



THE TABLE ARE DETAILED SCHEDULE IN TABLE 1 AND TABLE 2 AS BELOW

TABLE 1 : DIVISION OF EACH SUBJECT INTO PARTS

TABLE 2: SCHEDULE OF TESTS (Both Objective and Conventional)

Paper - I (Electronics & Telecommunication Engineering)

Topic Code	Topic Name
MC1	<p style="text-align: center;">MATERIALS & COMPONENTS(MC)</p> <p>Structure and properties of Electrical Engineering materials; Conductors, Semiconductors and Insulators, magnetic, Ferroelectric, Piezoelectric, Ceramic, Optical and Super-conducting materials.</p>
MC2	
EDC1	<p style="text-align: center;">PHYSICAL ELECTRONICS, ELECTRONIC DEVICES & IC'S (EDC)</p> <p>Electrons and holes in semiconductors, Carrier Statistics, Mechanism of current flow in a semiconductor, Hall effect; Junction theory; Different types of diodes and their characteristics; Bipolar Junction transistor</p>
EDC2	
SS1	<p style="text-align: center;">SIGNALS & SYSTEMS (SS)</p> <p>Classification of signals and systems: System modeling in terms of differential and difference equations; State variable representation; Fourier series; Fourier representation; Fourier series; Fourier transforms and their application to system analysis</p>
SS2	
NT1	<p style="text-align: center;">NETWORK THEORY (NT)</p> <p>Network analysis techniques; Network theorems, transient response, network graphs and their applications in network analysis; Tellegen's theorem. Steady state sinusoidal response</p>
NT2	
EMT 1	<p style="text-align: center;">ELECTRO MAGNETIC THEORY (EMT)</p> <p>Analysis of electrostatic and magnetostatic fields: Laplace's and Poissons's equations; Boundary value problems and their solutions; Maxwell's equations; application to wave propagation in bounded and unbounded media</p>

EMT 2	Transmission lines: basic theory, standing waves, matching applications, misconstrue lines. Basics of wave guides and resonators; Elements of antenna theory.
ELECTRONIC MEASUREMENTS & INSTRUMENTATION (EMI)	
EMI 1	Basic concepts, standards and error analysis; Measurements of basic electrical quantities and parameters;
EMI 2	Electronic measuring instruments and their principles of working: analog and digital, comparison, characteristics, application
EMI 3	Transducers; Electronic measurements of non electrical quantities like temperature, pressure, humidity etc; basics of telemetry for industrial use.

Paper - II (Electronics & Telecommunication Engineering)

Topic Code	Topic Name
ANALOG ELECTRONIC CIRCUITS (AEC)	
AEC 1	Diodes, Transistor biasing and stabilization, Small signal analysis, Frequency response, Rectifiers and power supplies.
AEC 2	FET and MOSFET, Op Amp PLL, other linear integrated circuits and applications, Pulse shaping circuits and waveform generators.
AEC 3	Power amplifiers, Wide banding techniques, Feedback amplifiers, Tuned amplifiers, Oscillators.
DIGITAL ELECTRONIC CIRCUITS (DEC)	
DEC 1	Transistor as a switching element; Boolean algebra, simplification of Boolean functions, Karnaguh map and applications, Combinational logic Circuits; Half adder, Full adder; Digital comparator, Multiplexer Demultiplexer, ROM and their applications.
DEC 2	Flip flops, R-S, J.K, D and T flip-flops, Different types of counters and registers Waveform generators. A/D and D/A converters, Semiconductor memories, IC Logic gates and their characteristics, IC logic families: DTL, TTL, ECL, NMOS, PMOS and CMOS gates and their comparison.
CONTROL SYSTEMS (CS)	
CS 1	Basics of Control Systems, Block Diagram & SFG, Physical Systems, Time Domain Analysis, Stability. Transient and steady state response of control systems; Effect of feedback on stability and sensitivity.
CS 2	Root locus techniques, Frequency response analysis, Concepts of gain and phase margins, Constant-M and Constant-N Nichol's Chart, Approximation of transient response from closed loop frequency response, Design of Control Systems, Compensators, Industrial controllers.
COMMUNICATION SYSTEMS (CMS)	
CMS 1	Random Variables and Noise, Analog Communication Systems
CMS 2	Digital Communication Systems, Fundamentals of Information Theory
CMS 3	Satellite Communication, Optical Fiber Communication, Propagation of signals at HF, VHF, UHF and microwave frequency

MICROWAVE ENGINEERING (MW)

MW 1 Waveguides, Microwave Tubes & Solid State Devices, Microwave Generator & Amplifier, Masers, lasers

MW 2 Microwave Components and Circuits, Misconstrue circuits, Microwave Measurements

MW 3 Microwave propagation, Microwave Antennas, Microwave Communication Systems terrestrial and Satellite based.

COMPUTER ENGINEERING (CE)

CE 1 Architecture and instruction set of Microprocessors 8085 and 8086, Assembly language Programming. Microprocessor Based system design: typical examples. Personal computers and their typical uses

CE 2 Use of basic data structures; Fundamentals of computer architecture; Processor design; Control unit design; Memory organization, I/O System Organisation

CE 3 Number Systems. Data representation; Programming; Elements of a high level programming language PASCAL/C

**TABLE - 2 Exam Schedule Details -
Electronics & telecommunication Engineering**

* Obj: Objective Paper

* Conv: Conventional Paper

TOPICWISE TESTS

DATE	TEST CODE & TIMING		TOPICS	NO.OF QUESTIONS	MARKS
13 TH MARCH (Sunday)	OBJ - 1 6.30 PM ONWARDS	CONV - 1 6.30 PM ONWARDS	NT1, CS1, SS1	60 OBJECTIVE	100
				CONVENTIONAL	100
20 TH MARCH (Sunday)	OBJ-2 6.30 PM ONWARDS	CONV-2 6.30 PM ONWARDS	EDC1, NT2, EMT1	60 OBJECTIVE	100
				CONVENTIONAL	100
25 TH MARCH (Friday)	OBJ-3 6.30 PM ONWARDS	CONV-3 6.30 PM ONWARDS	CS2, AEC1, DEC1	60 OBJECTIVE	100
				CONVENTIONAL	100
27 TH MARCH (Sunday)	GA1 (6 : 30 PM ONWARDS)		GENERAL ABILITY TEST - 1	60 OBJECTIVE	100
3 RD APRIL (Sunday)	OBJ-4 6.30 PM ONWARDS	CONV-4 6.30 PM ONWARDS	SS2, EMT2, EDC2	60 OBJECTIVE	100
				CONVENTIONAL	100
10 TH APRIL (Sunday)	OBJ-5 6.30 PM ONWARDS	CONV-5 6.30 PM ONWARDS	CMS1, AEC2, DEC2, CE1	60 OBJECTIVE	100
				CONVENTIONAL	100
15 TH APRIL (Friday)	OBJ-6 6.30 PM ONWARDS	CONV-6 6.30 PM ONWARDS	CMS2,EMI1,MW1,MC1	60 OBJECTIVE	100
				CONVENTIONAL	100
17 TH APRIL (Sunday)	GA2 (6 : 30 PM ONWARDS)		GENERAL ABILITY TEST - 2	60 OBJECTIVE	100
24 TH APRIL (Sunday)	OBJ-7 6.30 PM ONWARDS	CONV-7 6.30 PM ONWARDS	CE2,CMS3,EMI2,MW2	60 OBJECTIVE	100
				CONVENTIONAL	100
1 ST MAY (Sunday)	OBJ-8 6.30 PM ONWARDS	CONV-8 6.30 PM ONWARDS	AEC3,EMI3,MW3, MC2,CE3	60 OBJECTIVE	100
				CONVENTIONAL	100

REVISION TESTS

4 TH MAY (Wednesday)	RTO-1 6.30 PM ONWARDS	RTC-1 6.30 PM ONWARDS	NT,AEC,DEC	60 OBJECTIVE	100
				CONVENTIONAL	100
6 TH MAY (Friday)	RTO-2 6.30 PM ONWARDS	RTC-2 6.30 PM ONWARDS	CS,EDC,SS	60 OBJECTIVE	100
				CONVENTIONAL	100
8 TH MAY (Sunday)	RTO-3 6.30 PM ONWARDS	RTC-3 6.30 PM ONWARDS	EMT,CMS,CE	60 OBJECTIVE	100
				CONVENTIONAL	100
10 TH MAY (Tuesday)	RTO-4 6.30 PM ONWARDS	RTC -4 6.30 PM ONWARDS	MC,EMI,MW	60 OBJECTIVE	100
				CONVENTIONAL	100

MOCK TESTS (As per UPSC Pattern)

SUBJECT	MOCK TEST - I	MOCK TEST - II	TIME
General Ability Test	13 th MAY 2016	20 th MAY 2016	12.00 NOON ONWARDS
Paper-I Objective	14 th MAY 2016	21 st MAY 2016	12.00 NOON ONWARDS
Paper-II Objective	14 th MAY 2016	21 st MAY 2016	05.00 PM ONWARDS
Paper-I Conventional	15 th MAY 2016	22 nd MAY 2016	01.00 PM ONWARDS
Paper-I Conventional	15 th MAY 2016	22 nd MAY 2016	06.00 PM ONWARDS