</b>		<b>ACT-2</b>	
	<ul style="list-style-type: none"> <li>◆ Communication Networks : Principles / Practices / Technologies / Uses / OSI Model / Security</li> <li>◆ Basic packet multiplexed streams / scheduling</li> <li>◆ Protocols (TCP / TCP-IP)</li> <li>◆ Cellular Networks : Types, Analysis</li> </ul>		<ul style="list-style-type: none"> <li>◆ Microwave &amp; Satellite Communication</li> <li>◆ Fiber Optic Communication</li> </ul>	