UNIVERSITY OF COLOMBO, SRI LANKA

UNIVERSITY OF COLOMBO SCHOOL OF COMPUTING

BACHELOR OF SCIENCE IN INFORMATION SYSTEMS

First Year Examination – Semester II – 2018

IS1115 – Fundamentals of Economics

TWO (2) HOURS

To be completed by the candidate

Examination Index No: ....

Important Instructions to candidates:

1. The medium of instruction and question is **English**.

2. If a page or a part of this question paper is not printed, please inform the supervisor immediately.

3. Note that questions appear on both sides of the paper.
   If a page is not printed, please inform the supervisor immediately.

4. Write your index number on each and every page of the Question paper.

5. This paper has **04** questions and **12** pages.

6. Answer **ALL** questions. Questions in Part I and II carry 30 marks and 20 marks, respectively.

7. Any electronic device capable of storing and retrieving text including electronic dictionaries and mobile phones are **not allowed**.

8. **Non-Programmable** calculators are **allowed**.

For Examiner's use only	
Question No	**Marks**
1	
2	
3	
4	
Total	

PART - I

Question 1

(a) i.   Identify the importance of studying 'Economics' as an ordinary person with its rationality.

[05 Marks]

ii.   How does 'economic profit' differ from 'accounting profit'? Explain with an example.

[05 Marks]

(b) You are given the following marginal utility schedule for good X and good Y for an individual. The price of X is Rs. 150 and the price of Y is Rs. 100, and that the individual spends all daily income of Rs. 950 on X and Y.

Q	1	2	3	4	5	6	7
MUx	20	15.5	11	8	3.5	1	-5
MUy	30	25	20	17.5	11	2	-5

    i. How much of X and Y the individual should purchase to maximize utility?

    ii. Identify the consumer optimization. (Show that the condition for constrained utility maximization is satisfied when the individual is at his or her optimum.)

[07 Marks]

(c) Explain the relationship between the marginal utility curve and the demand curve of a commodity for a rational consumer.

[05 Marks]

(d) Explain the principles of increasing marginal cost and diminishing marginal product using a production possibility curve with an example.

[08 Marks]

Question 2

(a)   Explain the difference between 'change in quantity demanded' and 'change in demand'.
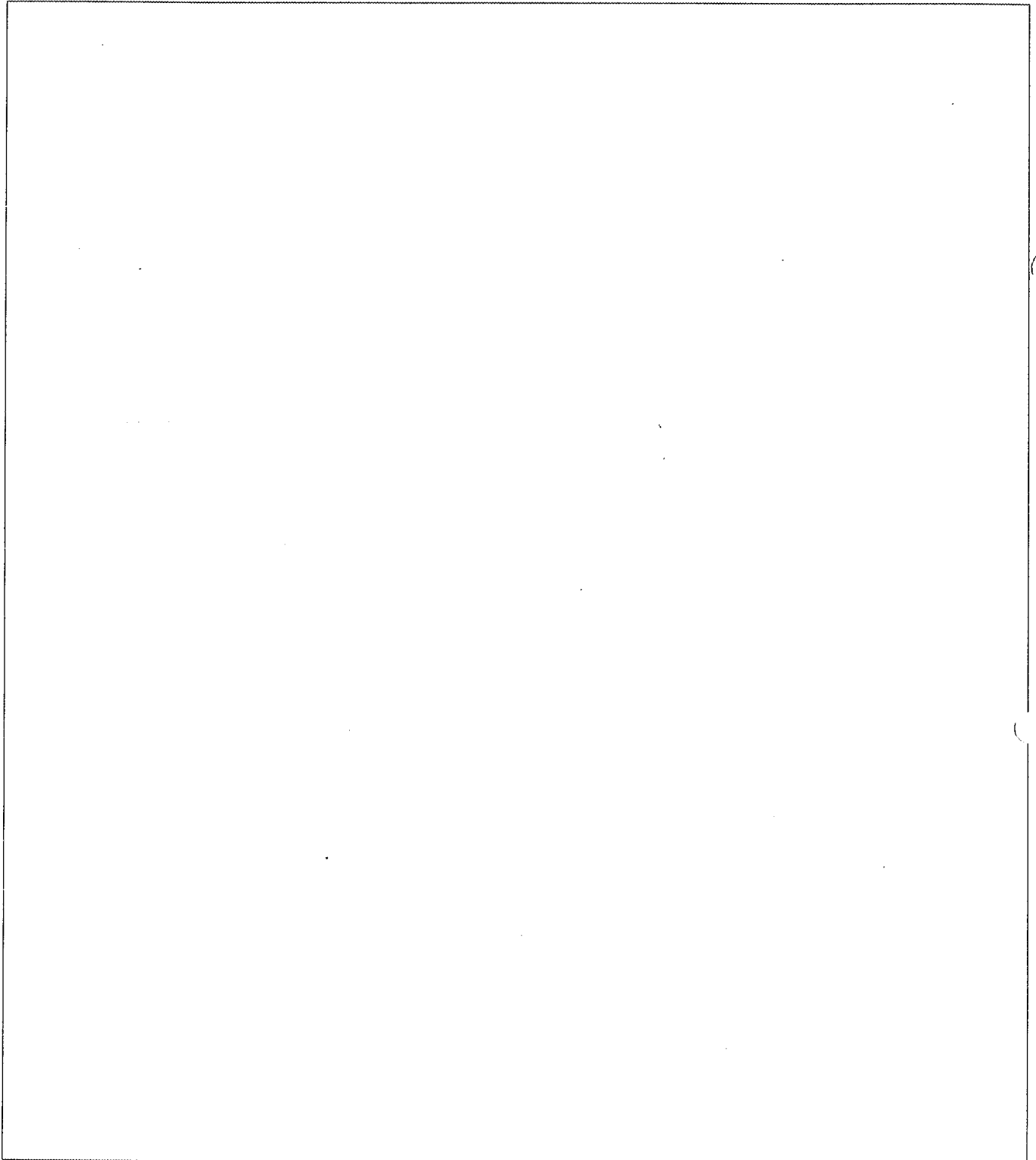
[04 Marks]

(b)   "When there is a decrease in supply, equilibrium price increases. As a result of this increase in price, demand decreases. This will make the equilibrium price to decrease again."

Do you agree with this statement? Explain your answer.

[04 Marks]

(c) i. If the demand function for a commodity is given by the equation; $P^2 + 4Q = 1600$, and the supply function is given by the equation; $550 - P^2 + 2Q = 0$, find the equilibrium price and the equilibrium quantity in the market.

ii. Draw the demand and supply curves for the above market condition.

[10 Marks]

(d) Explain the difference between short-run and long-run of a firm using different cost elements of production.

[04 Marks]

(e) Determine whether the manager is making a decision in the short run or the long run, for each of the following firm's decisions. Justify your answer.

i. A restaurant decides to stay open 24 hours a day rather than 16 hours a day.

ii. An automobile manufacturer builds another production facility.

iii. An airline restructures its schedules to increase the percentage of seats filled on each of its flights.

iv. A computer manufacturer adds more workers in its shipping department to speed delivery of new PC orders.
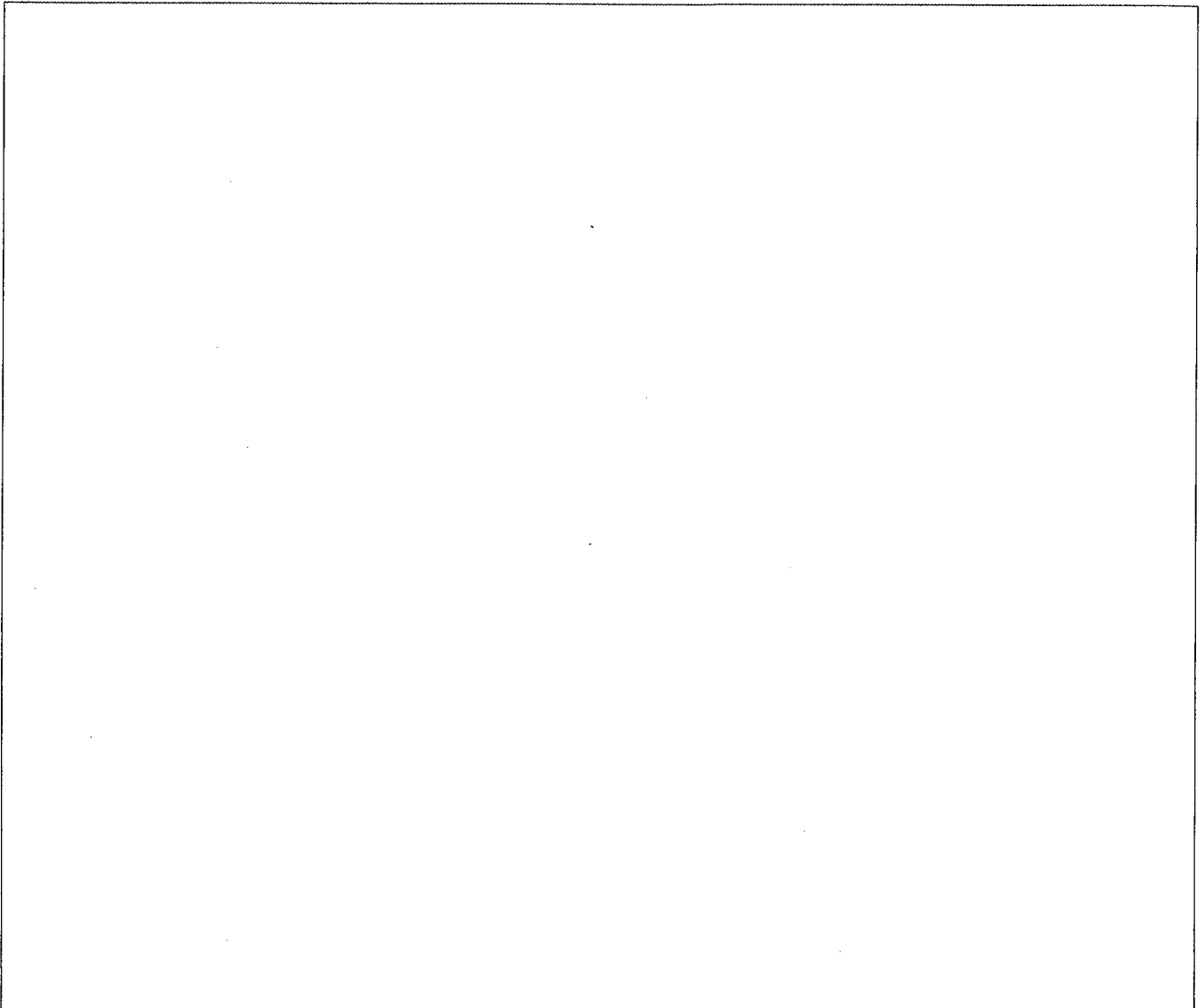
[08 Marks]

PART - II

Question 3

(a) What do you mean by 'Managing the macro economy'? Explain with main macroeconomic variables.

[05 Marks]
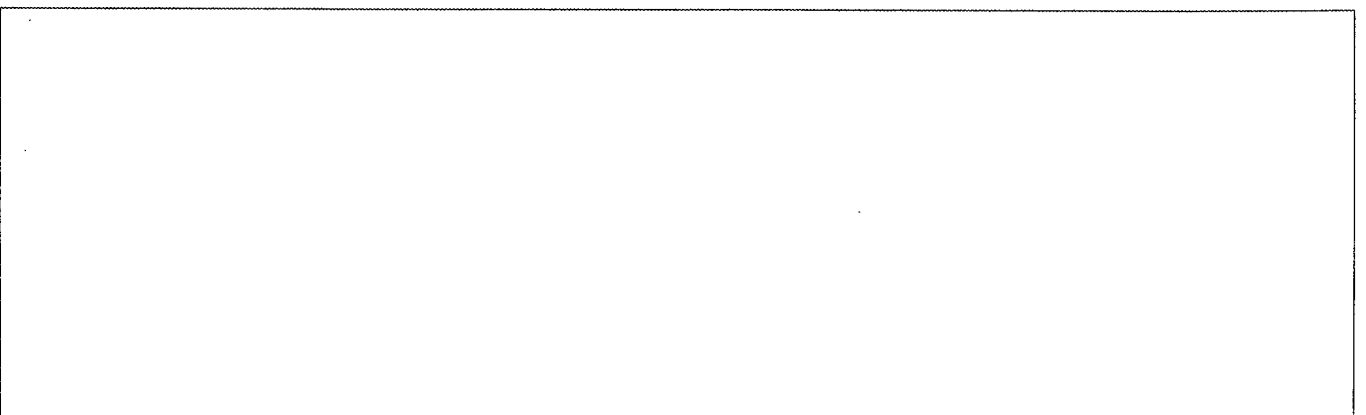
(b) Identify the two (02) markets of an economy. Explain the relationship of the two (02) parties in these markets using a diagram.

[08 Marks]

(c) Identify the three (03) moderators of an economy and their respective roles in managing the macro economy.

[07 Marks]

Question 4

(a) What do you mean by 'Gross Domestic Product (GDP)? Explain with three (03) different approaches to measure it.

[04 Marks]

(b)　Explain the difference between 'nominal GDP' and 'real GDP'.

[04 Marks]

(c)　Consider an economy that produces only three (03) types of products namely X, Y and Z. The production and price data of 2017 and 2018 are given in the following table.

	2017		2018	
	Quantity	Price (Rs)	Quantity	Price (Rs)
X	2,500	25	2,100	40
Y	4,000	40	8,000	35
Z	7,200	30	6,500	45

i.　Calculate the GDP deflator for 2018.

ii.　Identify the inflationary effect of the economy between 2017 and 2018.

iii.　How much is the economic growth rate in 2018?

[12 Marks]

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