ECONOMICS 101-03 MICROECONOMICS

EXAM 1

1. Clearly identifying a specific activity and the factors related to it and explaining and accurately describing their positive or negative, linear or non-linear relationship increase the grade. See comments on exam.

2. The role of assumptions:
- provide a common starting point for analysis of the behavior
- specify the underlying principles relevant to the behavior which do not need to be 'proved'
- limit the applicability of the analysis to specific behaviors, thereby allowing other behaviors to be ignored

3. Defining the concepts can help formulate a response and make the choice. Specialization is the ability to produce a larger quantity of a particular good or service than devoting the same time and resources to produce quantities of all goods. Markets involve the interaction of many individuals where multiple transactions assign monetary values to the goods or services and facilitate an efficient exchanges.

There is an argument for either specialization or markets causing the other:
Specialization leads to (causes) markets: Specialization implies a need to exchange the goods and services produced by various households. Markets are an efficient way to assign value and facilitate exchanges of the goods or services. The existence of specialization means there must be a way, markets, for households to acquire goods and services they are not adept at producing or for which they lack the resources to produce.

Markets leads to (causes) specialization: The existence of markets encourages individuals (households) to develop specialized skills which make it possible for them to efficiently value and exchange goods or services in which they specialize for other goods and services they need. If markets did not exist, exchanging goods/services specializations would be more time consuming–less efficient.

So long as you clearly specify your reasoning, either alternative is defensible. My preference is specialization causes markets which I believe is a stronger argument than markets cause specialization which implicitly assumes that markets exist for some other reason.

4. Production possibilities frontiers (PPF) allow for a determination of what combinations of resources (other activities) are possible or not as well as demonstrating that all combinations on a PPF are equally feasible–efficient. Whether the PPF is linear or not makes no difference in the above

5. The movement along a supply curve is the result of a shift of demand. Specific reasons for the shift are a change in: income of consumers, number of purchasers, preference of consumers, price of complementary or substitute good/service, expectations of future price changes/availability.

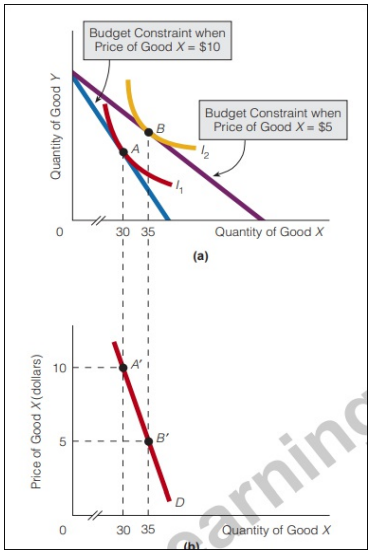
6. Shortages typically occur because of government intervention in a market, often by action to limit a price to a level below the equilibrium price. In the COVID-19 contest this can involve tests and vaccines–in both cases at zero direct cost to recipients. This results in the quantity supplied being less than the quantity demanded. The price limitations (ceilings), which are responsible are often justified on

the basis of fairness; however, the recipients who 'demand' the test or vaccine, is a larger number of recipients that would have 'demanded' the test or vaccine without the price ceiling. The result is an inefficient allocation of resources in that market. A surplus related to COVID-19 is the possible availability of protective equipment. A price higher than a market set price induces forms to supply a larger quantity.

The consequences in either case are negative as some non-market allocation scheme is necessary to distribute the good (or service). Rationing in the case of shortages: Limiting consumption in time; some type of lottery or favoritism or corruption are also negative consequences. Some non-market mechanism to address surpluses: need to dispose of excess production; storage costs. Implementation of these measures involve costs not necessary for market allocations. The price limitations distort resources allocations shifting to the production of other goods not demanded in as much quantity as the good for which there is a shortage or a surplus. The shortage situation is more practical, but a surplus is also defensible, in theory.

7. $MU_a / P_a = MU_b / P_b = 1$ represents conceptually the situation where the benefits (MU) equals the cost (price) of each good or service consumed. When the benefit = cost for a good or service that is the quantity a consumer should purchase–of the individual good or service and of all goods and services.

8. With no change in income, a decrease in the price of good X shifts the budget constraint allowing the consumer to purchase a larger quantity of good X. Since the consumer has a preference function for goods Y and X, the quantity of good Y purchased depends on the shape of the indifference curve for goods Y and X. In the graph, quantity of good Y increases as well as quantity purchased of good X. The price decline results in a movement along the demand curve for good X.



Graphically: (it makes no difference where the preference functions and budget are tangent)

The graph shows an increase in quantities purchased of both goods. Whether quantity of good Y increases or decreases depends on where the indifferent curve is tangent to the budget constraint.

9. Something like: The value of the **price elasticity of demand** is based on changes in the **quantity demanded** and **price of a good** and will always pass through a point of **unitary elasticity** along a **demand curve**.

10. True. The necessary information is the change in quantity purchased of a good when a consumer's income changes. Different consumers can change their purchasing amounts when his or her income changes. The good is a normal one if the change in the relative quantity purchased exceeds the relative change in income; it is an inferior good if the relative quantity purchased is less than the relative change in income. The determination is made by calculating the two consumer's income elasticities of demand

for the good; if the income elasticity is > 1 the good is a normal good, if the income elasticity is < 1 it is an inferior good. An income elasticity = 1 indicates there is no relationship between the change in income and change in quantity purchased (the good is neither normal nor inferior).