Heat : Answers to Subjective Questions (Typical)

A-01	(c)
A-02	(a)
A-03	(d)
A-04	(c)
A-05	(a)
A-06	(a)
A-07	(b)
A-08	(c)
A-09	(c)
A-10	(c)
A-11	(b)
A-12	(a), (c)
A-13	(a), (b), (c)
A-14	(c), (d)
A-15	(a)
A-16	(b)
A-17	20^0C
A-18	373.3 K
A-19	601 K
A-20	307 K
A-21	60^0
A-22	20.0 Ω, $3.80\times10^{-3}\ ^0C^{-1}$, $-5.59\times10^{-7}\ ^0C^{-2}$
A-23	0.99989 cm
A-24	0.4 cm
A-25	(a) 0.99976, (b) 1.00024, (c) 1.00096
A-26	15^0C to 25^0C
A-27	$-5\times10^{-4}\ ^0C^{-1}$

A-28	-82^0C
A-29	219^0C
A-30	50 cc
A-31	83^0C
A-32	Zero
A-33	24 N
A-34	$l_0\left[1+\frac{\alpha_a Y_a+2\alpha_s Y_s}{Y_a+2Y_s}\theta\right]$
A-35	5.8×10^8 Pa
A-36	No answer since it is a derivation.
A-37	9.6×10^{-2} %
A-38	$\alpha_1 Y_1=\alpha_2 Y_2$
A-39	127×10^6 N/m^2
A-40	$\alpha_1=4\alpha_2$
Q-41	If two rods of length L and 2L having coefficient of linear expansion α and 2α respectively are connected to get a rod of length 3L. Find the average coefficient of linear expansion of the composite rod.