

MEDIP Admission Test - Mock Test
Practice version with answer key

Surname:

Name:

Date: _____

Time allowed: 75 minutes

Instructions. Choose one answer for each question. Calculators are allowed only where needed. The answer key and brief solutions are placed at the end of the document for self-checking.

Microeconomics

1. Two indifference curves for the same consumer cannot intersect because such an intersection would violate:

- A. diminishing marginal utility only
- B. the budget constraint
- C. transitivity and consistency of preferences
- D. the law of supply

2. The marginal rate of substitution of good x for good y is:

- A. the price of x divided by income
- B. the absolute value of the slope of the indifference curve
- C. always equal to one when preferences are convex
- D. the slope of the production function

3. For $U(x,y)=x^{0.5}y^{0.5}$, income $I=120$, $p_x=3$ and $p_y=6$, the optimal demand for x is:

- A. 10
- B. 20
- C. 30
- D. 40

4. A negative income elasticity of demand identifies a good as:

- A. normal
- B. inferior
- C. a perfect complement
- D. a public good

5. In perfect competition, if one firm sets a price above the market price, its quantity demanded will typically:

- A. increase
- B. fall to zero
- C. remain unchanged
- D. make market demand perfectly inelastic

6. The marginal cost curve shows:

- A. total cost divided by output
- B. the increase in total cost from producing one additional unit
- C. fixed cost at each output level
- D. average variable cost minus average fixed cost

7. In a Cournot duopoly with two identical firms, the Nash equilibrium is found where:

- A. each firm produces monopoly output
- B. the two reaction functions intersect
- C. price is always equal to zero
- D. one firm chooses first and the other follows

8. A monopolist faces $P=80-2Q$ and constant marginal cost $MC=20$. The profit-maximizing quantity is:

- A. 10
- B. 15
- C. 20
- D. 30

9. In a Stackelberg duopoly with identical costs and linear demand, the leader typically produces:

- A. less than the follower
- B. the same quantity as the follower

C. more than the follower

D. zero output

10. Producer surplus in the short run can be measured as:

A. total revenue minus total variable cost

B. total revenue minus fixed cost only

C. consumer surplus plus profit

D. the area below demand and above price

Macroeconomics

1. In the Keynesian cross, an increase in government expenditure raises equilibrium output by more than the initial spending increase when:

- A. the marginal propensity to consume is positive
- B. taxes are always equal to spending
- C. the multiplier is zero
- D. investment is perfectly crowded out immediately

2. In the short run, the most volatile component of aggregate demand is usually:

- A. private consumption
- B. public expenditure
- C. private investment
- D. imports only

3. A liquidity trap is a situation in which money demand is:

- A. perfectly inelastic
- B. infinitely elastic at a very low interest rate
- C. always equal to money supply
- D. zero at all interest rates

4. In the IS-LM model, an increase in autonomous investment shifts:

- A. the IS curve to the right
- B. the IS curve to the left
- C. the LM curve to the right
- D. both curves downward

5. In the IS-LM model, an increase in money demand, with money supply fixed, shifts the LM curve:

- A. downward/rightward
- B. upward/leftward
- C. not at all
- D. together with the IS curve

6. With perfect capital mobility and fixed exchange rates in the Mundell-Fleming model, monetary policy is:

- A. ineffective
- B. fully effective
- C. effective only if prices fall
- D. identical to fiscal policy

7. In the AD-AS model, a favorable demand shock in the short run causes:

- A. output and prices to fall
- B. output to rise and prices to fall
- C. output to fall and prices to rise
- D. output and prices to rise

8. A negative supply shock in the AD-AS model typically leads to:

- A. lower output and higher prices
- B. higher output and lower prices
- C. lower output and lower prices
- D. higher output and higher prices

9. In a WS-PS labor market, a reduction in firms market power, other things equal, tends to:

- A. increase unemployment
- B. reduce equilibrium unemployment and raise the real wage
- C. leave unemployment unchanged

D. reduce the price-setting real wage

10. The natural rate of unemployment in orthodox neoclassical theory is associated with:

A. market frictions, search, and imperfections

B. aggregate demand only

C. the trade balance only

D. zero reservation wages

Basic Econometrics

1. In the simple linear regression model $y = \beta_0 + \beta_1 x + u$, β_1 measures:

- A. the expected change in y associated with a one-unit increase in x
- B. the average value of x
- C. the variance of the error term
- D. the number of observations in the sample

2. In a regression of wages on years of education, the wage is usually the:

- A. independent variable
- B. dependent variable
- C. omitted variable
- D. residual

3. The residual in an estimated regression is:

- A. the observed value minus the fitted value
- B. the fitted value minus the intercept only
- C. the number of explanatory variables
- D. always equal to zero for every observation

4. A positive correlation between two variables means that:

- A. one variable necessarily causes the other
- B. higher values of one variable tend to be associated with higher values of the other
- C. the regression coefficient must be zero
- D. there is no statistical relationship

5. Why does correlation not automatically imply causality?

- A. Because variables can move together for other reasons, such as omitted factors or reverse causality
- B. Because correlation can only be negative
- C. Because regression never uses data
- D. Because causality requires the dependent variable to be constant

6. An omitted variable problem arises when the omitted factor:

- A. is unrelated to both y and x
- B. affects y and is correlated with an included explanatory variable
- C. has no variation in the sample
- D. is included in the regression twice

7. In an OLS regression, the fitted value is:

- A. the value predicted by the estimated regression line
- B. the same as the residual
- C. the standard deviation of y
- D. the p -value of the slope coefficient

8. If the estimated coefficient on education is 0.08 in a regression where log wage is the dependent variable, a basic interpretation is:

- A. one more year of education is associated with about 8 percent higher wage
- B. education causes wages to fall by 8 euros
- C. the regression has exactly 8 observations
- D. the residual is always 0.08

9. A randomized experiment is useful for causal analysis because random assignment tends to:

- A. make treatment status unrelated to other determinants of the outcome
- B. remove the need for an outcome variable
- C. guarantee a perfect correlation

D. make all observations identical

10. In a scatter plot, a regression line is used mainly to:

A. summarize the average linear relationship between two variables

B. prove causality without assumptions

C. remove all outliers automatically

D. make the dependent variable disappear

Answer key and brief solutions

Section	Question	Answer	Brief solution
Microeconomics	1	C	If the same bundle lies on two curves, the implied ranking of other bundles becomes inconsistent.
Microeconomics	2	B	MRS measures the rate at which the consumer is willing to trade y for x along an indifference curve.
Microeconomics	3	B	With equal Cobb-Douglas exponents, half of income is spent on x: $x=(0.5*120)/3=20$.
Microeconomics	4	B	Demand falls when income rises, so the good is inferior.
Microeconomics	5	B	The individual firm faces a perfectly elastic demand at the market price.
Microeconomics	6	B	Marginal cost is the change in total cost associated with one more unit.
Microeconomics	7	B	Cournot equilibrium requires each firm to be best responding to the other.
Microeconomics	8	B	$TR=80Q-2Q^2$, so $MR=80-4Q$. Set $MR=MC$: $80-4Q=20$, hence $Q=15$.
Microeconomics	9	C	The leader commits first and uses the follower reaction function strategically.
Microeconomics	10	A	Short-run producer surplus equals revenue net of variable costs.
Macroeconomics	1	A	A positive MPC generates induced consumption and a multiplier larger than one.
Macroeconomics	2	C	Investment is highly sensitive to expectations and interest rates.
Macroeconomics	3	B	At very low rates, people willingly hold additional money balances.
Macroeconomics	4	A	Higher autonomous investment increases planned expenditure at each interest rate.

Macroeconomics	5	B	At each income level, equilibrium in the money market requires a higher interest rate.
Macroeconomics	6	A	The central bank must defend the peg, offsetting the initial monetary expansion or contraction.
Macroeconomics	7	D	A rightward shift of AD raises both output and the price level in the short run.
Macroeconomics	8	A	A leftward shift of short-run AS creates stagflationary pressure.
Macroeconomics	9	B	A lower mark-up raises the price-setting real wage and improves labor-market equilibrium.
Macroeconomics	10	A	It reflects structural and frictional features of the labor market.
Basic Econometrics	1	A	The slope coefficient is the expected change in the dependent variable when x increases by one unit.
Basic Econometrics	2	B	The dependent variable is the outcome the regression tries to explain.
Basic Econometrics	3	A	A residual is the sample prediction error: actual y minus predicted y.
Basic Econometrics	4	B	Correlation describes association; by itself it does not prove causality.
Basic Econometrics	5	A	Association may arise from confounding variables, reverse causality, or coincidence.
Basic Econometrics	6	B	Omitted variable bias requires relevance for y and correlation with an included regressor.
Basic Econometrics	7	A	The fitted value is the model prediction for a given observation.
Basic Econometrics	8	A	In a log-level model, a one-unit increase in x is approximately a $100 \cdot \beta$ percent change in y.
Basic Econometrics	9	A	Randomization helps balance confounders between treated and control groups.
Basic Econometrics	10	A	The line summarizes association; causal interpretation needs

			additional assumptions or research design.
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