## ANCIENT HISTORY AND CLASSICAL ARCHAEOLOGY ADMISSIONS TEST

## SAMPLE A

Answer ALL parts of BOTH questions. You have NINETY MINUTES for this test. We recommend that you read the entire paper before beginning to write your answers. Spend about a third of your time on reading, thinking and planning, and the rest of the time writing.

If you find the text in Question One and the image in Question Two difficult and unfamiliar, don't worry: the exercise is meant to be challenging, but we hope you will also find it thought-provoking. There is no 'right' answer to the questions: you will be judged on the intelligence of your case, how clearly you make it and how effectively you support it. You should use your own words in answering the questions.

## Question One (50 marks)

The first question is based on an adapted section from an article about the ancient Greek economy. Please read through the extract carefully and think about what it is trying to argue. You do not need to know anything about Greek history or economics to answer the question below.

Question: How convincing are the arguments that the author uses in this passage to demonstrate rapid economic growth in the ancient Greek world? How would you go about criticising them?

In recent papers Ian Morris has assembled an impressive array of data for measuring Greek economic growth in the period 800-300 BC. The first factor to consider in measuring Greek economic growth is demographic change. It is uncontroversial to state that the population of Hellas grew substantially in the half-millennium 800-300 BC. On the basis of exhaustive surveys of literary evidence, supplemented by recent work in survey and excavation archaeology, Morris posits that the Greek population of "the Aegean and the colonies in southern Italy and Sicily" rose from under 500,000 persons in the ninth century to perhaps 4 million persons in the fourth century. If this is correct, the population of this part of the Greek world increased about ten-fold and the per annum demographic growth rate was over 0.4%. As Morris points out, this is a comparatively high rate of sustained demographic growth in a premodern society.

Morris' figures are only estimates, but in order for Morris' posited demographic growth rate to be much too low, we would have to assume that the population of the Aegean/Italian-Sicilian Greek world in 800 BC was much larger than 500,000, or that in 300 BC the relevant parts of the Greek world had a population much less than 4 million. Neither counterfactual seems plausible: For the early period, archaeologists have expended a great deal of time and effort searching for and analyzing sites from the Greek Early Iron Age (aka the Dark Age) and they have done their best to show that the Dark Age was not so dark as all that. Despite their best efforts, known Early Iron Age Greek occupation sites remain comparatively sparse and small. At the other end of the time period, Morris' estimate of the population of the core Greek world in 300 BC is in line with demographic estimates since the 19<sup>th</sup> century, and is probably somewhat lower than other recent estimates.

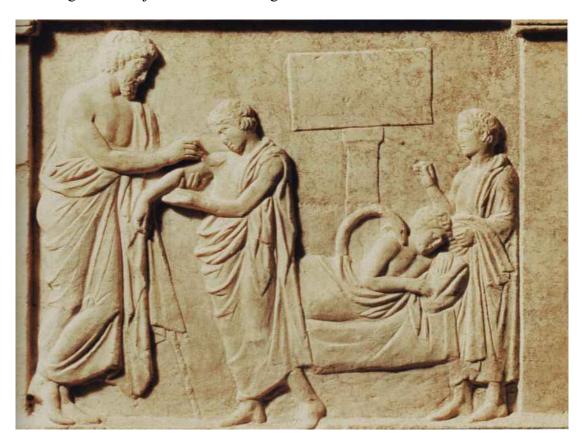
\*The second key factor in estimating aggregate economic growth is per capita consumption. Morris sought to estimate changes in per capita consumption over the same period. While there is no way to measure consumption directly, the proxies employed by Morris are telling. Morris assembled a substantial data set (n=405) of Greek house-plans. The median Greek house in the 9th century was small and squalid. Over the next 500 years, the median house became both much bigger and much better built. Looking at square footage alone, when account is taken of probable secondstories, the change in the of the median house is over 350% – from ca. 80 m² to ca. 360 m². Given the striking improvement in building standards, the total increase in the economic value of a house will actually have been substantially greater. Morris notes the difficulty of measuring the change in other consumption goods, but based on archaeological evidence of sites destroyed suddenly, he posits that, over the period 800-300, "a five- to ten-fold increase... seems reasonable."

Moving from these numbers to per capita consumption is a complex problem; a big part of premodern consumption was in the form of food and (where applicable) taxes and rents. Morris argues, on very reasonable grounds, that per capita consumption in ninth-century Hellas must have been close to the substance minimum. By 300 BC, however, he suggests that consumption had increased by 50% and perhaps as much as 95%. Thus, by 300 BC a typical Greek household was consuming half again to twice what an ordinary household had been consuming 500 years before. This range yields a per annum growth rate in per capita consumption of 0.07 – 0.14%. By comparison, the growth in the Roman per capita growth rate has been estimated at 0.1%. Morris' upper-range estimate is more likely than any lower estimate, and the actual rate of Greek per capita growth 800-300 BC was probably about 0.15% – one and a half times the estimated Roman growth rate.

Combining his estimate of demographic growth with his estimated growth in per capita consumption, Morris posits that total aggregate consumption growth (number of people x rate of consumption) in Hellas increased roughly 15 fold (assuming his lower per capita rate) to 20 fold (assuming his higher per capita rate) in the period 800-300 BC, giving an annual aggregate economic growth rate of 0.6 – 0.9%. As Morris points out, Holland is the gold standard for a high-performing early modern economy. The annual aggregate growth rate for Holland in 1580-1820 was about 0.5%. And so, as Morris notes, even if we were to cut his estimate of growth in half, the Greek economy compares favorably to an exceptionally high-performing premodern economy.

## Question Two (50 marks)

The image below is a relief sculpture set up at the sanctuary of the healing-god Amphiaraos at Oropos in Greece. The sculpture was set up in gratitude by an individual who had been healed by the god. You do not need to have any advance knowledge of the object or of Greek religion.



Describe the image, explain what aspects of the cult you think are highlighted and in what ways, and consider how much we might learn from it about what actually happened in the healing sanctuary at Oropos.