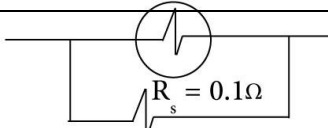


The answer	Symbol Of Right answer	Question number
“a” and “c” or “b” and “d”	C	1
the resistance from rheostat decreases and voltmeter reading decreases.	A	2
6 V , 3 A , 2 A	D	3
$R_1=1$, $R_2 = 9$, $R_3 = 2$, $R_4 = 8$	B	4
$\frac{36}{3} V$	A	5
10 V	B	6
$\rho_X > \rho_Y - A_X > A_Y$	A	7
0.125 m from wire X	C	8
$9.68 \times 10^{-5} Wb$	D	9
1 A	A	10
direction of current in both of them	C	11
zero	B	12
960 Ω	C	13
$F_y < F_x < F_z$	A	14
Force (F) increases and rod moved away from the battery.	B	15
	B	16
6000 Ω R_1 , 9000 Ω R_2	D	17
D	A	18
4 θ	B	19

0.08 V	C	20
$T_1 > T_2 > T_3$	A	21
	C	22
4.4 V	B	23
$5.77 \times 10^{-3} \text{T/S}$	D	24
10	A	25
6V	A	26
2 I	A	27
A	A	28
90°	B	29
50mA	D	30
$\frac{7}{11}$	A	31
remains constant	B	32
Decrease - Increase	C	33
The momentum of photon X is more than that of Y	D	34
The momentum of the photons in red light is the smallest in visible light.	C	35
$KE_C < KE_B < KE_A$	B	36
The electrons have high kinetic energy and short wavelength	A	37
3000nm	C	38
6n.m	D	39

The multiple reflections inside the resonant cavity.	C	40
No laser beam will produce from the device.	C	41
The photon energy of normal light is greater and the intensity is lower.	B	42
$\begin{matrix} Z & Y & X \\ 0 & 1 & 0 \end{matrix}$	A	43
The bulb (X) is switched off and the bulb (Z) remains illuminated.	D	44
$114 \mu\text{A} \quad 120 \mu\text{A}$	A	45
$A < B < D < C$	B	46
$W_S = W_P \text{ in ideal transformer so:}$ $(V \cdot I)_p = 120 I_p \quad I_p = 0.5\text{A}$ $(V \cdot I)_s = 12 I_s \quad I_s = 5\text{A}$		47
Because total resistance decreases so value X_L / R increases and phase angle increases		48
<p>The work function remains constant</p> <p>Kinetic energy of emitted electrons will increase</p>		49
$E = \frac{hc}{\lambda} = \frac{6.625 \times 10^{-34} \times 3 \times 10^8}{0.2 \times 10^{-9}} = 9.9375 \times 10^{-19}\text{J}$ $E = \frac{hc}{\lambda} = \frac{6.625 \times 10^{-34} \times 3 \times 10^8}{0.6 \times 10^{-9}} = 3.3125 \times 10^{-16}\text{J}$		50