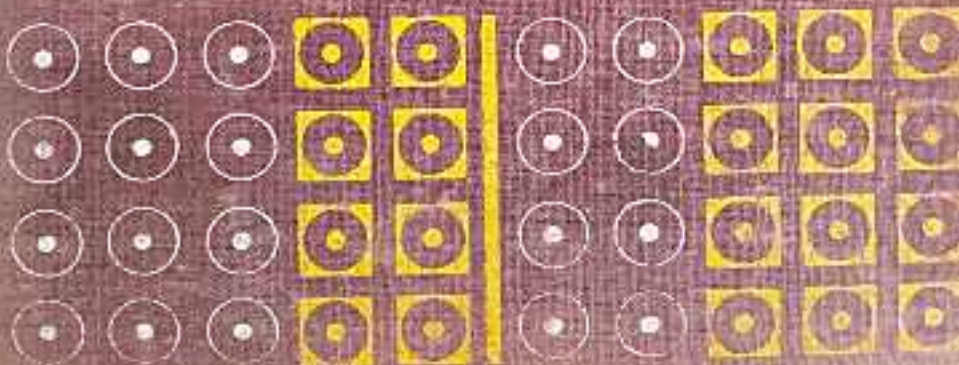
B.L. THERAJA

A TEXT-BOOK OF ELECTRICAL TECHNOLOGY

IN S.I. UNITS



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A TEXT-BOOK OF

TECHNOLOGY

IN

S.I. SYSTEM OF UNITS

(Including rationalized M.K.S.A. System)

For the Examinations of B. Sc. (Engg.) ; Sec. A & B of A.M.I.E. (I) ; A.M.I.E.E. (London) ; City & Guilds (London) ; I.E.R.E. (London) ; Grad. I.T.E. (I)

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Symbols

A	ampere ; area
B	magnetic flux density
C	capacitance
D	electric flux density
d	diameter
E	electromotive force, electric field strength, illuminance
e	base of natural logarithms, induced e.m.f. ; instantaneous value of alternating e.m.f., electron charge
F	force, luminous flux
f	frequency
G	conductance
g	gravitational acceleration
H	magnetic field strength or magnetising force
I	current, moment of inertia, luminous intensity
i	instantaneous value of alternating current
J	intensity of magnetisation
j	vector operator ; $\sqrt{(-1)}$
K	form factor
ε_0	permittivity of free space
ε_r	relative permittivity of a medium
L	self-inductance
l	length
M	mutual inductance, molecular weight, moment of inertia
m	mass
N	number of turns, speed in rev/min
n	number
P	power, number of poles in a machine
p	instantaneous power in an a.c. circuit
Q	electric charge
R	resistance
r	radius ; resistance
S	reluctance
s	slip
T	time period, torque, absolute temperature
t	time
V	potential difference
v	velocity, voltage
W	work, energy, power
X	reactance
Y	admittance
Z	impedance, number of armature conductors, electrochemical equivalent
α	temperature coefficient of resistance, angle
β	angle
γ	conductivity, angle
η	efficiency
θ	angle ; temperature
λ	wavelength
μ	amplification factor
μ_0	permeability of free space
μ_r	relative permeability of a medium
Ω	ohm
ρ	specific resistance or resistivity
Σ	sum of
σ	charge density, fractional slip
Φ	magnetic flux
ϕ	phase angle
Ψ	electric flux
ω	angular velocity