The value of the objective function $z = 3x_1 - 2x_3$ at the feasible solution $(2+\beta, 1+3\beta, 3+4\beta, \beta, 2+5\beta)$ is

$z = 3(2+\beta) - 2(3+4\beta) = -5\beta$.

But β can be any real positive number, so when $\beta \to \infty$, we have that $z = -5\beta \to -\infty$

So, there is NO optimal solution (since we have a minimum problem).