Solution:

Given the exercise price of the stocks to be \$20 per share, and the option to exercise being \$8 per share. Thus, the total of $\$8 \times 6,000 = \$48,000$. Since the options are exercised for 3 years, this means that for each year, the compensation recorded should be \$16,000.

(1)

The journal entries would be given by:

Date	Particulars	Debit	Credit
31 Dec,	Compensation expense of stock option	16,000	
2013	To Paid in Capital stock option		16,000
31 Dec,	Compensation expense of stock option	16,000	
2014	To Paid in Capital stock option		16,000
31 Dec,	Compensation expense of stock option	16,000	
2015	To Paid in Capital stock option		16,000

(2)

The journal entries would be given by:

Date	Particulars	Debit	Credit
31 Dec,	Cash	120,000	
2013	Paid in Capital stock option	48,000	
	To Common stock		12,000
	To Additional Paid in Capital		156,000
	Common Stock		

(3)

Benefits of this is that since the stock price has increased to \$45 from \$20 when the stock was there, the people bought stock at \$20 and could easily sell it at \$45 in the market, which results in profit for the managers.