



IES MASTER

Institute for Engineers (IES/GATE/PSUs)

ESE-2017 Prelims Test Schedule, Electrical Engineering

OBJECTIVE TEST

Date	Topic
2nd October	N.T. : ECF-1, MC-1, MC-2, ADE-2
	R.T. :
9th October	N.T. : ECF-2, MI-1, CS-1, CS-2
	R.T. : ECF-1, MC-1, MC-2, ADE-2
16th October	N.T. : ECF-3, MI-2, MC-3, MC-4
	R.T. : ECF-2, MI-1, CS-1, CS-2
23rd October	N.T. : ECF-4, BEX-1, ADE-1, ADE-3 (General Studies & Engineering Aptitude)
	R.T. : ECF-3, MI-2, MC-3, MC-4
30th October	N.T. : EM-1, MATH-1, PS-1, SSP-1
	R.T. : ECF-4, BEX-1, ADE-1, ADE-3
6th November	N.T. : CF-1, MATH-2, PS-2, PE-1 (General Studies & Engineering Aptitude)
	R.T. : EM-1, MATH-1, PS-1, SSP-1
13th November	N.T. : BEX-2, MI-3, CS-3, SSP-2
	R.T. : CF-1, MATH-2, PS-2, PE-1
20th November	N.T. : EM-2, PS-3 (General Studies & Engineering Aptitude)
	R.T. : BEX-2, MI-1, MI-3, CS-3, SSP-2, ADE-3, MC-1, MC-2
27th November	N.T. : CF-2, PE-2
	R.T. : EM-2, ECF-1, ECF-3, MI-2, PS-2, PS-3, ADE-2, CS-2
4th December	N.T. : CF-3, MATH-3 (General Studies & Engineering Aptitude)
	R.T. : CF-2, ECF-2, MI-1, BEX-1, EM-1, CS-1, MI-3, CS-3, ADE-3, PE-2, SSP-1
11th December	N.T. :
	R.T. : MATH-1, MATH-3, EM-1, EM-2, ECF-1, ECF-4, BEX-2, CF-3, ADE-2, CS-2, PS-1, PS-3, PE-1, SSP-2
18th December	Full Length + General Studies and Aptitude
25th December	Full Length + General Studies and Aptitude
1st January, 2017	Full Length + General Studies and Aptitude

Test Type

Technical Obj. Test _____ 10:00 A.M. to 1:00 P.M. _____ Sunday

GS & Engg. Aptitude Test _____ 2:00 P.M. to 4:00 P.M. _____ Sunday

Timing

Day

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

Subject Code Details

Engineering Mathematics (MATH)	MATH-1		MATH-2		MATH-3	
	◆ Linear Algebra ◆ Complex Variables ◆ Transform Theory		◆ Calculus ◆ Differential Equations		◆ Probability and Statistics ◆ Numerical Methods	
Electrical Materials (EM)	EM-1			EM-2		
	◆ Crystal Structures & Solid State ◆ Band Theory ◆ Dielectrics ◆ Magnetic materials			◆ Conductive materials ◆ Photo conductivity ◆ Nano materials ◆ Superconductors		
Electric Circuits & Fields (ECF)	ECF-1	ECF-2		ECF-3		ECF-4
	◆ Circuit Elements ◆ 3-phase Circuits ◆ Network Graphs ◆ Transient and steady state Response	◆ Network Theorems ◆ Two-port networks ◆ Network Functions ◆ Resonance		◆ Electrostatics and Magneto statics		◆ Time varying fields & Maxwell's Equations
Electrical & Electronic Measurements	MI-1		MI-1		MI-1	
	◆ Errors, Units, Dimensions & standards ◆ Galvanometers ◆ Types of Instruments ◆ Measurement of Power		◆ Measurement of Energy ◆ Measurement of resistance ◆ Potentiometers ◆ AC bridges		◆ Electronic Instrumentation ◆ Data Acquisition System ◆ Transducers	
Computer Fundamentals (CF)	CF-1		CF-2		CF-3	
	◆ Architecture, CPU, I/O, Memory, Peripheral devices ◆ Boolean algebra ◆ Number system arithmetic functions		◆ Basic of OS, Virtual memory ◆ File system ◆ Networking		◆ Data Representation and Programming, Programming languages	
Basic Electronics Engineering (BEX)	BEX-1			BEX-1		
	◆ Basics of diodes, BJT, FET, MOSFET			◆ Transistor amplifiers – equivalent circuits & frequency response ◆ Oscillators, Feedback amplifiers		
Analog Digital Electronics (ADE)	ADE-1		ADE-2		ADE-3	
	◆ OPAMP ◆ Multivibrator, Sample and Hold circuits ◆ Filters		◆ Digital Electronics ◆ Microprocessors		◆ Communications	
Systems and Signal Processing (SSP)	SSP-1			SSP-1		
	◆ Continuous & discrete-time signals ◆ Shifting and scaling ◆ Linear, time-invariant and causal system ◆ Laplace & Z-transform			◆ Fourier series ◆ Discrete Fourier Transform ◆ FFT ◆ FIR and IIR Filters ◆ Bilinear Transformation		
Control System (CS)	CS-1		CS-2		CS-3	
	◆ Basics ◆ Block diagram Algebra ◆ Signal flow ◆ Mathematical Modeling		◆ Time Response Analysis ◆ Stability ◆ Frequency Response & its stability		◆ Root Locus ◆ Controllers & Compensators ◆ State Variable Analysis	
Electrical Machines (MC)	MC-1	MC-2		MC-3		MC-4
	◆ Transformers ◆ Basic concepts of Rotating Machines	◆ Polyphase Induction Machines ◆ Single Phase motors		◆ DC Machines		◆ Synchronous Machines
Power System (PS)	PS-1		PS-2		PS-3	
	◆ Electric Power Sources-Thermal, Hydro Nuclear, Wind & Solar ◆ Performance of lines & cables ◆ HVDC & Corona ◆ Smart Grid; Environment Implications		◆ Symmetrical Components & Fault Analysis ◆ Power System stability & dynamics ◆ Load flow; Matrix Representation		◆ Economic Load Dispatch & Power Economics ◆ Load Frequency control ◆ Voltage Control & Compensation ◆ FACTS ◆ Power System Protection ◆ Solid state Relays	
Power Electronics and Drivers (PE)	PE-1			PE-1		
	◆ Power Semiconductor Devices ◆ High Frequency Inductors & transformers ◆ Diode Rectifiers ◆ Phase Controlled Rectifiers			◆ Choppers; DC-DC switched mode converters ◆ Inverters; DC-AC switched mode converters ◆ AC Voltage Controllers ◆ Cycloconverters ◆ Electric Drives ◆ Resonant Converters		