If the sum of the first ten terms of the series $\left(1\frac{3}{5}\right)^2+\left(2\frac{2}{5}\right)^2+\left(3\frac{1}{5}\right)^2+4^2+\left(4\frac{4}{5}\right)^2+\ldots\ldots$, is $\frac{16}{5}m$, then m is equal to :

(1) 102

(2) 101

(3) 100

(4) 99

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$\left(1\frac{3}{5}\right)^2+\left(2\frac{2}{5}\right)^2+\ldots\ldots\ldots 10\text{ terms}=\frac{16}{5}m$

$\therefore \left(\frac{8}{5}\right)^2+\left(\frac{12}{5}\right)^2+\left(\frac{16}{5}\right)^2+\ldots\ldots 10\text{ terms}=\frac{16m}{5}$

$\therefore \frac{1}{25}\left(8^2+12^2+16^2+\ldots\ldots\ldots 10\text{ terms}\right)=\frac{16m}{5}$

$\therefore \frac{16}{25}\left(2^2+3^2+4^2+\ldots\ldots\ldots 10\text{ terms}\right)=\frac{16m}{5}$

$\therefore 1^2+2^2+3^2+4^2+\ldots\ldots\ldots 11\text{ terms-1=5m}$

$\therefore \frac{11\times(11+1)(2\times11+1)}{6}-1=5m$

$\therefore m=101$

Hence, Option (2).