For non-homogeneous equations, V of P technique should be used only when necessary (otherwise, use the method of undetermined coefficients) - 'incorrect' approach (even with correct answer) will earn half a credit only.

Note that D denotes the differential operator $\dfrac{d}{dx}$.

Set 2.6: 2, 6.
Set 2.10: 12, 13, 16.
And:

$$x^2 y'' - 4xy' + 6y = \frac{\ln x}{x^4}$$