SAMPLE

Admission Test for MPhil Applied Economics [FATE]

Instructions for Candidates:

1. Please write down your full NAME in BLOCK letters on cover page & on answer sheet as well.
2. Use ANSWER SHEET to answer the questions.
3. En-circle (i.e. ©) / Tick (i.e. √) ONLY ONE option.
4. Overwriting / cutting / duplication will be considered WRONG.
5. Each question carries ONE point.
6. TIME Allowed is 90 minutes.

Department of Economics
FORMAN CHRISTIAN COLLEGE (A Chartered University)
**Section I: Microeconomics (20 X 1 = 20 marks)**

1. When both the price of a substitute and the price of a complement of commodity X rise, the demand for X
   - a. rise  
   - b. fall  
   - c. remains same  
   - d. all of the above

2. If the amount of a commodity purchased remains unchanged when the price of another commodity changes, the cross price elasticity between them is
   - a. negative  
   - b. positive  
   - c. zero  
   - d. all of the above

3. When total utility increases, marginal utility is
   - a. negative and increasing  
   - b. negative and declining  
   - c. zero  
   - d. positive and declining

4. The change in quantity demanded of a commodity resulting from a change in its price, while holding real income constant by keeping the consumer on the same indifference curve before and after the price change is known as
   - a. Hicksian’s substitution effect  
   - b. Slutsky’s substitution effect  
   - c. Hicksian’s income effect  
   - d. Slutsky’s income effect

5. If by increasing the quantity of labour use by one unit, the firm can give up 2 units of capital and still produce the same output then the $MRTS_{LK}$ is
   - a. $\frac{1}{2}$  
   - b. 1  
   - c. 2  
   - d. 1/2

6. All the curves are U-shaped except
   - a. the AVC curve  
   - b. the AFC curve  
   - c. the AC curve  
   - d. the MC curve

7. If $MRTS_{LK}$ equal 4 then the $MP_L / MP_L$
   - a. $\frac{1}{4}$  
   - b. 4  
   - c. 2  
   - d. 1/2

8. When $\alpha = 3/4$ and $\beta = 1/4$ for the Cob-Douglas production function then returns to scale are
   - a. increasing  
   - b. decreasing  
   - c. constant  
   - d. all of the above

9. If total revenue remains unchanged when price changes, the demand curve is
   - a. unitary elastic  
   - b. elastic  
   - c. inelastic  
   - d. any of the above

10. AFC equals the vertical distance between the
    - a. AC and AVC curves  
    - b. AC and MC curves  
    - c. AVC and MC curves  
    - d. all of the above

11. In an economy of two commodities (X and Y) and two factors (L and K) general equilibrium of production is reached when
    - a. $MRTS_{LK} = P_L / P_K$  
    - b. $MRTS_{LK} = MRS_{xy}$  
    - c. $MRTS_{LK} = (MRTS_{LK})_x = (MRTS_{LK})_y$

**Section II: Macroeconomics (20 X 1 = 20 marks)**

1. The equation $C = 20 + 0.90Y_d$ predicts that consumption is
   - a. $\$90$ when $Y_d$ is $\$100$  
   - b. $\$100$ when $Y_d$ is $\$90$  
   - c. $\$110$ when $Y_d$ is $\$100$  
   - d. $\$180$ when $Y_d$ is $\$200$

2. When nominal GDP is $\$1100$ and real GDP is $\$1000$, the GDP deflator is
   - a. 9.09  
   - b. 110  
   - c. 1.11  
   - d. 90.91

3. By definition the marginal propensity to consume
   - a. equals $\Delta C / \Delta Y_d$  
   - b. is the behavioral coefficient $c$ in the consumption function $C = \bar{C} + cY_d$

4. When the price level rises, the demand for labor schedule shifts
   - a. rightward  
   - b. leftward  
   - c. no shift  
   - d. all of the above

5. Suppose nominal GDP is $\$500$ in year 1. if the GDP deflator doubles by year 6 while real output increased 40%, nominal output in year 6 is
6 The average propensity to consume is
   a. \( \Delta C/\Delta Y \)   b. \( C/Y \)   c. \( C/\Delta Y \)   d. \( \Delta C/Y \)

7 In two sector model, when saving is \(-$40 + 0.20Yd\) and investment is $60, equilibrium output is
   a. $100   b. $400   c. $500   d. $1000

8 When an increase in government spending is matched by an equal decrease in government transfer, output will
   a. stay the same   b. decrease   c. both a and b   d. increase

9 According to permanent income hypothesis, all increase in
   a. permanent income are saved   b. permanent income are consumed
   c. transitory income are saved   d. transitory income are consumed

10 Other things remaining the same when the nominal money supply increases the aggregate demand curve will shift
   a. leftward   b. rightward   c. no change   d. all of the above

11 When there is full employment and aggregate supply is positively sloped, a decrease in taxes increase
   a. the price level and output has no effect on output
   b. the price level but has no effect on output
   c. output but has no effect on price level
   d. the nominal and real wage

### Section III: Econometrics (10 X 1 = 10 marks)

1 Variance of random error (homoskedastic or heteroskedastic) plays no role in the determination of
   a. standard error   b. unbiasedness property   c. efficiency   d. none of the above

2 Which of the following regression model is not linear in parameter
   a. \( Y_i = \beta_1 + \beta_2 X_i^2 \)
   b. \( \ln Y_i = \beta_1 + \beta_2 \ln X_i \)
   c. \( Y_i = \beta_1 + \beta_2 X_i \)
   d. all of these

3 By rejecting the Ho, we mean that our finding is
   a. statistically significant   b. nothing to do with significance
   c. statistically insignificant   d. none of these

4 A sample of market data taken at a point in time is a
   a. statistical series   b. time series data   c. population   d. cross sectional data

5 In estimating simultaneous equation model by indirect least square method
   a. OLS is applied to the reduced equation
   b. GLS is applied to the structural equation
   c. GLS is applied to the reduced equation
   d. OLS is applied to the structural equation

6 An unbiased and consistent estimator is said to be efficient if it has
   a. minimum variance   b. maximum variance   c. both a and b   d. none of these