



**BSc in Export Agriculture**  
**Third Year Second Semester Examination –December/ January 2017/ 2018**

**Macroeconomics (EAG 329-2)**  
**Section I – Structured Questions**

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**Instructions:**

Answer all questions in the given space.

No. of questions : Two (02)

No. of pages : Eight (08)

Time : One (01) hour

Total marks allocated : 40%

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01.

(I) Define the followings;

a) Gross Domestic Product (10 marks)

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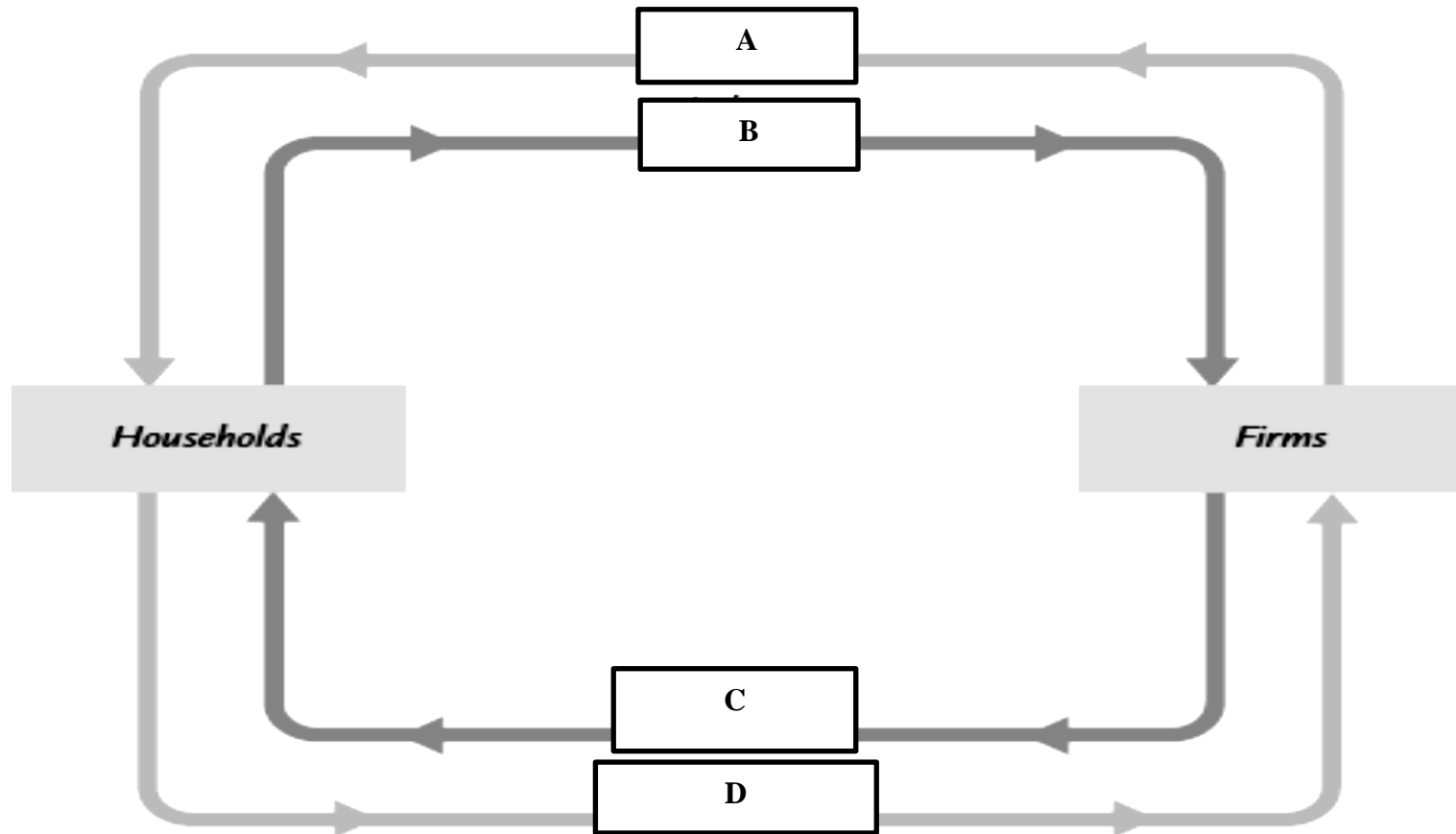
b) Gross National Product (10 marks)

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c) Net National Product (10 marks)

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(II) Given below is a Simple (private sector) Model of Circular Flows of a closed economy



Identify A,B,C and D

(10 marks)

A

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B

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C

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D

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(III) Draw the following in the given diagram in part (II) (30 marks)

- a) Private Sector Model of Circular Flows with Financial Market
- b) Model of Circular Flows with Government Sector
- c) Model of Circular Flows with Government and Foreign Sector (open economy)

(IV) Find out the equilibrium level of national income when autonomous consumption is \$100. MPC is 0.8 and autonomous investment is \$50.

(05 marks)

(V) Calculate the GDP in a closed economy with no government where  
 $C = 100 + 0.8Y$  and  $I = 1000$ . (05 marks)

(VI) If the consumption function is given by the equation  $C = 100 + 0.8Y$   
a) What is the saving function? (05 marks)

b) At what level of income, saving will be zero? (05 marks)

c) If  $I$  is equal to 1000, at what level of income saving will be equal to  
investment? (10 marks)

02. “In the most basic model of aggregate demand, spending determines output and income, but output (Y) and income also determine spending. In particular, consumption depends on income, but increased consumption increases aggregate demand and therefore output.”

(I) What is meant by;

a) Aggregate Demand (AD)? (10 marks)

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b) Aggregate Supply (AS)? (10 marks)

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c) Autonomous Spending? (10 marks)

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(II) Write a formula to show Aggregate Demand. You need to identify the terms in the formula. (10 marks)

(III) An economy is at equilibrium when.....(05 marks)

(IV) What is meant by Unplanned Inventory Investments (IU)? (05 marks)

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(V) State what the economy does when;

a)  $IU > 0$  (05 marks)

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b)  $IU < 0$  (05 marks)

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(VI) Assume that investment is  $\bar{I}$ , government spending is  $\bar{G}$ , taxes are  $\bar{T}_A$ , transfers are  $\bar{T}_R$ , and net exports are  $\bar{N}_X$ . Consumption depends on *disposable income*.

a) If the consumption formula is  $C = \bar{C} + cY$ , Derive a function for disposable income ( $YD$ ) (04 marks)

b) Derive a formula for AD (04 marks)

c) Derive a formula for equilibrium output (04 marks)

d) Derive a formula for Investments if the savings are  $S$  (04 marks)

(VII)  
e) What is meant by multiplier? (04 marks)

- f) Write down the formula for multiplier. You need to identify the terms in the equation (04 marks)
- g) Rewrite the formula for multiplier if the tax rate is  $t$  (04 marks)
- h) When taxes are imposed, what effect does it have on the multiplier? (04 marks)
- i) If the marginal propensity to consume is .8 and taxes are zero, calculate the multiplier (04 marks)
- j) If the tax rate is .25, calculate the multiplier. (04 marks)

**[End of Section I]**