Given

Total number of questions = 100

2 marks for every correct answer.

0.5 marks deducted for every wrong answer

Marks obtained = 120

Let x be the number of correct answers and y be the number of wrong answers.

$$x + y = 100 \qquad \text{....... (1)}$$

$$2x - 0.5y = 120 \qquad \text{....... (2)}$$

$$
\begin{array}{l}
0.5x + 0.5y = 50 \\
2x - 0.5y = 120 \\
(+) \qquad\qquad (+) \\
\hline
2.5x = 170
\end{array}
$$

$$x = \frac{170}{2.5} = 68$$

$\therefore$ The student answered 68 questions correctly.