In class exam 1: Economic Development: ECON 410: Fall 2018

Answer all of the following questions. Each question in this section is worth 5 points for a total of 60 points.

1. List the order plant domestication in the Fertile Crescent from earliest to latest varieties:
   a. Olives, dates, figs and pomegranates first; wheat and peas second; and apples last.
   b. Wheat and peas first; olives, dates, figs, and pomegranates second; and apples last.
   c. Wheat and peas first; apples second; and olives dates, figs and pomegranates last.
   d. Apples first; wheat and peas second; and olives dates, figs and pomegranates last.
   e. Olives dates, figs and pomegranates first; apples second; and wheat and peas last.

2. Mark Blumler examined the distribution of large seeded-grasses, and Bar-Yosef and Kislev looked specifically at the grasses in the wild in the Jordan Valley today. Their conclusions are summarized by which of the below?
   a. Both c. and e.
   b. The seeds 10 times the median seed size were distributed evenly across the continents of the world.
   c. Almost 2/3 of the seeds 10 times the median seed size were located in Eurasia, almost all in the Mediterranean climate zone.
   d. Protein content varied little amongst the wild seeds.
   e. Wheat and barley were quite abundant, easy to harvest, grew quickly from sowing and had relatively high protein content.

3. Which of the following are the reasons why the alphabet became the dominant method of writing:
   a. Restricting sounds to a single sign.
   b. The addition of the Arabic number system for easier writing of numbers
   c. Giving easy to remember names that are acrophonically related to the letters and placing in fixed order.
   d. The invention of unique symbols for vowels.
   e. a., c. and d.

4. Which of the following regions is NOT a region of Mediterranean climate:
   a. Parts of Western and Southern Australia
   b. the Gulf Coast of the United States
   c. California
   d. Central Chile

e. Western Cape Province of South Africa

5. The most important reasons why agriculture diffused more rapidly in Eurasia compared to other agricultural regions in Western Africa and the Americas is:
   a. Longitudinal axis of orientation of Eurasia, and its similar climate across long stretches.
   b. Longitudinal axis of orientation of Africa and North and South America, and its similar climate across the orientation.
   c. Latitudinal axis of orientation of Africa and North and South America, and its dissimilar climate across the orientation.
   d. Latitudinal axis of orientation of Eurasia, and its similar climate across the orientation.
   e. Longitudinal axis of orientation of Eurasia, and its dissimilar climate across long stretches.

6. Father of the 3 monotheist (one God) religions, and he is credited with the end of what practice?
   a. Abraham
   b. Mohammed and the ritual sacrifice of animals
   c. Human sacrifice
   d. Moses and the 10 Commandments
   e. a. and c.

7. Which of the below is NOT a reason why some animals are undomesticable?
   a. Carnivorous diet
   b. Mean disposition
   c. Mammals of large size
   d. Shyness in reproduction
   e. Tendency to panic

8. Which of the following pairs is not a historical lethal gift from livestock
   a. Smallpox a mutation of cowpox in cattle herds
   b. Flu from pig herds and chicken, ducks and turkeys
   c. Measles from cattle herds
   d. Syphilis from sheep and goat herds
   e. Pertussis (whooping cough) from pig herds and dogs

9. List two examples of extinction of plant varieties because of cloning reproduction:
   a. Non sweet toxic almond trees and particular apple trees from fungus
   b. Potato blight in Ireland
   c. Occasional elimination of entire banana orchards from disease
   d. Shattering wheat stalk varieties and exploding pea pod varieties
   e. Both b. and c.

10. Proportionality in response to an injury; and general rules of human behavior were named what, and came from whom?
    a. “An eye for an eye, a tooth for a tooth,” the Golden Rule and Isaac.
    b. The Golden Rule, 10 Commandments and Mohammed
    c. “An eye for an eye, a tooth for a tooth,” 10 Commandments and Moses.
    d. The Golden Rule, 10 Commandments and Confucius.
    e. “An eye for an eye, a tooth for a tooth,” 10 Commandments and Buddha.

11. The parable of the Good Samaritan was given by the founder of what faith? Summarize the message of the parable and name the founder.
    a. Hinduism, the Golden Rule and Buddha.
    b. Christianity, Love your Neighbor (and your neighbor is all of mankind including your enemies) and Jesus.
    c. Judaism, “An eye for an eye, a tooth for a tooth,” Abraham.
    d. Islam, Love your fellow Muslims, Mohammed.
    e. Judaism, 10 Commandments, Moses.

12. Which of the following were not domesticated originally in the Fertile Crescent?
    a. Horses
    b. Goats
    c. Pigs
    d. Cows
    e. Sheep

Answer the following. The entire question is worth 40 points. Individual point values are given beside each category.

Examples of the time to afford separate items or baskets.

	Year	1919		1997		2017
i	Basket of 12 grocery items	570 min.		96 min.		93 min.
	Year	1926	1954	1970	1997	2017
ii	movie ticket	19 min.	17 min.	29 min.	19 min.	25 min.
iii		Year	1946	1970	1997	2017
	dry cleaning a dress		70 min.	30 min.	30 min.	41 min.
iv.		Year	1920	1956	1973	1996	2016
	new house 1 sq. ft costs		7.8 hr	6.5 hr	5.4 hr	5.6 hr	5.6 hr
	amenities per new house						
	3 or more bedrooms			78%	88%	87%	90%
	2 or more bathrooms			28	60	91	97
	1 or more fireplaces			35	44	62	48
	2 stories or more			6		47	51
	central heat & air cond.			6	49	81	93

(15) Comment on the change of living standards for items i-iv. Have they improved throughout the 20th century into the first part of the 21st century? In order to answer this question, compute the change in the price of the item per year. Use the following formula to compute this: (ln(price of item in 2017 or 2016) – ln(price of item in the first year observed))/(last year – first year). So for example for i. (ln(93)-ln(570))/98 = -1.85% per year or reduction in the price of food from 1919 to 2017 at 1.85% per year. The ln stands for the natural log. Your phone should have a scientific calculator with an ln key.

If an item has become more expensive, can you think of reasons why living standards based on these items are actually higher than before, even if the time cost of purchasing the items has moved in the wrong direction.

Here is another set of time prices of items.

Year	1929	1957	1970	1997	2017
Twin mattress	161 hrs.	78 hrs.	42 hrs.	24 hrs.	12 hrs.
King mattress	321 hrs.	156 hrs.	84 hrs.	61 hrs.	27 hrs.
Year	1910	1950	1970	1997	2017
Electric range	345 hrs.	292 hrs.	113 hrs.	22 hrs.	23 hrs.
Year	1913	1954	1970	1997	2017
Dishwasher	463 hrs.	140 hrs.	69 hrs.	28 hrs.	15 hrs.
Year	1916	1958	1970	1997	2017
Refrigerator	3162 hrs.	333 hrs.	112 hrs.	68 hrs.	31 hrs.
Year	1911	1956	1970	1997	2017
Clothes washer	553 hrs.	138 hrs.	72 hrs.	26 hrs.	20 hrs.
Year	1916	1958	1970	1997	2017
Clothes dryer	198 hrs.	118 hrs.	57 hrs.	26 hrs.	20 hrs.
Year	1908	1955		1997	2017
Ford sedan	4696 hrs.	1638 hrs.		1365 hrs.	988 hrs.
Year		1954	1971	1997	2017
Color television		562 hrs.	174 hrs.	23 hrs.	20 hrs.
Year	1947	1967	1975	1997	2017
Microwave oven	2467 hrs.	176 hrs.	97 hrs.	15 hrs.	5 hrs.
Year	1944	1970	1984	1997	2017
Computer	197824 hrs.	1395272 hrs.	435 hrs.	76 hrs.	60 hrs.
Million operations/second	.000003	12.5	8.3	166	300000

(15) Comment on the change of living standards for these items. Have they improved throughout the 20th century into the first part of the 21st century? If no, can you think of reasons why living standards based on these items are actually higher than before, even if the time cost of purchasing the items has moved in the wrong direction. Again, compute the annualized rate of price change for each item. For example the dishwasher would be given by: (ln(15) - ln(463))/(2017-1913) = -3.30% per year, or a price *decline* of about 3.3 percent per year.

(5) Consider the evidence for in-state tuition and fees at the University of Texas at Austin:

	Year	1925	1950	1970	1995	2017
Hours		100	50	75	200	266

Consider that the gain in earnings from graduating from college can vary over time. That is suppose the premium in earnings compared to someone who only graduated from high school and did not attend college can vary over time. What must be the case over the past 100 years to help explain the changing price of college in order for the decision to attend college to be rational, wealth maximizing.

(5) From class we saw that the typical country of Europe would be a below median US state from the standpoint of real output per worker or real output per capita. What other evidence from class was presented to indicate that this lower standard of living in European countries as measured by real output per worker or real output per capita is in fact measuring something real.