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*There are explanations only.

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Microeconomics

1-Basic Economic Principles

1) Answer: A

Simply put, microeconomics is the study of individuals and individual markets and macroeconomics involves the whole economy and the interaction between markets. Therefore A. (Credit to Hongyi Wang from Shanghai United International School, Gubei Campus)

2) Answer: C

The opportunity cost of a choice is the best alternative forgone for making that choice. Therefore, the opportunity cost of building a city park would be the best alternative use of the resources used for the construction of the park, thus C. (Credit to Hongyi Wang from Shanghai United International School, Gubei Campus)

3) Answer: C

"Scarcity," in economics, means that society has more economic wants than it's available productive resources to satisfy all of these wants. This concept underlies the idea that ordinarily consumers, businesses, and governments tend to choose the most effective use of limited resources, i.e., they must follow the principle of "economizing". The problem of scarcity is faced continually by every society, whatever the form of its government or economic system.

4) Answer: D

The opportunity cost of producing a good or service is the next best alternative good or service that might have been produced with the same resources. In other words, opportunity cost refers to what is forgone once money or resources are used for a specific purpose.

5) Answer: A

Factors of production are the inputs the firm uses to produce. There are a few types of them: labor, land, capital / machineries, and entrepreneurship / entrepreneur. Entrepreneurship is sometimes excluded.

6) Answer: A

The four factors of production are land, labor, entrepreneurship, and capital. Therefore, answer choice A is considered a productive resource and exclusively so. (Credit to Hongyi Wang from Shanghai United International School, Gubei Campus)

7) Answer: D

Entrepreneurship isa kind of production factors (land, labor, capital), it is a special labor who organizes the production and take the risks. The aim of this activity is to earn profits. Choice D is correct answer. (Credit to Mengze Lyu from Faragut school Tianjin Campus)

8) Answer: D

Opportunity cost is defined as the cost of things you give up to get it. In other words, it is the second best alternative. But from this question, there is no obvious explanation about the next best alternative. So, Choice D is correct answer. (Credit to Mengze Lyu from Faragut school Tianjin Campus)

9) Answer: B

Cotton production moves up, simultaneously wheat production is constant.
There is the technology progress for cotton. Cotton gin is used in production and cotton production is more productive. Choice B is correct answer. (Credit to Mengze Lyu from Faragut school Tianjin Campus)

10) Answer: D

In choice A and C, Harry and Jane perform the action for himself or his family without being paid. Hiring occurs in labor market (B). Purchasing tickets belongs to market for goods and services. (Credit to Herui Chen from HEFEI NO. EIGHT SENIOR HIGH SCHOOL)

11) Answer: B

In circular flow diagram, households provide labor, land, and capital. Working as labor brings wages, providing land brings rent, and investment of capital brings profit of firms. (Credit to Herui Chen from HEFEI NO. EIGHT SENIOR HIGH SCHOOL)

12) Answer: A

The production possibility frontier represents the maximum of a combination of two goods for the closed economy. Maximum capacity is determined by productivity and production requirements, including resources, technology and labors. If the three types of requirements can be changed, the maximum capacity can’t be determined. (Credit to Herui Chen from HEFEI NO. EIGHT SENIOR HIGH SCHOOL)

13) Answer: D

In a circular flow diagram, the three factors pointing from households to firms are labor, land, and capital. (Credit to Herui Chen from HEFEI NO. EIGHT SENIOR HIGH SCHOOL)

14) Answer: A

Giving up something means people need to choose between two or more choices. This decision process is trade-off. (Credit to Herui Chen from HEFEI NO. EIGHT SENIOR HIGH SCHOOL)

15) Answer: D

When Jack opens a restaurant, he spontaneously gives up playing sports that brings 5 million dollars per year. As a result, the cost of opening the restaurant would be 5 million dollars this year. (Credit to Herui Chen from HEFEI NO. EIGHT SENIOR HIGH SCHOOL)

16) Answer: C

Points on production possibility curve refer to the maximum combinations of outputs with all the resources. Therefore, points outside the curve are impossible to reach even with all the resources. (Credit to Herui Chen from HEFEI NO. EIGHT SENIOR HIGH SCHOOL)

2-Supply and Demand

17) Answer: A

Law of demand: other things equal, the quantity demanded of a good falls when the price of the good rises. In this case, when the price of hamburger decrease, the demand of hamburger increase, it’s an example of the law of demand.

18) Answer: E

The first event will decrease the demand of iPhone (both price and quantity of iPhone will fall), while the second event will decrease supple of iPhone (price will increase while quantity will decrease). Because both events will reduce the quantity of iPhone, so the quantity of iPhone will decrease; two events influence the price of iPhone in different directions and the degree of influences cannot be determined, so the price of iPhone cannot be determined.

19) Answer: C

An inferior good has a negative income elasticity of demand. The quantity demanded of it will drop as people earn more.

20) Answer: A

Due to increasing in salary, quantity demanded of bus decrease. (As the price of bus ticket is kept constant), the demand curve shift to left, so it is an inferior goods. Choice A is correct answer. (Credit to Mengze Lyu from Faragut school Tianjin Campus)

21) Answer: C

Substitute goods are goods with comparable characteristics and functions that can replace each other to achieve similar purposes. Answer choice C exemplifies substitute goods because IBM computers and HP computers can replace each other to achieve the similar purposes of internet access, file storage, communication etc. Answer choice A, B, and D exemplify complement goods that are diametrically opposite in terms of replaceability or substitutability with substitute goods. (Credit to Hongyi Wang from Shanghai United International School, Gubei Campus)

22) Answer: C

Answer choice B and D are trivial because demand is independent from supply. Answer choice A is incorrect because of two reasons. First, a price rise doesn't increase the market supply but rather increases the quantity supplied. Second, an increase in the number of producers will decrease the equilibrium price. (Credit to Hongyi Wang from Shanghai United International School, Gubei Campus)

23) Answer: B

Answer choice B provides an accurate definition of the demand curve. Answer choice A is inaccurate in its use of "actually". Answer choice C is trivially incorrect. Answer choice D reflects marginal benefit, which is the same as demand, but is relatively obscure in dictions. (Credit to Hongyi Wang from Shanghai United International School, Gubei Campus)

24) Answer: E

Changes in price won't affect the curve because they correspond to movements along the curve. Only choice E is a movement along the curve without shifting it. (Credit to Herui Chen from HEFEI NO.EIGHT SENIOR HIGH SCHOOL)

25) Answer: C

Substitutes mean that the two goods are mutually replaceable. When price of X increases, consumers buy fewer good X and want something else to replace such decrease in quantity. Therefore, the increase in quantity demanded proves that good Y can replace good X. (Credit to Herui Chen from HEFEI NO. EIGHT SENIOR HIGH SCHOOL)

26) Answer: B

An inferior good is an economic term that describes a good whose demand drops when people's incomes rise. These goods fall out of favor as incomes and the economy improve and as consumers begin buying more costly substitutes instead. (Credit to Herui Chen from HEFEI NO.EIGHT SENIOR HIGH SCHOOL)

27) Answer: B

The law of supply dictates that, all other factors being equal, as the price of a good or service increases, the quantity of goods or services that suppliers offer will increase, and vice versa. (Credit to Herui Chen from HEFEI NO. EIGHT SENIOR HIGH SCHOOL)

28) Answer: C

Apples will become more popular among consumers because they want to become healthier, so the demand for apples increases and the price will increase consequently. (Credit to Herui Chen from HEFEI NO. EIGHT SENIOR HIGH SCHOOL)

29) Answer: A

Because changes in prices cause no change in quantity, the quantity demanded is set at one specific value whatever the price. Therefore, a vertical straight line can represent this perfectly inelastic relationship. (Credit to Herui Chen from HEFEI NO. EIGHT SENIOR HIGH SCHOOL)

3-Market Equilibrium

30) Answer: A

At the equilibrium market price, the quantity demanded equals the quantity supplied and there’s no surplus or shortage. We can say the market is clear.

31) Answer: C

The market equilibrium is precisely defined as the state in which the quantity demanded equates with the quantity supplied. In such a situation, there is no tendency for the price to increase because there is no excess demand, nor does there exist a downward pressure on the price since the inventory level stays the same. (Credit to Hongyi Wang from Shanghai United International School, Gubei Campus)

32) Answer: B

At the price of 200, the quantity demanded (800) exceeds the quantity supplied (500), resulting in a shortage. Answer choice A, surplus, refers to the situation of quantity supplied exceeding quantity demanded. Answer choice C refers to the situation of quantity demanded equating quantity supplied. Therefore B. (Credit to Hongyi Wang from Shanghai United International School, Gubei Campus)

33) Answer: C

Consumer surplus can be understood as the total "net utility" gained by consumers in a market. This is represented by the summation of all lines showing the distance between the portion of the demand curve above the equilibrium price and the equilibrium price, because each point on this upper portion represents a consumer who gains a "net utility" of PMB-PE by paying the price PE (equilibrium price) and gaining the marginal benefit PMB (the height of the demand curve). By calculus, this summation equates with the area underneath the demand curve down to the equilibrium price. Therefore C. By a similar logic, answer choice D, producer surplus, is represented by the area above the supply curve up to the equilibrium price. Answer A and B are trivial upon random tryout. (Credit to Hongyi Wang from Shanghai United International School, Gubei Campus)

34) Answer: B

Since all answer choices involve a double shift of demand and supply, the combination of an increase in supply and a decrease in demand would unambiguously decrease the equilibrium price. When the price of raw cotton decreases, the production cost of cotton shirts decreases and supply shifts to the right. When the price of wool shirts decreases, demand for cotton shirts decrease because wool shirts and cotton shirts are substitutes. Therefore, B is our answer. (Credit to Hongyi Wang from Shanghai United International School, Gubei Campus)

35) Answer: A

Answer choice A is correct. Answer choice B describes the benefit to a consumer of buying a good at the equilibrium price. Answer choice C refers to the branch of economics that studies resource allocation and social and individual welfare. Answer choice D is a concept about efficiency increases and their derivative benefits. (Credit to Hongyi Wang from Shanghai United International School, Gubei Campus)

4-Elasticity

36) Answer: A

Explanation: Price elasticity of demand (PED) is defined as the ratio between percentage change in quantity demanded and percentage change in price. A PED of 2.0 means that this ratio is 2. In other words, the quantity demanded changes by 2% for any 1% change in its price. And since the law of demand states that quantity demanded is negatively correlated with price, a 1% decrease in price will lead to a 2% increase in quantity demanded. Therefore, we choose A. (Credit to Hongyi Wang from Shanghai United International School, Gubei Campus)

37) Answer: C

The formula for elasticity of supply is percentage change in quantity/percentage change in price. So, the answer is 10%/5%=2. (Credit to Herui Chen from HEFEI NO. EIGHT SENIOR HIGH SCHOOL)

38) Answer: E

Choice A can influence because the availability determines whether and how much consumers buy the substitutes when price changes. Choice B can influence because, for example, if the good transforms from luxuries to necessities, consumers will purchase a certain range of amount regardless of prices. Choice C can influence because when types of markets change, the scale of buyers and sellers changes and consumers' preferences will change. Choice D can influence because when time becomes longer, consumers will have more flexibility to choose other goods. (Credit to Herui Chen from HEFEI NO. EIGHT SENIOR HIGH SCHOOL)

39) Answer: C

Compared to luxuries, other four goods are more important for daily life, so when prices increase, people are more willing to buy other four goods, instead of luxuries. Thus, the demand for luxuries is more elastic than other four goods.

40) Answer: E

When elasticity of supply is less than 1, it's inelastic. When elasticity is greater than 1, it's elastic. When elasticity equals 1, it's unit elastic. (Credit to Herui Chen from HEFEI NO. EIGHT SENIOR HIGH SCHOOL)

41) Answer: D

Supply of chocolate shift to right, so the price of chocolate will decrease, the quantity of chocolate will increase. Choice D is correct answer. (Credit to Mengze Lyu from Faragut school Tianjin Campus)

42) Answer: B

When a product cannot be substituted nor abandoned by the consumer, it has an inelastic demand.

43) Answer: C

Price elasticity of demand (PED) is defined as the ratio between percentage change in quantity demanded and percentage change in price. A PED of 2.0 means that this ratio is 2. In other words, the quantity demanded changes by 2% for any 1% change in its price. And since the law of demand states that quantity demanded is negatively correlated with price, a 1% decrease in price will lead to a 2% increase in quantity demanded. Therefore, we choose C. (Credit to Hongyi Wang from Shanghai United International School, Gubei Campus)

44) Answer: B

Within the specified price range, the demand for radishes is more price elastic than that for carrots because 1.6>0.79. Therefore B. Answer choice A is trivial from the previous conclusion. Answer choices C and D are to do with cross price elasticities (XED), which cannot be directly deduced from the given data. Note that the reason a price range is included in the discussion is that price elasticity of demand (PED) varies along a demand curve. The relative size of 2 products' PEDs also varies at different price points, with the exception of 2 intersecting demand curves. (Credit to Hongyi Wang from Shanghai United International School, Gubei Campus)

45) Answer: D

A perfectly inelastic supply represents a supply that does not respond to changes in price. This only occurs with the supply is fixed, as suggested by answer choice D. On the demand supply model, this situation is shown by a vertical supply curve. Answer choice A represents a quite opposite situation with the supply curve very flat, almost horizontal. Answer choice B represents the exact opposite situation with the supply curve entirely horizontal. (Credit to Hongyi Wang from Shanghai United International School, Gubei Campus)

46) Answer: D

With its unique style, fixed quantity, and irreplaceable value, Picasso paintings have an extremely inelastic supply. The supply of fast food is elastic because its production time is very short. The supply of soft drinks is elastic because it is storable and its production time is short. The supply of road buildings is also more elastic than that of paintings. (Credit to Hongyi Wang from Shanghai United International School, Gubei Campus)

47) Answer: B

When the price of sugar increases by 5%, the sugar consumption decreases by 10%, so the absolute value of price of elasticity for sugar = 10%/5% = 2, it means that sugar consumers are very sensitive to the price change of sugar. Thus, even the price of sugar increases by a small portion, consumers will decrease their consumption of sugar by a large portion, resulting in the reduction of money spent on sugar (money spent on sugar = price of sugar * quantity consumed of sugar).

5-Utility and Consumer Choice

48) **Answer: E**

The answer is yes, as consumers are more sensitive to their own monetary costs, so having an entity that pays for medical services certainly changes the behavior of health-care consumers.

49) Answer: C

Brand loyalty refers to the situation whereby consumers acquainted with a particular brand display preference towards this brand over others. Therefore C. Answer choice A is overly general to be correct and might trivially be ruled out by economic assumptions. Answer choice B, a high cross elasticity, would result in a drastic decrease in demand for Maxwell's coffee, quite contrary to the described situation. Answer D is trivial as it counters the statement of Folder's coffee being 'on sale'. (Credit to Hongyi Wang from Shanghai United International School, Gubei Campus)

50) Answer: B

The graph is a budget constraint line, showing the possible consumption combinations of good X and good Y under a fixed income. Therefore, taking any point on the curve would yield the same correct result. Without loss of generality and for simplicity, take the y-intercept: 6 units of Y. This costs 6*5=30 units of currency as the consumer income. Therefore B. (Credit to Hongyi Wang from Shanghai United International School, Gubei Campus)

51) Answer: B

The law of diminishing marginal utility states that the additional utilities derived from unitary increments of consumption decreases, leaving A and B as possible candidates. Since different consumers derive different levels of utilities from internet access, answer choice B is correct. (Credit to Hongyi Wang from Shanghai United International School, Gubei Campus)

6-Market System

52) **Answer: B**

An economic system is a society's framework that coordinates economic activity. Two general types of economic systems are command-based system and market-based system.
In a command economy, central planning by government determines how productive resources are allocated to the production of goods and services. In a market economy, buyers and sellers pursue personal goals and interact through markets, and this determines the allocation of resources.

53) Answer: A

According to the theory of invisible hand, in competitive market, unintended greater social benefits can be achieved and public welfare can be concerned even when individuals behave in the way that maximizes their self-interests (**A** is the definition of the invisible hand). Business leaders don't have compulsory social responsibilities, therefore **B** is wrong. In a market economy, there's no presence of public sector or government, therefore central planning is non-existent, making **C** the wrong answer. In economics, economists usually assume that people will maximize their individual interests prior to others, therefore in ideal condition they have no awareness of public interest, **D** is wrong. (Credit to Yian Shen from Shanghai United International School, Gubei Campus)

54) Answer: B

The first sentence corresponds to the supply curve in which more goods are supplied at higher prices. The second sentence corresponds to the demand curve in which fewer goods are demanded at higher prices. Also, because it's in a market economy, there is no government intervention. As a result, many sellers and many buyers—and the consequent competition—result in the equilibrium. (Credit to Herui Chen from HEFEI NO.EIGHT SENIOR HIGH SCHOOL)

55) Answer: B

Resources are scarce in every kind of economic system because humans inevitably face this situation on Earth. Choice A is too extreme, and choice C doesn't necessarily exist in all economic systems(capitalism). Choice D isn't a must. (Credit to Herui Chen from HEFEI NO. EIGHT SENIOR HIGH SCHOOL)

7-Market Efficiency and Social Welfare

56) Answer: B

A public good is non-excludable and non-rival, so the one person’s usage will not reduce its availability for others, hence **C** is wrong. Public goods do benefit all individuals in the society (think an example as the national defense, the provision of public goods will benefit all of the citizens involved in the border of the country), thereby **D** is wrong. **A** is wrong because it doesn’t matter with the private business’s willingness to produce. The provision of public good by public sectors is concerned with the issue of free riders, that is, since the public good is non-excludable, no individuals can be excluded from being benefited from the public goods, making **B** the answer. (Credit to Yian Shen from Shanghai United International School, Gubei Campus)

57) Answer: C

National defense both requires cost and brings benefit. Also, it’s a public good, so it’s not rival(D). The situation in C is actually the free-rider problem. (Credit to Herui Chen from HEFEI NO. EIGHT SENIOR HIGH SCHOOL)

58) Answer: D

Efficiency requires undertaking an activity as long as the additional benefit of more of the activity is greater than the additional cost. The most efficient approach to pollution control is to reduce pollution as long as the extra benefits of reduction exceed the extra costs. The other solutions would reduce pollution, but the costs of these policies are likely to far outweigh the extra (or marginal) benefits.

59) Answer: A

Smoking is clearly a negative externality. Other choices are either irrelevant (d) or incorrect (b).

60) Answer: B

A person’s vaccination brings positive side effects to others, which is a positive externality.

61) Answer: C

Negative externality or external cost refers to the negative impact or cost suffered by a third party, which is not directly involved in the transaction.

62) Answer: D

The statement of a good not being excludable means that the good not having potential consumers prevented from consuming it. Therefore D. Answer choice A, rival good, describes another characteristic of goods whereby one consumer consuming the good reduces its availability for other potential consumers. Answer choice E is arbitrary and therefore incorrect. (Credit to Hongyi Wang from Shanghai United International School, Gubei Campus)

63) Answer: C

A positive externality exists if the production and consumption of a good or service benefits a third party not directly involved in the market transaction. The nice garden can bring benefit, joy received from beautiful scene to the neighbour, who is not directly involved in the production of garden. (Credit to Jerry Jin from Wuhan Britain-China School)

64) Answer: A

Societies can either choose to set up regulation to discourage firms from generating negative externalities E.g. corrective tax, or clean up externalities by government. Since private parties have no incentive to regulate their behaviors, so they can only negotiate in order to protect private right. (Credit to Jerry Jin from Wuhan Britain-China School)

8-Firms' Costs, Revenue, Production and Objectives

65) Answer: A

Profit is what is left over after all costs of production (total costs) are subtracted from total revenues (price per unit times the number of units sold). Profit is the fundamental incentive for firms or individuals to engage in business in a market economy.

66) Answer: C

Answer choice C illustrates a typical situation that causes diseconomies of scale, which is when the average total cost increases as a firm expands over the long run. Answer choice A and B, on the other hand, may be the examples of economies of scale (increasing returns to scale), which happen when the average total cost decreases as a firm expands over the long run. Therefore, only answer choice C exemplifies a disadvantage situation. (Credit to Hongyi Wang from Shanghai United International School, Gubei Campus)

67) Answer: B

Marginal Revenue Product, or the value of the marginal product, is the marginal product of an input times the price of the output, or the additional revenue gained from increase the amount of an input by one unit.

68) Answer: C

The basic role of entrepreneurs in the economy is to make business decisions and undertake the associated risks, as implied by answer choice C. Answer choice A and B refer to possible roles of entrepreneurs but are not general or consistent enough to be considered "basic". Answer choice D is arbitrary and therefore incorrect. (Credit to Hongyi Wang from Shanghai United International School, Gubei Campus)

69) Answer: D

Proprietorship only need a start-up and is started by one person, while corporation require multiple people and complex starting processes.

70) Answer: B

Profit refers to the monetary benefit or net gain in owning and operating a firm. The goal of all firms is to maximize benefit and thus maximize profit.

71) Answer: A

Fixed costs refer to the costs that is independent on the quantity produced. In this situation, it is the cost level when the quantity of output is zero.

72) Answer: C

Fixed costs refer to the costs that is independent on the quantity produced. In this situation, it is the cost level when the quantity of output is zero, so the fixed cost is \$6. The average variable costs of producing 3 units of output = (\$12-\$6)/3 = \$2.

73) **Answer: D**

Marginal value of the first worker = 4 - 0 = 4. Marginal value of the second worker = 9 - 4 = 5. Marginal value of the third worker = 16 - 9 = 7. Marginal value of the 4th worker = 22 - 16 = 6 < 7, so diminishing marginal product begins at the 4^{th} worker.

74) Answer: D

The value of marginal product (MRP) is the additional values gained from hiring one additional labor.

75) Answer: D

Implicit costs are the opportunity costs a firm incurs by using its resources in a certain way. Answer choice D describes the opportunity cost of the firm using its office space for office work. It is the forgone rent returns that the firm could have earned by renting the space out. Answer choice A, B, and C are all explicit costs towards different factors of production. Therefore D. (Credit to Hongyi Wang from Shanghai United International School, Gubei Campus)

76) Answer: A

Variable costs are cost imposed by factors of production that vary in quantity with output in the short run. Answer choice A represents a variable cost since a firm can easily change the number of workers it hires in order to affect output, changing the monthly payments for hired labor in the short run. Answer choice B, C, and D are fixed costs because they cannot be changed immediately to affect output. Take B for instance, property tax payments cannot be altered in the short run because changing them requires changes to the firm’s property ownership, which affects the scale of production and only occurs in the long run. (Credit to Hongyi Wang from Shanghai United International School, Gubei Campus)

77) Answer: C

Accounting profit= revenue- explicit cost, Economic profit = revenue- explicit cost- implicit cost, hence their difference is implicit cost, hence C. (Credit to Jerry Jin from Wuhan Britain-China School)

78) Answer: A

Average total cost can be calculated by ATC = TC/Q = (TFC + TVC)/Q = (100,000 + 80*10,000)/Q = (100,000 + 800,000)/Q = 900,000/Q = 900,000/10,000 = 90. Hence A. (Credit to Mike Li from Wuhan Britain-China School)

79) Answer: D

Marginal cost is defined as the increase in total cost that arises from an extra unit of production. ATCo = TC0/Q, ATC1 = TC1/Q = (TC0 + MC)/(Q+1). As MC is greater than ATC0, ATC1 > ATC0, average total cost is increasing. (Credit to Mike Li from Wuhan Britain-China School)

80) Answer: C

Shut down is defined as AR(Average Revenue) < AVC(Average Variable Cost), while exit is defined as AR < ATC(Average Total Cost). AR in this case is $1000, AVC in this case is $550, ATC in this case is $1150. Hence, AR is bigger than AVC, the firm shouldn’t shut down in the short run, which means it will operate until the contract expires. AR is smaller than ATC, the firm should exit the market in the long run. This is because FC due to the contract is sunken cost, and shouldn’t be included in consideration. In the long run when the contract expires, it becomes variable cost again and hence will be considered. (Credit to Mike Li from Wuhan Britain-China School)

81) Answer: C

Natural monopoly is defined as a monopoly that arises because a single firm can supply a good or service to an entire market at a smaller cost than could two or more firms. Therefore, if a natural monopoly is broken into several small firms, the advantage of a lower cost will vanish, leading to an increase in the average costs of production. (Credit to Mike Li from Wuhan Britain-China School)

82) Answer: B

Economic profit occurs when price is larger than marginal cost. To maintain the high price, the number of producers in the market has to be limited. If the market is protected by barriers to entry such as in natural monopoly, potential suppliers can be excluded out of the market. (Credit to Juliet Sun from Wuhan Britain-China School)

83) Answer: C

Social cost = private cost + external cost. Social cost involves cost borne by producers, consumers, and third parties.

84) Answer: A

Private benefit is the benefit derived by an individual or firm directly involved in a transaction as either buyer or seller. Therefore, private benefit is the benefit to people who buy and consume it. (Credit to Benson Yang from Wuhan Britain-China School)

85) Answer: C

Because of the decrease in the marginal product of labors, there will be more labors required to produce same amount of output. Thus, the firm has to hire more labors and the marginal cost of output will increase. (Credit to Benson Yang from Wuhan Britain-China School)

86) Answer: D

The Law of Diminishing Marginal Product is the economic concept shows increasing one production variable while keeping everything else the same will initially increase overall production but will generate less returns the more that variable is increased. Because some of the workers are not producing efficiently, there will be diminishing marginal product. (Credit to Benson Yang from Wuhan Britain-China School)

87) Answer: C

Marginal product of labor is the quantity of additional units of output produced from employing one additional unit of labor. At low levels of employment, increased coordination between labor and specialization causes the marginal product of labor to increase and the marginal cost to decrease. Therefore C. Answer choice A and B are trivial. Answer choice D is incorrect because rising prices leads to increasing marginal revenue product, not marginal product. As a side note, marginal revenue product = marginal revenue * marginal (physical) product. (Credit to Hongyi Wang from Shanghai United International School, Gubei Campus)

9-Market Structure

88) Answer: A

In microeconomics, the goods are identical in a perfect competitive market, but differentiated in a monopolistic competitive market. This explains why advertisement is adopted in monopolistic competition.

89) Answer: A

This is an example of how price is determined by supply and demand in competitive markets. A decrease in the supply of wheat with demand unchanged will increase the equilibrium price of wheat. The factors referred to in the other answers would reduce the equilibrium price of wheat.

90) Answer: C

If a firm is in a perfectly competitive market, this firm has many competitors, its products are almost identity with its competitors' products, and this firm is a price taker. The products of Microsoft Corporation and Ford Motor Company are obviously different from products of their competitors, and they can determine the prices of their products to a large degree. Compare with them, the hot dog vendor in New York has many competitors and their products-hot dogs do not have significant difference, so a hot dog vendor is the closest to being a perfectly competitive firm.

91) Answer: D

A monopoly is the only producer in its market, so it can determine the price of its product. Therefore, in order to maximize its product, the price of a monopoly's product is usually higher than that in other markets and the quantity of a monopoly's product is usually lower than that in other markets. When a monopoly broke into several competitive firms, the price will fall and quantity will increase.

92) Answer: A

Corn is an agricultural product, fertilizer in **A** and farm equipment in **C** is its complements, an increase in the price of complements will decrease the quantity demanded for the corn, vice versa. An improvement in the technology of production (namely **D**) will reduce the unity cost of the production, hence increase the quantity supplied. Assume corn is a normal good (as the normal assumptions do), an increase in the incomes of consumers will lead to greater demand for the product. (Credit to Yian Shen from Shanghai United International School, Gubei Campus)

93) Answer: D

Because the new equilibrium quantity decreases, the shift must be leftward. The change is either a decrease in demand or decrease in supply. Then, according to the upward slope and demand-supply graph, it's the decrease in supply that causes an increase in price. (Credit to Herui Chen from HEFEI NO.EIGHT SENIOR HIGH SCHOOL)

94) Answer: B

A natural monopoly is a monopoly that arises because a single firm can supply a good or service to an entire market at a smaller cost than other firms.

95) Answer: C

A monopolist produces at the level which MR = MC, which is lower than competitive output but at a higher price.

96) Answer: E

A B C and D are all characteristics of an oligopolistic market structure. E is a feature of perfect competition and monopolistic competition. (Credit to Wenbin Zheng from HD Qingdao Wanda School)

97) Answer: D

In the short run, a monopoly may receive profit, break even, or endure loss, depending on comparison between price and average total cost. Being a monopoly does not guarantee positive profit in the short term.

98) Answer: C

The demand curve faced by a firm in a perfectly competitive market is horizontal because the firm is a price taker. It can only accept the market price determined by the market demand and supply, without ability to influence it, because it is so small compared with the whole market. (Credit to Wenbin Zheng from HD Qingdao Wanda School)

99) Answer: A

A collusive oligopoly is when oligopoly firms collude to produce mutually beneficial quantities and prices, making decisions like a single firm, a monopoly. Therefore A. All other choices involve firms independently choosing prices and quantities based on their individual interests, different to that of a monopoly's. (Credit to Hongyi Wang from Shanghai United International School, Gubei Campus)

100) Answer: D

Since perfectly competitive firms are price-takers, imperfectly competitive markets, or monopolistically competitive markets, are typically characterized by having a large number of firms with price making ability. Choice A, B, and C are characteristics of perfect competition. C, in particular, is incorrect because monopolistically competitive markets have firms with various sizes. (Credit to Hongyi Wang from Shanghai United International School, Gubei Campus)

101) Answer: D

The supply curve of a monopolist does not exist because a monopoly has complete control over the price and thus there's no association between a controlled price and the quantity supplied.

102) Answer: B

Free does not only mean no fees. In some cases, it means no official limits.
Option A is not correct, because no costs of entering does not mean that a company can enter an industry without any other limits.

103) Answer: C

Drawing a set of monopoly cost curves, it can be observed that a monopoly configuration would results in lower output and higher price than would perfect competition. This is because monopoly firms' demand curves are inelastic relative to those of other markets. Answer A and B are incorrect because all firms try to maximize profits. Answer D is trivial. (Credit to Hongyi Wang from Shanghai United International School, Gubei Campus)

104) Answer: C

Because many sellers left the industry, the supply decreases and according to the law of demand and supply the price will rise. (Credit to Benson Yang from Wuhan Britain-China School)

105) Answer: D

Monopoly is about the supply side, so choice A, on demand side, is not relevant. The supply curve depends on the firm’ s production cost, and some monopolistic firms also face increasing marginal cost, so choice B is incorrect. The price is determined by demand curve and the optimal level of production, not solely marginal cost (C). The definition of monopoly is that there is only one firm in the market, but in real world, there are other firms providing similar goods. (Credit to Herui Chen from HEFEI NO. EIGHT SENIOR HIGH SCHOOL)

10-Economics of Labor

106) Answer: D

Medical doctors generally earn more than farmers because these doctors usually have spent large amount of money and time to accept high-level education, so that they own valuable skills and experience that the farmers do not have. In other words, these medical doctors are scarcer, given the demand for their services.

107) Answer: C

A perfectly competitive labor market is characterized by a perfectly elastic labor supply curve, such that a firm cannot change the wage rate no matter what.

108) Answer: C

Higher wages in an industry would increase the production cost of goods in this industry, shifting the supply curve to the left. This results in higher equilibrium price and lower equilibrium quantity. Therefore C. (Credit to Hongyi Wang from Shanghai United International School, Gubei Campus)

Macroeconomics

1-Basic Concepts

1) Answer: C

The condition of scarcity (relatively unlimited wants and limited resources) means that people in all economic systems must decide: (1) which goods and services will be produced; (2) how these goods and services will be produced; and (3) who will get these goods and services. Not all economic systems include profits, minimum wage laws, or income taxes, so these questions are not basic.

2) Answer: A

Voluntary exchange occurs only when the people involved expect to gain from the trade. If neither the student nor the store expects to gain from this trade (the purchase of the sweatshirt), neither would have made the exchange.

2-Measuring of GDP

3) Answer: B

GDP=C(consumption)+I(Investment)+G(Government spending)+NX(Net exports). (Credit to Herui Chen from HEFEI NO. EIGHT SENIOR HIGH SCHOOL)

4) Answer: C

Real income per capita is a measure accurately indicative of a nation's standard of living. A high real income per capita (real income per head) indicates a high living standard and vice versa, because the more real income a person earns, the more purchasing power that person has. Answer choices A and D are incorrect since they are nominal and thus less indicative of the living standard, which is measured in real terms. Answer choice B is appropriate but less consistent than answer choice C. A country with a low rate of unemployment might have a low standard of living due to widespread underemployment, low wages, and part-time employment. (Credit to Hongyi Wang from Shanghai United International School, Gubei Campus)

5) Answer: D

The gross domestic product is precisely defined as the market value of all final goods and services produced within a country’ s physical boundary within a specified time period, usually a year. This definition is most thoroughly represented by answer choice D. Answer choice A is average price level. Answer choice B is government expenditure. Answer choice C describes merely a component of GDP and is therefore incorrect. (Credit to Hongyi Wang from Shanghai United International School, Gubei Campus)

6) Answer: D

GDP per capita is defined as total output of UK’ s economy (within the geographical boundary of UK) divided by the country’ s population. **A** is wrong before London is only part of UK’ s economy, therefore it cannot represent the entire state. The average disposable income of a UK resident is an independent measure of economic performance. **C** is wrong as GDP is the total output of the economy rather than the citizens, GNI per capita measure the total income of the UK citizens, which is closer to the description. (Credit to Yian Shen from Shanghai United International School, Gubei Campus)

7) Answer: C

A suggests the situation of contractionary monetary policy. A fall in the interest rates encourages potential savors (marginal depositors) to spend their money rather than save in the bank. A decrease in the business taxes will encourage businesses and firms to spend more since they have more spare money (that are originally used to pay taxes). A reduction in the personal income tax rates have similar effects which in turn increases the expenditure. A decline in the consumer income reduces consumers’ ability for more expenditure, hence less spending. (Credit to Yian Shen from Shanghai United International School, Gubei Campus)

8) Answer: D

A explains the concept of circular flow of money, the nominal flow of money cannot fully represent the output level of the country. The amount of government regulations and spending can adjust the output of the economy, but not determining the economy’ s potential output, making **B** wrong. Business demand for final goods & services doesn’ t determine the supply side of the market, thereby is not related to the economy’ s potential output, **C** is wrong. The quantity & quality of labor, capital, and natural resources are categorized as the input of the production process, therefore it is the determinant for the economy’ s potential output, **D** is correct. (Credit to Yian Shen from Shanghai United International School, Gubei

Campus)

9) Answer: D

In a market economy, efficiency is prioritized over equality and equity since there' s no government or public sectors existing that do concern about the public welfare of the economy, hence **A** is wrong. Controlling the supply of gold is not related to people' s incentive to trade, rather, it' s on a more macro and monetary level and only suitable for gold-standard economies (which most countries are not). In a market economy, there' s no restriction on the 3 basic economic question, therefore the question of what to produce is decided by consumers, making **C** the wrong answer. The right to own private property protects people' s right for claiming the ownership of their private properties (this also includes patents etc.), this makes exchanges meaningful (as exchange is defined as using person A' s ownership of something (can be money) to change for person B' s ownership of another thing.) (Credit to Yian Shen from Shanghai United International School, Gubei Campus)

10) Answer: E

GDP (Gross Domestic Product) measures the total value of all final goods and services produced in a country in a given year. Thus, the transaction must include the trade of final goods and services with other people. A domestic exchange with family members is not included in.

11) Answer: C

GDP (Gross Domestic Product) measures the total value of all final goods and services produced in a country in a given year, regardless the products are made by what kind of companies.

12) Answer: C

The growth rate of Nominal GDP is the growth rate of real GDP plus inflation. Price index is calculated by tracking changes in the cost of buying a given market basket, a measure of the overall price level. Thus, rise in price index refers to rise in price level. According to the formula, the growth in nominal GDP is 10% [=($11,000-$10,000)/$10,000], but compared with the growth of inflation, 16.7% [=(140-120)/120], the real GDP actually decreases.

13) Answer: E

When people purchase stocks and bonds, firms can use these money to invest, so the purchase of stocks and bonds have already been included in the accounting of business spending. Thus, GDP does not measure the purchase of stocks and bonds.

14) Answer: E

When consumers buy an egg at the grocery store, it's counted as direct consumption, therefore counted in the GDP. But when a restaurant that sells omelets buys an egg, since it uses the egg to produce omelets, therefore eggs are intermediate goods, only the omelets is the final product to be counted in the GDP. If both are counted, the GDP will be double-counted. (Credit to Yian Shen from Shanghai United International School, Gubei Campus)

15) Answer: C

Real GDP is the production of goods and services valued at constant prices. Nominal GDP is the production of goods and services valued at current prices, it means the effects of the price adjust is considered. Choice C is correct answer. (Credit to Mengze Lyu from Faragut school Tianjin Campus)

16) Answer: B

The definition for real GDP is nominal GDP adjusted for changes in the price level. Real Δ% GDP=Nominal Δ% GDP - Inflation rates. (Credit to Yian Shen from Shanghai United International School, Gubei Campus)

17) Answer: D

Transfer payments, despite are components of the income circulation, is not associated with outputs of goods and services, therefore it is reasonable that it's not counted as part of GDP. The defects of the GDP are that it cannot measure the level of underground economic activities (black market, illegal trading etc.), and non-market productions are not included (including chiefs cooking for their own families), therefore it is not an inclusive measure of the country's total output. (Credit to Yian Shen from Shanghai United International School, Gubei Campus)

18) Answer: C

GDP (by expenditure method) consists of consumption, investments, net exports, and government purchases. Note that GDP measures the output level, therefore government transfer payment doesn't count since it doesn't correspond to an output. (Credit to Yian Shen from Shanghai United International School, Gubei Campus)

19) Answer: B

Nominal GDP growing for more than 2 percent doesn't necessarily mean a rising living standard as the inflation rate is unknown. Real GDP growing for more than 2 percent covers the impact of increase of population by 2%, while also not taking into the impact of pricing influences. This allows real GDP per capita to increase as 2+%/2%>1. Consumption spending growing doesn' t necessarily mean better quality of life since GDP is not restricted to consumption only. (Credit to Yian Shen from Shanghai United International School, Gubei Campus)

20) Answer: C

This is a typical example of non-market conducts, in which the service provided by the gardener will no longer be a market exchange since it' s an off-market conduct, therefore is not counted into the GDP as GDP only measures on-market outputs. (Credit to Yian Shen from Shanghai United International School, Gubei Campus)

21) Answer: A

The GDP of Canada is the market value of all final goods and services produced within Canada in a given period of time, so neither electronics made in Japan nor movies produced outside Canada should not be included in the GDP of Canada.

22) Answer: D

GDP calculates only the value of actual production and transactions and does not include stock trading in financial markets. Choices A, B, and C are all components of the GDP calculation because they represent government spending, consumption, and investment.

23) Answer: A

The GDP of Canada is the market value of all final goods and services produced within Canada in a given period of time, so neither electronics made in Japan nor movies produced outside Canada should not be included in the GDP of Canada.

24) Answer: B

We calculate real GDP by first designating one year as a base year. We then use the prices of goods in the base year to compute the value of goods and services in all the years. In other words, the prices in the base year provide the basis for comparing quantities in different years. Nominal GDP uses current prices to place a value on the economy' s production of goods and services. Real GDP uses constant base-year prices to place a value on the economy' s production of goods and services. Real GDP is not affected by changes in prices in current years, while nominal GDP is affected by changes in prices in currents years. Therefore, real GDP always equals nominal GDP in base year, not current year.

25) Answer: A

GDP=C+I+G+(X-M)=$7900+$1850+$1000+($1350-$1190) =$10910. (Credit to Li Zhang from Guangdong Experimental High School AP International Curriculum)

26) Answer: C

Real GDP growth rate = Nominal GDP growth rate - inflation rate = 6% - 2% = 4%

27) Answer: B

GDP measures the market value of all final goods and services produced within a country in a given period of time, it considers all goods produced within this country, including the product of foreign labor, so A and C are wrong.
GDP does not measure the value of intermediate goods because the value of intermediate goods has already been included in the final goods, so D is not a disadvantage of GDP.
House work like child care by parents at home is important for our life, but GDP does not measure its value, which is a disadvantage of GDP.

3-Inflation, deflation and Business Cycle

28) Answer: B

According to the definition, recession is a period of declining real incomes and rising unemployment. During a recession in an economy, both the economy growth and business spending will fall.

29) Answer: B

Real income = nominal income - inflation rate. Real income can be regarded as nominal income adjusted for prices level. If your annual income rises by 50% while prices of the things you buy rise by 100%, your real income = 50% - 100% = -50%, so your real income decreases 50%.

30) Answer: C

According to the definition of inflation, it's the increase in the general level of prices over a period of time. An economic growth can cause the standard of living to increase over time (namely **B**) and the real GDP to grow (namely **D**). Growth in interest rate is related to loanable funds market, increase in interest rate is a contractionary signal of the macroeconomy, thereby it's most probable that in such condition, interest rate will fall. (Credit to Yian Shen from Shanghai United International School, Gubei Campus)

31) Answer: B

The alternation between economic downturns and upturns in the macroeconomy is known as the business cycle. It is irregular and unpredictable. The ups and downs in the cycle are inevitable.

32) Answer: C

GDP deflator is a wider measure of the average change in prices, it is not restricted to only family produced products. Producer Price Index concerns the production process of the producers, which is usually used as a leading indicator of change in price level. Consumer Price Index measures the average price of things purchased by typical family (it's a weighted average). Minimum wage has not correlation with the price index. (Credit to Yian Shen from Shanghai United International School, Gubei Campus)

33) Answer: C

One major property of the business cycle is that it's usually predictable in the long run (usually following an upward growing trend), but irregular and unpredictable in the short run. There's no regular period in which a business cycle will last (different models follow a different period, e.g. Kitchin cycle usually proposed the business cycle to be 3 to 5 years). Unlike the stock market (under strong form of Efficient Market Hypothesis), most economists can predict the business cycle in the long run, but not in the short run, therefore **A** is not absolute true fact. (Credit to Yian Shen from Shanghai United International School, Gubei Campus)

34) Answer: D

CPI, as suggested by its name, is a weighted average of the price index covering the goods that will be purchased by a typical family. While GDP deflator covers the output of the entire economy, including those which will not be purchased by typical households (including national defense, healthcare etc.) (Credit to Yian Shen from Shanghai United International School, Gubei Campus)

35) Answer: D

Food occupies the most weight in the consumer price index, next is transport and housings. **A**, **B,** and **C** are too minor relative to food. (Credit to Yian Shen from Shanghai United International School, Gubei Campus)

36) Answer: A

Growth rate of your nominal income this year = (35,000/30,000)-1 =16.67%
Growth rate of your real income this year = growth rate of your nominal income this year - inflation rate this year = 16.67% - 10% =6.67% >0, so both your nominal and real incomes increased.

37) Answer: C

Inflation rate = (price index in year 2-price index in year 1)/ price index in year 1 = (price index in year 2/price index in year1) -1 = (109/105) -1 = 0.038.

38) Answer: E

Inflation is an increase in the overall price level in an economy in a given period of time. According to traditional monetarist perspective, the quantity equation explains that the growth in the quantity of money will cause inflation, especially that increase is not associated with growth in the output. High inflation also imposes various costs on the society, the most typical example is menu cost and shoe leather costs. It' s part of the government' s macroeconomic objectives to keep inflation in a controllable range (usually 2% to 4% in practice). (Credit to Yian Shen from Shanghai United International School, Gubei Campus)

39) Answer: E

Deflation is a fall in the general price level in an economy in a given period of time. During deflation, decrease in the general price level also reduced the income of households and firms as lower price of the produced product means lower revenue and profits, and hence income. Unemployment will definitely rise because lower revenue of the firms reduces their demand for labor. The quantity of money contracts during the period of deflation (according to the monetarist view), with less quantity, the average value of money will increase as a result. (Credit to Yian Shen from Shanghai United International School, Gubei Campus)

40) Answer: D

Leading economic indicators are used to forecast changes before the rest of the economy begins to move in a particular direction and help market observers and policymakers predict significant changes in the economy. Producer Price Index (PPI) tracks changes to the cost of production. Changes in PPI will result in the change of CPI. The reason is that the price index of means of production, the price index of means of living and the price index of raw materials, fuel and power all lead to the change of CPI. Therefore, PPI can be used as the leading index of inflation rate.

41) Answer: B

This question typically refers to US economy. In the US economy, housing is the biggest component in the calculation of CPI, hence gains the most weight. Next is food and beverages, and transportation. (Credit to Yian Shen from Shanghai United International School, Gubei Campus)

42) Answer: A

CPI is the measurement of the price of a weighted average market basket of consumer goods and services purchased by households. PPI concerns the producers, GDP deflator covers the prices of goods and services produced by the whole economy, not restricted to a typical consumer. Inflation rate is too broad and GDP is not relevant to the question. (Credit to Yian Shen from Shanghai United International School, Gubei Campus)

43) Answer: D

The cost of living, measured by CPI (Consumer Price Index), fails to take the following variables into account. 1) the changes of prices of goods and services are not coordinate (not proportionate), this is related to the concept of substitution bias, where CPI will overestimate inflation when consumers choose to purchase a relatively less expensive good to substitute the original one. 2) the appearance of new goods and 3) the quality of goods. This make CPI not a perfect indicator, hence other indicators are needed to complement the statistical discrepancy. (Credit to Yian Shen from Shanghai United International School, Gubei Campus)

44) Answer: D

When there is an inflation, the real value of interests paid by loan borrowers decreases, so the real value of interests received by loan lenders decreases too. Therefore, the interest incomes redistribute from loan lenders to loan borrowers.

45) Answer: D

When there is an inflation, the real value of interests paid by loan borrowers decreases, so the real value of interests received by loan lenders decreases too. Therefore, the interest incomes redistribute from loan lenders to loan borrowers. When there in a deflation, the interest incomes redistribute from loan borrowers to loan lenders.
Menu costs are the costs of changing prices. Losses always exist whether there is an inflation or there is a deflation.

46) Answer: B

Menu cost is the cost to a firm resulting from changing its prices as a result of inflation. Shoe leather cost is the cost of time and effort that people expend by holding less cash in order to reduce the inflation tax that they pay on cash holdings when there is high inflation. Inflation tax (note that it is not an actual tax required by the government) is the penalty for holding cash at a time of high inflation. Market failure waste refers to a situation in which the allocation of goods and services by a free market is not Pareto efficient, often leading to a net loss of economic value, this concept is not related to inflation. (Credit to Yian Shen from Shanghai United International School, Gubei Campus)

47) Answer: E

The only distinction between CPI and the GDP deflator is that CPI only covers the items that a typical household will buy, whereas the GDP deflators the price of all produced goods and services in the economy during the year. GDP deflator might even include defense, a public good that is not purchased by consumers, thereby it is a measurement of the price level of the whole economy. (Credit to Yian Shen from Shanghai United International School, Gubei Campus)

48) Answer: D

Calculating from CPI to inflation rate follows this formula: inflation rate=$(CPI_2-CPI_1)/CPI_1$. Here CPI_1 (CPI of year 1) is 110, while CPI_2 (CPI of year 2) is 115, hence (115-110)/110=4.55%. (Credit to Yian Shen from Shanghai United International School, Gubei Campus)

49) Answer: A

When unanticipated deflation occurs, the real value of debt increase.
The lenders get more benefit from the borrower. Choice A is correct answer. (Credit to Mengze Lyu from Faragut school Tianjin Campus)

50) Answer: B

The Consumer Price Index (CPI) is a measure that examines the weighted average of prices of a basket of consumer goods and services, such as transportation, food, and medical care. It is calculated by taking price changes for each item in the predetermined basket of goods and averaging them. Weights are based on the proportion of total expenditure spent on the different categories, reflecting the importance of different products to consumers. (Credit to Zhiqiang Ma from ULink College of Suzhou Industrial Park)

4-Economic Growth

51) Answer: C

When the labor productivity increases, the total output of the economy will increase too, causing the increase of the economy' s underlying trend rate of growth. When inflation increases, the nominal GDP may rise too, but it does not mean the economy is truly growing. Thus, the increase in labor productivity is most likely the right answer.

52) Answer: B

Increase in the reserves of gold is not necessarily a signal of economic growth (as most countries have abolished their gold standard system). High unemployment suggests that resources are not fully employed, which is not an ideal condition for the economy to experience high growth rate, making **C** wrong. The problem of tariff is a typical example of prisoner's dilemma, in which it turns out that the outcome is not optimal or the mostly preferred one. Capital investment can increase productivity, therefore enabling high rates of economic growth. (Credit to Yian Shen from Shanghai United International School, Gubei Campus)

53) Answer: B

Capital goods are the buildings, machines, and equipment that are used to produce products or provide services.

54) Answer: B

When the private saving increases, banks will have more money to lend to businesses, so the borrowing costs for businesses will be lower, causing businesses to borrowing money to buy more capital goods and increase the employees' wages. Thus, both the purchase of capital goods and productivity of employees will increase. When business investments increase, businesses will buy more capital goods and increase the employees' wages too.

55) Answer: C

Growth rate of nominal GDP is a measure of change of the output of an economy, but it involves inflationary effects, alternatively, growth rate of real GDP measure solely the change in the output of the economy with the elimination of inflation. To calculate the material well being of the average person, real GDP per capita is needed and it's calculated as real GDP divided by population. The growth in the percentage of labor force that's employed only suggest transformation of the factors of production (input) to labor force rather than capitals, but doesn't not relate to the output. (Credit to Yian Shen from Shanghai United International School, Gubei Campus)

56) Answer: C

Despite the concept of scarcity have always been the basic economic problem, it doesn' t necessarily influence the economic growth of the economy. In the history, there haven' t been cases where the scarcity of natural resources limited economic growth, even oils didn' t. (Credit to Yian Shen from Shanghai United International School, Gubei Campus)

57) Answer: B

Straightaway, **D** is incorrect because investment in human capital can effectively increases workers'

productivity, leading to long-term economic growth. Investments in human capital increases the productivity of the workers, which leaves a greater opportunity cost to workers because their opportunity cost (implicit cost) of not working (eg. leisure) will be higher. For firms, highly productive workers will make it more costly to replace their outputs by machines & physical capital. (Credit to Yian Shen from Shanghai United International School, Gubei Campus)

58) Answer: C

A and **B** are incorrect as decrease in supply will stimulate a higher price, so do increase in demand.

Technical advancement and progress have largely increased their supply, therefore decreases their prices. (Credit to Yian Shen from Shanghai United International School, Gubei Campus)

59) Answer: C

Higher standards of living depend on high productivity. It means some jobs needs high-education and skilled workers. Choice C is correct answer. (Credit to Mengze Lyu from Faragut school Tianjin Campus)

5-Employment and Unemployment

60) Answer: C

Answer choice C, collective bargaining, correctly refers to the described situation. Answer choice A, closed shop, describes the situation in which a trade union forbids non-members from entering the labor market. Answer choice B, the seniority system, is the system of hierarchy among employees based on their relative lengths of employment. Answer choice D, right to work legislations, are laws that protect workers' right to work by preventing forced contributions to trade unions. (Credit to Hongyi Wang from Shanghai United International School, Gubei Campus)

61) Answer: C

Unemployment rate is the percentage of the labor force that is unemployed. The labor force is the total number of workers, including both the employed and the unemployed.
When the population increases, the changes of unemployment rate is unclear.
When consumer incomes decrease, some businesses may lose incomes because of fewer consumers. Thus, these businesses may fire employees, causing an increase in unemployment rate.
When the economic growth increases, more employees will be hired to expanse businesses, causing a decline in unemployment rate.
When business investment decreases, unemployment rate may increase because businesses do not need so many employees as before.

62) Answer: D

Frictional unemployment: unemployment that results because it takes time for workers to search for the jobs that best suit their tastes and skills.
Structural unemployment: unemployment that results because the number of jobs available in some labor markets is insufficient to provide a job for everyone who wants one.
Cyclical unemployment: periodic unemployment caused by fluctuations in the business cycle.

63) Answer: B

If a person voluntarily quits his/her job, it means he/she spends some time to search for the jobs suit her/his taste and skills. This is frictional unemployment. Choice B is correct answer. (Credit to Mengze Lyu from Faragut school Tianjin Campus)

64) Answer: C

Unemployed people include those who were not employed, were available for work, and had tried to find employment during the previous four weeks. Unpaid worker in a family member's business in E is an employed person, while full-time student in A, retired people in B, people who have given up looking for jobs in D are neither employed people nor unemployed people.

65) Answer: C

Arbitration is the use of arbitrators to settle a dispute. Mediation is a structured, interactive process where an impartial third party assists disputing parties in resolving conflict through the use of specialized communication and negotiation techniques (Wikipedia). Collective bargaining is the negotiation between trade unions (representing the workers, hence calling "collective") and management department of a firm to arrive at a labor contract. Reconciliation is an accounting process that compares two sets of records to check that figures are correct and in agreement (Investopedia). (Credit to Yian Shen from Shanghai United International School, Gubei Campus)

66) Answer: A

Yuan is frictionally unemployed because he is in a period of searching for jobs. Answer B is trivial. Answer C and D are incorrect because the reason for his unemployed status is not restructuring job markets or an economic recession. (Credit to Hongyi Wang from Shanghai United International School, Gubei Campus)

67) Answer: C

Emphasizing the connection between productive contribution and economic reward means tying how productive a person is with the amount of income that person receives. Since every person is naturally different in productivity, such economists would advocate against an equal income distribution because it mismatches the inequality in individual productivity. Therefore C. (Credit to Hongyi Wang from Shanghai United International School, Gubei Campus)

68) Answer: B

Simply put, equity is how "fair" things are in an economy, not how "large" things are or, importantly, how "equal" things are. This definition exclusively corresponds to answer B. Answer A, C, and D adhere more closely to the concept "efficiency", not "equity". (Credit to Hongyi Wang from Shanghai United International School, Gubei Campus)

6-Aggregate Demand and Aggregate Supply

69) Answer: A

Aggregate demand includes consumer consumption, government spending, investment and net export. In the Aggregate Demand and Aggregate Supply diagram, price level is the vertical axis and total output is the horizontal axis. The point where AD and AS curve intercept reflects current price level and real GDP.

70) Answer: C

Long-tern improvements in standard of living can be only brought by rightward shifts of Long-Run

Aggregate Supply curve. Only the increase in labor productivity can make LRAS curve shift to the right.

7-Monetary System

71) Answer: D

Important functions of money:
medium of exchange: an item that buyers give to sellers when they want to purchase goods and services;
unit of account: the yardstick people use to post prices and record debts;
store of value: an item that people can use to transfer purchasing power from the present to the future.
When a person is buying a ticket of movie, the buyers give money to sellers, money is serving the function: medium of exchange.

72) Answer: B

When real interest rates increase, people are more willing to save money in the bank because they can earn more interests and they are less willing to borrow money because the borrowing costs increase.

73) Answer: D

For borrowers, decrease in the real interest rates reduces their cost of borrowing money, therefore encourages them to borrow more from the loanable funds market. For depositors, the interest (money gained from lending money to the bank) decreases, therefore disincentives them to save. (Credit to Yian Shen from Shanghai United International School, Gubei Campus)

74) Answer: D

As widely known, US is not a country with gold-standard or "silver-standard", its official money, the US dollars, is a type of fiat money, making both **A** & **B** wrong. Corporate bonds are included in the money market (note that money market is not equivalent to the money supply market), **C** is wrong. Checking account deposits is a form of demand deposits, therefore is included in the M1 money supply, hence **D** is correct. (Credit to Yian Shen from Shanghai United International School, Gubei Campus)

75) Answer: C

The major function of a commercial bank is to connect the demand side and supply side of the loanable funds market. It accepts deposits from depositors (savors) and give them a certain interest, in turn, they will loan the funds raised from the depositors to borrowers and charge the borrowers for a higher interest for profits. All **A**, **B**, and **D** can be performed by the commercial bank system, however, it’s not its major function. (Credit to Yian Shen from Shanghai United International School, Gubei Campus)

76) Answer: C

Money has 4 important functions: 1. medium of exchange to make payments; 2. measure of value of accounts to fix a price; 3. store of value to purchase in the future; 4. means of deferred payment to repay loans. However, exchanging shoveling the driveway for use of landlord’s car is barter.

77) Answer: D

The Federal Reserve System (FRS), often called simply the Fed, is the central bank of the United States. FRS was founded to provide the country with a safe, flexible, and stable monetary and financial system. It is responsible for the formulation of monetary policy and the regulation of member banks and independent of political influence. (Credit to Nicole Zhu from Wuxi Boston International School)

78) Answer: B

Resource market exists in the circular flow of income model. Loanable funds market connects the demand and supply side of the market (borrowers and depositors). The labor market consists of labor force and employers. Taxes are related to fiscal measures of the government. (Credit to Yian Shen from Shanghai United International School, Gubei Campus)

79) Answer: C

Opportunity cost is defined as the best next opportunity forgone. In this case, the opportunity cost of spending/holding money is to use that money for other objectives, including depositing in the banks which can provide interests. **A** in itself is correct, money is a means of payment, but it’s not relating to the concept of opportunity cost. The trouble of having to get the money out of the bank is not an opportunity cost, rather, it’s more likely to be an implicit transaction cost or a risk. (Credit to Yian Shen from Shanghai United International School, Gubei Campus)

80) Answer: B

Do note that, **A**, **B** and **C** are the functions of money, but here money is deposited in bank with the depositor hoping to save for future usages, therefore money functions as a storage of value. Its function as a unit of account and means of payment is usually applicable in the exchanges or transactions. (Credit to Yian Shen from Shanghai United International School, Gubei Campus)

81) Answer: B

The money market contains a demand curve and a supply curve of money. The demand curve is a negative association between interest rate and quantity of money. The supply curve is a vertical line that can be shifted by the Fed. When the supply curve shifts to the left, its new intercept with the demand curve would be at the higher interest rate.

82) Answer: A

In order to alter the money supply, the Fed can change reserve requirements. If the Fed reduces the required reserve ratio, banks will lend a larger percentage of their deposits, leading to more loans and an increase in the money supply via the money multiplier. Alternatively, if the Fed increases the required reserve ratio, banks are forced to reduce their lending, leading to a fall in the money supply via the money multiplier. (Credit to Yifan Huang from SSFBC - The High School Affiliated to Shaanxi Normal University)

8-Macroeconomics Policies

83) Answer: C

Supply-side policy aims at increasing productivity, and reducing social welfare can motivate more people to work harder. Therefore, the productivity of the society is increased. (Credit to Herui Chen from HEFEI NO. EIGHT SENIOR HIGH SCHOOL)

84) Answer: A

Monetary policy is the setting of the money supply by policymakers in the central bank. Changes in interest rates and open market operation are caused by central bank, while changes in government spending, budget deficits and taxes are caused by the government.

85) Answer: A

Monetary policy involves policies made by central banks, which normally involves changes in interest rate, money supply and exchange rate.

86) Answer: B

Purpose of supply-side policies is, in other words, shift aggregate supply to the right in order to grow more sustainability. (Credit to Herui Chen from HEFEI NO. EIGHT SENIOR HIGH SCHOOL)

87) Answer: D

Reduction in the tax level is included as a component of expansionary fiscal policy. Expansionary fiscal policy is a governmental measure to stimulate the aggregate demand (mainly encourage increase in consumption and investment) in the economy, but with a cost of higher inflation rates. Interest rate, on the other hand, is irrelevant to the fiscal policy, rather, it's part of the monetary policy. (Credit to Yian Shen from Shanghai United International School, Gubei Campus)

88) Answer: A

The definition of a government budget surplus is a higher tax revenue relative to the government spending. Both **D** and **B** can be the potential causes of this phenomenon, but it's not explaining the phenomenon itself. (Credit to Yian Shen from Shanghai United International School, Gubei Campus)

89) Answer: D

The definition of a government budget deficit is a higher government expenditure relative to the tax revenues. Both **A** and **B** can be the potential causes of this phenomenon, but it's not explaining the phenomenon itself. (Credit to Yian Shen from Shanghai United International School, Gubei Campus)

90) Answer: C

Fiscal policy is government policy using taxation, government spending and borrowing to regulate the economy by changing AD. (Credit to Wenbin Zheng from HD Qingdao Wanda School)

91) Answer: D

When there is an inflation, it means that there are too much money in the economic system, so government should try to decrease money in economic system. Both decreasing taxes and decreasing interest rates will encourage people to consume, causing more money in economic system, while decreasing government spending will discourage people to consume and discourage firms to invest more, so the correct answer is D.

92) Answer: D

Fiscal policy is a governmental policy aiming to use government expenditures and tax scheme to achieve macroeconomic objectives. Monetary policy, conducted usually by central banks, is to use adjustments in the interest rates and OMO (Open Market Operation) to achieve macroeconomic objectives. Income policy is to adjust the distribution of income and wages to response to inflation. Stabilization policy is a form of discretionary policy, aiming to encourage steady growth of the economy. (Credit to Yian Shen from Shanghai United International School, Gubei Campus)

93) Answer: C

A explains the balance of government budget, but not this particular condition of deficit. Budget deficit is defined as government expenditures exceeding net tax revenues (G-T<0). Leakages are savings, taxes and imports, taxes contribute to government revenue rather than expenditures. (Credit to Yian Shen from Shanghai United International School, Gubei Campus)

94) Answer: A

A budget deficit occurs when government spending exceeds government income. Therefore A. Answer B and D are trivial. Answer C is incorrect because government spending includes much more than investment spending. Answer E is incorrect for a similar reason. (Credit to Hongyi Wang from Shanghai United International School, Gubei Campus)

95) Answer: A

Efficiency means that society is getting the maximum benefits from its scarce resources. Equality means that those benefits are distributed uniformly among society's members. In other words, efficiency refers to the size of the economic pie, and equality refers to how the pie is divided into individual slices. When the government tries to cut the economic pie into more equal slices, the pie gets smaller. Therefore, when government policies are designed, there is trade-off between efficiency and equality.

96) Answer: A

Monetary policy is the changes in the money supply and interest rates (and also the Open Market Operations). Fiscal policy is the changes in the government spending and taxation mechanism. Changes in regulation is concerned with supply side policy. (Credit to Yian Shen from Shanghai United International School, Gubei Campus)

97) Answer: C

A recession can be defined as a sustained period of weak or negative growth in real GDP (output) that is accompanied by a significant rise in the unemployment rate. To get out of this period, offering lower discount rate will encourage business to increase output. (Credit to Estelle YU from Chongqing Nankai Liangjiang Secondary School)

98) Answer: A

The basic objective of expansionary policy is to boost aggregate demand to make up for shortfalls in private demand. It is based on the ideas of Keynesian economics, particularly the idea that the main cause of recessions is a deficiency in aggregate demand. Expansionary policy is intended to boost business investment and consumer spending by injecting money into the economy either through direct government deficit spending or increased lending to businesses and consumers. (Credit to Estelle YU from Chongqing Nankai Liangjiang Secondary School)

99) Answer: A

Money policy includes reserve requirements, federal funds rate, and open market operation. During a period of low unemployment, the Fed needs to adopt a tight monetary policy to fight high inflation, that is raising the federal funds rate or raising the reserve requirements for banks or sell bonds to decrease the money supply. So, B and D are wrong. C is fiscal policy rather than monetary policy. (Credit to Yingjie Sun from Jinling High School Hexi Campus)

100) Answer: B

Open market strategy is the tool that Federal Reserve uses to increase or decrease money supply. Federal Reserve can either choose decreasing reserve requirement or decrease discount rate, or to purchase government securities to increase money supply. Hence B. (Credit to Jerry Jin from Wuhan Britain-China School)