MIDTERM EXAMINATION

Hanoi University of Science and Technology – TROY PROGRAM
Course: ECO251 – Principles of Macroeconomics
Code: 570
Time allowed: 20 minutes

Part 1: Multiple Choice Questions

Question 1: Missing

Question 2: Missing

Question 3: Missing

Question 4: Missing

Question 5: Missing

Question 6: Missing

Question 7: Missing

Question 8: Missing

Question 9: The labor force is best defined as:
A. The ratio of employed persons to unemployed persons
B. The total number of unemployed persons
C. The ratio of unemployed persons to employed persons
D. The total number of employed persons plus the total number of unemployed persons
E. The total number of employed persons

Question 10: Consumers, firms, and governments face __ because we are faced with the problem of __.
A. Trade-offs; scarcity
B. Marginal analysis; trade-offs
C. Trade-offs; specialization
D. Marginal analysis; scarcity
E. Specialization and trade; normative economics

Question 11: Suppose GDP = $10{,}000$, consumption = $7{,}000$, investment = $1{,}500$, and government spending = $2{,}500$.
What are net exports?

A. -100
B. $-1{,}000$
C. Exports = $1{,}000$ and imports = $1{,}000$
D. Exports = $1{,}000$ and imports = 0
E. $1{,}000$

Question 12: Nominal GDP increases from $2{,}000$ to $2{,}100$. Why does real GDP remain unchanged?

A. Price level increased by 5%
B. Price level decreased by 5%
C. Price level remained constant
D. Price level decreased by 2.5%
E. Price level increased by 1%

Question 13: GDP can be calculated by which formula?

A. $GDP = C + I + G + (X - M)$
B. $GDP = C - I + G + (M - X)$
C. $GDP = C + I + G$
D. $GDP = S + I$
E. $GDP = C + I + G + X$

Question 14: In 2022, Jackie bought a used 1968 Ford Mustang for $40{,}000$. When it was new, the Mustang sold for $5{,}000$. How much did it contribute to GDP in 2022?

A. $35{,}000$
B. $40{,}000$
C. $5{,}000$
D. 0
E. $45{,}000$

Question 15: During a strong expansionary phase of the business cycle, which is likely true?

A. Inflation rate is falling
B. GDP is rising
C. Unemployment rate is rising
D. Employment rate is falling
E. National income is falling

Question 16: In a simple economy with no government sector, money paid by firms to households returns via:

A. Export market $\rightarrow$ import market
B. Product markets $\rightarrow$ factor markets
C. Factor markets $\rightarrow$ product markets
D. Stock market $\rightarrow$ bond market
E. Foreign sector $\rightarrow$ domestic sector

Question 17: What is the formula for inflation rate?

A. $\frac{CPI_2 - CPI_1}{CPI_1} \times 100$
B. $\frac{CPI_1 - CPI_2}{CPI_2} \times 100$
C. $\frac{CPI_2}{CPI_1}$
D. $\frac{CPI_1}{CPI_2}$
E. $(CPI_2 - CPI_1) \times 100$

Question 18: Which is an intermediate good?

A. A new skateboard
B. Coal used to generate electricity
C. A doctor visit before vacation
D. Gasoline for your car
E. A vacation trip

Question 19: Usually when the business cycle is in the __ stage, inflation is __.

A. Trough; highest
B. Expansion; falling
C. Peak; lowest
D. Contraction; falling
E. Peak; negative

Question 20: If $MPC = 0.75$, what is correct?

A. Multiplier = 25
B. MPC = 0.25
C. Multiplier = 0.75
D. MPC = 0.75
E. MPS = 0.75

Question 21: The sum of wages, interest, rent, and profit is:

A. Net exports
B. Budget balance
C. National savings
D. Government spending
E. National income

Question 22: The short-run fluctuations in economic activity are called:

A. Aggregate demand curve
B. Business cycle
C. Economic growth rate
D. Circular flow model
E. Product life cycle

Question 23: When the business cycle is in the __ stage, unemployment is __.

A. Peak; highest
B. Contraction; falling
C. Expansion; falling

D. Expansion; zero
E. Trough; lowest

Question 24: Which transaction is included in GDP?

A. Reading books at a public library
B. Selling a used textbook
C. Raking leaves for iced tea
D. Buying a new book
E. Saving 500 in a bank

Question 25: Adding all spending in the economy to compute GDP is called:

A. Income approach
B. Public sector approach
C. Value-added approach
D. Expenditure approach
E. National savings approach

Part 2: Problem Solving

Problem 1

Given data:

Year	Vehicle Price	Quantity	Bread Price	Quantity	Tablet Price	Quantity
2022	$11,000$	300	2.0	6000	200	–
2023	$12,000$	320	2.5	7000	210	–

a. Compute nominal GDP for 2022 and 2023.

b. Compute real GDP for 2023 using 2022 as base year and calculate growth rate.

Problem 2

Given:

- $C_0 = 150$
- $MPC = 0.8$
- $I_0 = 320$

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a. Construct aggregate demand and find equilibrium income

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b. Use Saving–Investment method