CLASS: 12	**INDIAN SCHOOL MUSCAT** **SECOND PERIODIC ASSESSMENT**	SUBJECT: PHYSICS
	SET - A	
Q.NO.	VALUE POINTS	SPLIT UP MARKS
1.	Expression of dielectric constant of a medium in terms of capacitance , No unit	½, ½
2.	Capacitance decreases Using $U = q^2/2C$ So stored energy in capacitor increases	1
3.	Definition of dielectric strength of a dielectric	1
4.	Definition electrical conductivity of a conductor and its SI unit	½ ,½
5.	(i) Cu (ii) Si	½ ,½
6.	Derivation of $C = K \varepsilon_0 A/d$ Diagram Derivation	 ½ 1½
7.	$I_X = I_Y$ $n_x eAv_x = n_Y eAv_y$ $v_x / v_y = 1/2$	 1 1
8.	Using $V = E_{eq} - Ir_{eq}$ $E_{eq} = 6V$, emf of each cell = 2V $r_{eq} = 6\Omega$, internal resistance of each cell = 2Ω	 1 1
9.	$C_x = 5\ \mu F$ and $C_y = 20\ \mu F$ $V_x = 12$ V and $V_y = 3V$	2 1
10.	Derivation of $I = neav_d$	3
11.	Derivation of E_{eq} and r_{eq} in parallel combination of cells	2, 1