Ec 365

Spring 2026

MID-TERM 1:hints for answers (not complete)

1. *Comment on the difference between the irrigation systems in lower Mesopotamia and Egypt. How are they explained by geography? Is there any relation with state formation in the two regions?*

   Lower Mesopotamia was almost entirely flat and located between the Tigris and Euphrates rivers. The region experienced a strong annual cycle, occasional violent floods, and virtually no rainfall. Agriculture and settlement therefore required organized irrigation and flood protection through canals and dikes. This coordination was achieved by city-states, which benefited from the agricultural surplus generated by the irrigation networks surrounding them. The study by Allen, Bertazzini, and Heldring shows that cities often emerged through cooperation following sudden river shifts.

   The Nile Valley had a very different geography. About half of its agricultural land lay in a narrow valley along one of the largest rivers in the world, while the other half was located in the Nile Delta. The Nile had a strong annual cycle, but its flood was gradual and powerful rather than violent, although water levels could vary significantly from year to year. Irrigation was local, capturing water in small loop-like channels that did not affect other parts of the valley. As a result, there was no need for large coordinated irrigation systems.

2. *This inscription was found near the Great Pyramid of Egypt and probably made at the time of its construction:*

   > *"I have purchased this house from the scribe Tjenti. I gave him 10 shats for it; one piece of cloth with four thread, 3 shats; one bed, 4 shats; one piece of cloth with two threads, 3 shats."*

   Is this inscription evidence that money was used for exchanges at this time? The answer should be much more than yes/no.

   The inscription provides strong evidence that money was **not** used as a medium of exchange. The shat was a unit of account used in barter: goods were exchanged directly for other goods without physical money as an intermediary.

3. *The figure on the side presents the characteristics of coins that were dated around 570 BCE, weight (as a fraction of a unit, which does not have be defined here), and mix of gold and silver. Comment on the figure, (why there were coins like this and how were they used).*

   At the time, technical knowledge did not enable the separation of gold and silver. The exchange value (face value) of coins was determined by their weight, not by precise metal composition. The graph shows that weights were defined with remarkable precision, as fractions of a unit (1/2, 1/3, etc.). The proportion of gold in a coin could vary considerably without affecting its exchange value.

4. *For which type of commercial transaction were gold coins used (in any metallic monetary system)? Explain why. Which type of coins were debased to generate seignorage revenues, coins based on gold or silver? Explain. (Use the physical properties of the metals).*

Gold is about twice as dense as silver, while silver has a density similar to copper. Gold was roughly twelve times more valuable than silver, whereas copper had negligible value by comparison. A gold coin of practical size would therefore have been too valuable for everyday transactions—worth more than a month's pay for a Roman legionnaire. ...

5. *n 33 CE, there was credit crisis in the Roman Empire and prices of real estate were crashing. How was the crisis resolved? Whey were the real estate prices were crashing? (Optional: is there any relation, in economics, with the financial crisis of 2009 in the US?)*

   According to Tacitus, a severe liquidity shortage forced individuals to sell land in order to repay loans. These "fire sales" depressed land prices, which triggered additional sales because land served as collateral for loans. Tiberius resolved the crisis by injecting liquidity into banks rather than directly assisting individuals. ...

6. *Briefly describe the evidence (and the investigation method), for the production of silver in the Roman empire, and an index of trade. Do the different types of evidence match each other?*

   Two independent types of evidence confirm patterns of silver production:

   Ore deposits in ancient silver mines (documented by Patterson in the 1970s).

   Measurements of atmospheric lead preserved in Greenland ice cores. Lead vapor was a byproduct of silver extraction from lead ore.

   Trade evidence comes from Mediterranean shipwreck data. The hump-shaped pattern of shipwrecks, peaking between 200 BCE and 200 CE, mirrors silver output patterns.

7. *On this satellite photograph, you can see the town of Jaca in Spain, and in the north, the city of Pau, in a plain in France, with the Pyrenees mountains in between. Use this photograph (pay attention to detail), to comment on the fuero that was granted to the town. You will give a (very) short description of the fuero (more than the principle than the details), and present a geographical cause. In which century was the fuero issued?*

   Jaca lies at the entrance of a valley used to cross the Pyrenees from France into Spain, making it the first town in Spain encountered by immigrants from the north. [This was the purpose of the photograph]. The *causality* is from the geography and "constructs" a narrow passage through the mountains to the first place where a town can be established.]

   More...

8. *The parliament met to oppose the tax increases of Edward I. True/false? Explain. Which century is this?*

   False. More...

9. *Discuss the differences between England and Spain for the development of charters, assemblies and parliaments. Emphasize the reasons for the differences.*

   England, was politically centralized following the Norman Conquest (1066), right from the start. [Important causality from the a territory of the right size, on an island, with well organized conquerors, the Norman, a bit like the Ptolemies taking over Egypt]. William the Conqueror distributed land to his barons, creating a unified structure. After Magna Carta (1215), which was not a parliament, but a meeting of barons and the city of London to limit the power of the king, parliamentary assemblies were were gradually implemented by kings to secure taxation consent.

In the Iberian Peninusla, territorial expansion occurred gradually during the Reconquista. Kings granted charters (fueros) to northern cities in order to attract settlers, establishing property rights and local liberties. By the late 12th century, city representatives from city oligarchies (who were neither nobles nor clerics) joined assemblies around the king in the Kingdom of Aragon. This practice eventually spread to the entire peninsula where the main cities were represented in assemblies (the Cortes). Their functions became similar to those of the English parliaments.

10. *Additional question: Revise the slides on the wealth distribution of Roman senators.*