

CLASS: 12	INDIAN SCHOOL MUSCAT SECOND PERIODIC ASSESSMENT	SUBJECT: PHYSICS
	SET - C	
Q.NO.	VALUE POINTS	SPLIT UP MARKS
1.	Definition of the term mobility. SI unit is $\text{m}^2/\text{V-s}$	$\frac{1}{2}, \frac{1}{2}$
2.	Definition of dielectric strength of a dielectric	1
3.	(i) Cu (ii) Si	1
4.	Capacitance decreases Using $U = q^2/2C$ So stored energy in capacitor increases	1
5.	Definition of capacitance , No unit	$\frac{1}{2}, \frac{1}{2}$
6.	$I_X = I_Y$ $n_X eAv_x = n_Y eAv_y$ $v_x/v_y = 1/2$	1 1
7.	Derivation of $C = K \epsilon_0 A/d$ Diagram Derivation	$\frac{1}{2}$ 1 $\frac{1}{2}$
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.	Derivation of E_{eq} and r_{eq} in parallel combination of cells	2,1
10.	$C_x = 5 \mu\text{F}$ and $C_y = 20 \mu\text{F}$ $V_x = 12 \text{ V}$ and $V_y = 3 \text{ V}$	2 1
11.	Derivation of $v_d = eV\tau/ml$	3

