LIST OF SYMBOLS

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PART - I

A	:	Area of conductor
b	:	basicity of an acid
C	:	Cell constant
c	:	intercept of line on y axis
C	:	Current in ampere
d	:	density
δ	:	Sharpness in terms of half width
G	:	Conductance in mho
I_{max}	:	Maximum intensity in multiple reflected beam
I_{min}	:	Minimum intensity in muktiple reflected beam
k	:	specific conductance
ℓ	:	length of conductor
m	:	slope of line
M	:	Molarity/Molecular weight
m.f.	:	mole fraction
N	:	Normality
P	:	Percentage purity
R	:	Resistance in ohm/Reflectance coefficient
R_x	:	Unknown resistance
S	:	Constant
σ_c	:	Conductivity of electrolyte
T	:	Transmission coefficient
$\bar{X}$	:	Mean value (average)
$\bar{Y}$	:	Mean value (average)
λ	:	Ionic conductivity

PART - II

A	:	Area of cross section
A_o	:	Initial area of cross section
a	:	Standard hardness (Constant)
b, B	:	Constant
c, C	:	Constant
D,E,F	:	Constant
d	:	diagonal length of indentation mark
d_K	:	diagonal length of Knoop indentation mark
d_V	:	diagonal length of Vickers indentation mark
$\bar{H}$	:	Average hardness in high load region
H_k	:	Knoop hardness number (kg - mm^{-2})
H_v	:	Vickers hardness number (kg - mm^{-2})
K	:	Constant
l_o	:	length (initial)
l	:	length after small compression
m, m_1, m2, m_3 m_4	:	Slopes of various lines
n	:	slope of log P vs. log d graphs
P	:	Load in gm.
HLR	:	High load region
σ_c	:	Electrical conductivity of $NaNO_3$ crystal
ϵ	:	Compressive stress
κ_2	:	constant
δ	:	constant
T_Q	:	Quenching temperature ^oK

PART - III

A	:	Pre-exponential factor
A_t	:	Pre-exponential factor for tangential chemical dissolution
A_s	:	Pre-exponential factor for surface chemical dissolution
A_o	:	Constant
$A_{t\ th}$	:	Pre-exponential factor for tangential thermal dissolution
$A_{s\ th}$	:	Pre-exponential factor for surface thermal dissolution
C	:	Concentration of an etchant
C_a	:	Concentration of an acid
D	:	Amount of reaction ; Diffusion rate
E	:	Activation energy
E_t	:	Activation energy for tangential dissolution
E_s	:	Activation energy for surface dissolution
E_σ	:	Activation energy for electrolytic conductivity of an etchant
E_μ	:	Activation energy for viscosity of etchant
$Et\ th$	:	Activation energy for tangential thermal dissolution
$E_{s\ th}$	:	Activation energy for surface thermal dissolution
$E_{t\ th}$ $E_{s\ ch}$	:	Activation energy for tangential and surface chemical dissolution
$\delta\omega$	:	desorption rate for weak reaction
δ_b	:	desorption rate for strong reaction

K	:	Boltzmann constant
K, Ka	:	Constant
L	:	Length of etch pit along [110]
μ	:	viscosity
n	:	order of reaction
T	:	Temperature of etching ^{o}K.
V	:	Etch rate
V_t, V_s	:	Etch rate of tangential and surface dissolution of ledges respectively
V_{tm} & V_{sm}	:	Maximum etch rate of tangential and surface dissolution respectively
σ_m	:	maximum electrical conductivity of an etchant
σ_c	:	Electrolytic conductivity of an etchant
E_n	:	Activation energy of dissolution approximately along [001]
E_A	:	Activation energy of dissolution for area