BCM SCHOOL, BASANT AVENUE, LUDHIANA
ANSWER KEY OF OCTOBER ASSIGNMENT
CLASS: VIII (MATHEMATICS)
TOPICS: LINEAR EQUATIONS IN ONE VARIABLE, EXPONENTS AND POWERS

SECTION A (MULTIPLE CHOICE QUESTIONS)	
Sol.1	c) 6, 15
Sol.2	b) 10
Sol.3	a) 3

SECTION B (2 MARKS QUESTIONS)	
Sol.4	Size of RBC = 7×10^{-6}m Size of plant cell = 1.275×10^{-5}m $\therefore \dfrac{Size\ of\ RBC}{Size\ of\ plant\ cell} = \dfrac{0.7}{1.3} = \dfrac{1}{2}$
Sol.5	Let the two consecutive numbers be x and $x + 1$ A/Q $\quad (x + 1)^2 - x^2 = 15$ So the numbers are 7 and 8

SECTION C (3 MARKS QUESTIONS)	
Sol.6	$\dfrac{3(17-3x)-5(4x+2)}{15} = \dfrac{15-18x+7x+14}{3}$ x = 4
Sol.7	m + 1 + 6 = 9 m = 2

SECTION D (5 MARKS QUESTIONS)	
Sol.8	$\dfrac{1}{8}$
Sol.9	Let the age of Baichung be x years. The age of his father = x + 29 years, and the age of his grandfather = x + 29 + 26 = (x + 55) years. As per the conditions, we get x + x + 29 + x + 55 = 135 $\Rightarrow$ 3x + 84 = 135 $\Rightarrow$ 3x = 135 − 84 (transposing 84 to RHS) $\Rightarrow$ 3x = 51 $\Rightarrow$ x = 51 ÷ 3 (transposing 3 to RHS) $\Rightarrow$ x = 17 Hence Baichung's age = 17 years Baichung's father's age = 17 + 29 = 46 years, and grand father's age = 46 + 26 = 72 years.

SECTION E (CASE STUDY)
Sol.10

a) Let the no. of 1 rupee coins x

No. of 10 rupee coins be $\frac{x}{2}$

No. of 5 rupee coins be $\frac{x}{3}$

No. of 2 rupee coins be $\frac{x}{4}$

A/Q $\qquad x + \frac{x}{2} + \frac{x}{3} + \frac{x}{4} = 400$

On solving $x = 192$

b) No. of 5 rupee coins is 64

c) No. of 10 rupee coins is 96