Strathmore
UNIVERSITY

STRATHMORE UNIVERSITY BUSINESS SCHOOL

MASTER OF SCIENCE IN DEVELOPMENT FINANCE

END OF SEMESTER EXAMINATION

MDF 8102: MICRO AND MACRO ECONOMICS

Date: Monday, 3rd December 2018 **Time**: 3 Hours

Instructions:

1. This examination consists of **FIVE (5)** questions.
2. Answer question **ONE** and ANY OTHER **THREE** questions

Question 1 (Compulsory) (40 Marks)

a) Derive the IS curve using the Keynesian cross or the loanable funds model and comment on why it slopes downward **(10 Marks)**

b) Using relevant examples and indifference curves differentiate perfect complements and perfect substitutes **(10 Marks)**

c) Discuss the different tools of Monetary Policy available to Central Bank for managing the level of interest rates and therefore influencing the level of aggregate demand.

(10 Marks)

d) Is GDP a Good Measure of Economic Well-Being? Discuss. **(10 Marks)**

Question 2 (20 Marks)

You are provided the following information for a duopoly in a small town with 140 residents. The "good": cell phone service with unlimited anytime minutes and free phone. Two firms: Zain, Yu. Each firm's costs: FC = \$0, MC = \$10

The table below shows the Small town's demand schedule

P	*Q*
$0	140
5	130
10	120
15	110
20	100
25	90
30	80
35	70
40	60
45	50

Required:

a) Derive the small town competitive and monopoly outcomes from the data provided. Justify your outcomes. **(8 Marks)**

b) What outcomes should we expect from our duopolists? **(12 Marks)**

Question 3 (20 Marks)

Given the cobb-Douglas utility function $U(X,Y) = a\log(X) + (1-a)\log(Y)$ and the budget constraint $P_X X + P_Y Y = I$. Derive the Ordinary demand function and comment on the Lagrange multiplier

Question 4 (20 Marks)

We can write the demand and supply curves algebraically as follows:

Demand: $Q = a - bP$

Supply: $Q = c + dP$

a) In 1998, Americans smoked 470 billion cigarettes, or 23.5 billion packs of cigarettes. The average retail price was $2 per pack. Statistical studies have shown that the price elasticity of demand is -0.4, and the price elasticity of supply is 0.5. Using this information, derive linear demand and supply curves for the cigarette market **(14 Marks)**

b) What would a 55-percent decline in demand do to the price of cigarettes? **(6 Marks)**

Question 5 (20 Marks)

As our case study begins, the Isolandian textile market is isolated from the rest of the world. By government decree, no one in Isoland is allowed to import or export textiles, and the penalty for violating the decree is so large that no one dares try. Now suppose that, in an election upset, Isoland elects a new president. The president campaigned on a platform of "change" and promised the voters bold new ideas. Her first act is to assemble a team of economists to evaluate Isolandian trade policy. She asks them to report on three questions: If the government allows Isolandians to import and export textiles, what will happen to the price of textiles and the quantity of textiles sold in the domestic textile market? Who will gain from free trade in textiles and who will lose, and will the gains exceed the losses? Should a tariff (a tax on textile imports) be part of the new trade policy?

Required: Based on the questions asked by the president, conduct an economic analysis of different trade policy options and prepares a report to be presented to the president by the economic team.