



CERTIFIED PUBLIC ACCOUNTANT
FOUNDATION LEVEL 2 EXAMINATIONS
F2.2: ECONOMICS AND BUSINESS ENVIRONMENT
DATE: THURSDAY 30, MAY 2024

INSTRUCTIONS:

1. **Time Allowed: 3 hours 15 minutes** (15 minutes reading and 3 hours writing).
2. this examination has **seven questions** and **only five questions** should be attempted.
3. Marks allocated to each question are shown at the end of the question.
4. Show all your workings where necessary.
5. The question paper should not be taken out of the examination room.

QUESTION ONE:

Musange Mining Company (MMC) has been dealing in the mining of Pozzolana, a major raw material for cement production. Throughout the past ten years, The Rwandan Cement industry has received new players making it a fortune for MMC as reflected in their annual sales. The raw material is supplied in two grades; Grade A that makes 42.5N cement and grade B used in the manufacture of 32.5 N cement. The company's finance manager has identified the supply and demand functions for their product as below:

$$Q_{sa} = \frac{dy}{dx} \quad y = \sqrt{(2x^2 + 3)^8} \quad Q_{da} = 20 - 2x \quad Q_{sb} = x (\sqrt[11]{2x + 3}) \quad Q_{db} = 30 - 2x$$

Where Q_{sa} and Q_{sb} represents quantity supplied for Pozzolana grade A and B respectively, while Q_{da} and Q_{db} represents quantity demanded respectively for Grade A and B, $\frac{dy}{dx}$ represents a change of y with respect to x and x represents Pozzolana price.

Required:

- Determine the supply function of Grade "A" Pozzolana** (3 Marks)
 - Assuming a price of FRW 1 up to FRW 15, use a well labelled graphical illustration, to determine the range of prices within which demand and supply functions of Pozzolana grade B intersect.** (17 Marks)
- (Total: 20 Marks)**

QUESTION TWO

PRIME BANK LTD is a licensed commercial bank operating in fifty-six branches across the country. Among its loan products include: personal consumption loans, mortgages loans, overdrafts and car loans. Mr. GWIZA Arsene, a shop owner in Biryogo, deposited FRW 1,000,000,000 on his current account. As part of its credit creation process, the bank loaned a portion of this deposit to 25 employees who had applied for personal consumer loans through their Prime bank accounts. This action led to Prime Bank expanding its bank loans portfolio with a multiplier of 25.

Required:

- With an illustration, explain the credit creation process from GWIZA's deposit until the bank reaches a total asset position of FRW 16,350,478,795** (16 Marks)
 - State two assumptions and two limitations of quantity theory of money.** (4 Marks)
- (Total: 20 Marks)**

QUESTION THREE

INGAGI Firebox Ltd (IFL) was incorporated 30 years ago to deal in the manufacturing of fire matches (Match box). The inauguration of Bugesera industrial park brought huge opportunities to many companies ranging from steel bars producers to plastic tanks and chemical products manufacturers. Despite the presence of cheap labour and being located at the entrance of Burundi, the IFL's principal export market, the company's earnings per share have been shrinking for the past few years. During the recent Board of Director's meeting in which 2022 financial statements were approved, RUA Auditors, IFL's external auditor advised those charged with governance to develop a policy that mitigates goals incongruity between Senior Managers and Shareholders before embarking on the expansion journey, and later on the board resolved to bring all IFL's sister companies under the central management of IFL to benefit from IFL's expertise. In the meeting one of the members raised an idea of merging with other companies in the region to solve the problem goals incongruity and ensure that the objective of expansion is met.

Required:

- a) Explain the term "Goal incongruity" from the above scenario and explain its two main probable causes. (6 Marks)
- b) Outline any four strategies to enhance goal congruence in IFL's operations (4 Marks)
- c) Explain four categories of economies of scope that IFL's sister companies would enjoy from the proposed centralized management. (4 Marks)
- d) Explain to the Board of Directors of IFL four motives for mergers (4 Marks)
- e) Distinguish between horizontal growth and vertical growth of firms (2 Marks)

(Total: 20 Marks)

QUESTION FOUR

The primary objective of the National Bank of Rwanda's monetary (NBR) policy is to ensure price stability, contributing to sustained macroeconomic stability. In the last two decades ending December 2018, the NBR conducted its monetary policy by targeting the quantity of money to achieve that objective. Under that monetary targeting framework, NBR managed to keep inflation low and stable, by providing the quantity of money in the economy - broad money aggregate - in line with inflation and economic growth objectives. In January 2019, the National Bank of Rwanda shifted from the quantity-based monetary policy framework, to a price-based approach, after five years of preparation.

As stipulated in the law governing the National Bank of Rwanda (NBR), the Monetary Policy Committee (MPC) is responsible for the formulation of a monetary policy in NBR. The committee meets once a quarter and whenever necessary, upon invitation by the Governor. To ensure a successful price based monetary policy, in January 2019, the MPC adjusted its processes to fit the new framework that is more forward looking. Hence, the frequency of MPC preparatory meetings have increased, which continues to enhance a well-informed and forward-looking policy decision making. (Source: <https://www.bnr.rw/monetary-policy>)

Required:

- a) Explain what is meant by monetary policy and discuss five monetary policy tools you may anticipate in the East African Central Banks. (12 Marks)
 - b) Explain four policies to cure a balance of payment deficit. (8 Marks)
- (Total: 20 Marks)**

QUESTION FIVE

a) The Multiplier is a measure of the effect on total National Income of a unit change in some part of aggregate demand either investments, government spending or exports. An Initial increase in expenditure has a snowball effect, leading to more and more spending in the economy leading of a larger increase in National Income.

Required:

- i) Highlight any four Limitations of the Multiplier. (4 Marks)
 - ii) Explain the Keynesian theory of income and employment. (2 Marks)
 - iii) Discuss two differences a between a closed economy and an open economy. (4 Marks)
- b) Price discrimination means selling the same or slightly differentiated products to different sections of consumers at different prices.

Required:

- i) Discuss three degrees of price discrimination. (6 Marks)
 - ii) Discuss two factors that would influence the alternative use of factors of production. (4 Marks)
- (Total: 20 Marks)**

QUESTION SIX

- a) Differentiate cardinal utility and ordinal utility theories (2 Marks)
- b) Highlight three advantages of cardinal utility approach and three disadvantages of cardinal approach. (6 Marks)
- c) Given the total utility (TU) and marginal utility (MU) in the table below:

Units	0	1	2	3	4	5	6	7	8
Total Utility (TU)	0	12	22	?	?	?	?	?	?
Marginal utility (MU)	0	12	10	8	6	4	1	-2	-5

Required:

Compute total utility using the above information. (3 Marks)

d) Discuss two functions of markets in the context of economics. (2 Marks)

e) Discuss the relationship between indirect taxes imposed by the government and price of a commodity. (3 Marks)

f) Explain the concepts of economic goods and free goods as applied in production (4 Marks)

(Total: 20 Marks)

QUESTION SEVEN

It is believed that markets are most likely to increase production, allocate efficiency and therefore raise the level of economic welfare. Most economists favor a perfect competition market over others on the grounds that in the so-called long run equilibrium for a firm under perfect competition some desirable objectives can be achieved to boost the economy. However, it is also believed that in such circumstances if demand fluctuates as it normally does in competitive markets; the market might likely be extremely unstable.

Required:

a) Discuss five conditions for perfect competition. (10 Marks)

b) i) Differentiate between oligopoly and monopolistic competition. (2 Marks)

ii) Highlight two characteristics of monopolistic competition. (2 Marks)

c) Explain the concept of production possibilities. (2 Marks)

d) Distinguish between marginal product of labour and average product of labour. (4 Marks)

(Total: 20 Marks)

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