## Questions TA 3 session

## Question 1

The largest component of the UK GDP is consumption.

Select one:TrueFalse

## Question 2

In the UK, GDP is less volatile than investment but more volatile than consumption.

Select one:
© True
○ False

## Question 3

Consider the capital accumulation equation of the Solow model with exogenous technology growth: $K_{t+1}=s K_{t}^{\alpha}\left(A_{t} L\right)^{1-\alpha}+(1-\delta) K_{t} . K_{t}$ is the aggregate capital stock, $A_{t}$ is the level of technology, $L$ is the constant population size, $s$ is the exogenous savings rate, $\alpha$ is the capital income share in the economy, $\delta \in(0,1)$ is the depreciation rate of capital. We assume $A_{t}$ grows at a constant rate so that $A_{t+1}=(1+g) A_{t}$. Finally, we define the capital stock per efficiency unit as $k_{t}=\frac{K_{t}}{A_{t} L}$. The steady state level of capital stock per efficiency unit, $k^{*}$, is given by $k^{*}=\left(\frac{s}{\delta+g}\right)^{\frac{1}{1-\alpha}}$.

Select one:TrueFalse

## Question 4

Measuring capital stock is central to the growth accounting framework; however, the measure of capital stock is not always available for researchers and policy-makers for the entire sample period. To obtain the measure of capital stock, one can use the Perpetual Inventory Method (PIM), which requires estimating or imputing of (1) the rate of depreciation, (2) the initial level of capital stock, and (3) the real interest rate.

Select one:TrueFalse

