THE UNITED REPUBLIC OF TANZANIA

NATIONAL EXAMINATIONS COUNCIL

ADVANCED CERTIFICATE OF SECONDARY EDUCATION EXAMINATION

151/1 **ECONOMICS 1**

(For Both School and Private Candidates)

Time: 3 Hours **ANSWERS** **Year: 2013**

Instructions

1. This paper consists of EIGHT questions.

2. Answer all questions in section A and choose two questions each from section B and C.

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1. (a) Briefly explain the following economic terms:

(i) Normative statements

Normative statements in economics are subjective expressions that reflect opinions, values, or what ought to be, rather than what is. These statements often involve judgments about economic policies or outcomes, such as suggesting that the government should increase minimum wages to reduce poverty. They are based on personal beliefs or ethical perspectives and cannot be tested or proven with data, distinguishing them from positive statements, which are factual and verifiable.

(ii) Macroeconomics

Macroeconomics is the branch of economics that examines the economy as a whole, focusing on large-scale economic phenomena. It deals with aggregates like national income, unemployment rates, inflation, and gross domestic product (GDP). Macroeconomics analyzes how these factors interact and how government policies, such as fiscal policy (taxation and spending) or monetary policy (interest rates), can influence overall economic performance, growth, and stability on a national or global level.

(iii) Market economy

A market economy is an economic system where decisions about production, investment, and distribution are primarily driven by the forces of supply and demand in free markets, with minimal government intervention. In such a system, prices are determined by the interactions of buyers and sellers, and resources are allocated based on consumer preferences and producer incentives. This system, often seen in capitalist economies, encourages competition and innovation but may lead to inequalities if left unchecked.

(iv) Scarcity

Scarcity refers to the fundamental economic problem of having unlimited human wants and needs in a world with limited resources. It means that there are not enough goods, services, or resources—like land, labor, or capital—to satisfy everyone's desires, forcing societies to make choices about how to allocate resources efficiently. Scarcity leads to trade-offs, where choosing one option means forgoing another, and it underpins the need for economic decision-making and prioritization.

1. (b) Why microeconomics is important in studying economics? (Give six points).

Microeconomics helps us understand consumer behavior by analyzing how individuals make decisions about what to buy, which in turn allows economists to predict demand patterns for goods and services. This insight is crucial for businesses and policymakers to anticipate market trends and consumer responses to price changes or new products.

Microeconomics examines firm decision-making, exploring how businesses determine production levels, set prices, and allocate resources to maximize profits. This provides valuable insights into how firms operate within markets, helping to explain production strategies and competitive behaviors that shape industries.

It explains market dynamics by showing how supply and demand interact to determine prices and quantities in specific markets, such as the market for coffee or smartphones. Understanding these interactions is essential for analyzing how markets function and how they respond to external shocks like policy changes or technological advancements.

Microeconomics aids in understanding resource allocation, revealing how scarce resources are distributed among competing uses to meet societal needs efficiently. This knowledge helps in designing systems that optimize the use of limited resources, ensuring that goods and services are produced in a way that maximizes societal welfare.

It evaluates the impact of policies like taxes, subsidies, or price controls on individual markets and consumer welfare, helping policymakers design effective interventions. For example, microeconomics can assess how a sugar tax might affect consumption patterns and health outcomes, guiding public health strategies.

Finally, microeconomics serves as a foundation for macroeconomics by analyzing individual behaviors that collectively shape larger economic aggregates, such as national income or employment levels. By understanding the micro-level decisions of consumers and firms, economists can better predict and manage macroeconomic phenomena like inflation or unemployment.

2. (a) What is meant by the term price elasticity of demand?

Price elasticity of demand measures how sensitive the quantity demanded of a good or service is to a change in its price. It is defined as the percentage change in quantity demanded divided by the percentage change in price. When the elasticity is greater than 1, demand is considered elastic, meaning consumers are highly responsive to price changes; if less than 1, it is inelastic, indicating low responsiveness; and if equal to 1, it is unit elastic, where the percentage changes are equal.

2. (b) Explain eight factors that affect price elasticity of demand.

The availability of substitutes significantly affects price elasticity of demand; goods with many close substitutes, such as different brands of cereal, tend to have higher elasticity because consumers can easily switch if the price rises, whereas goods with few substitutes, like gasoline, have more inelastic demand due to limited alternatives.

Whether a good is a necessity or a luxury also influences elasticity; necessities like medicine often have inelastic demand because consumers need them regardless of price, while luxuries like vacation packages have more elastic demand as consumers can forgo them if prices increase, making them more sensitive to price changes.

The proportion of income spent on a good impacts its elasticity; items that take up a large share of income, such as cars, tend to have more elastic demand because price changes significantly affect budgets, unlike small-ticket items like pens, where price changes have a minimal impact on purchasing decisions.

The time horizon plays a role in elasticity; demand is typically more elastic in the long run because consumers have more time to adjust their behavior, such as finding alternatives to expensive electricity, compared to the short run, where immediate adjustments are harder to make.

Habit or addiction can make demand less elastic; goods that are habit-forming, like cigarettes, often have inelastic demand because consumers are less responsive to price changes, continuing to purchase them even when prices rise due to their dependency.

Brand loyalty affects elasticity as well; strong brand loyalty can make demand less elastic, as consumers are willing to pay higher prices for a preferred brand, such as Apple products, rather than switching to a cheaper alternative, reducing their price sensitivity.

The frequency of purchase influences elasticity; goods purchased frequently, like groceries, may have less elastic demand because price changes are less noticeable over time, whereas infrequently purchased items, like furniture, may see more elastic demand as consumers are more price-conscious for such purchases.

The durability of goods also matters; durable goods, such as appliances, often have more elastic demand because consumers can delay purchases if prices rise, waiting for better deals, whereas non-durable goods, like food, have more inelastic demand due to their immediate necessity.

3. (a) Explain five conditions for price discrimination to exist.

Price discrimination requires the firm to have market power, meaning it must have some control over pricing, such as in a monopoly or monopolistic competition, to set different prices for different consumers without losing its market position to competitors.

The firm must be able to segment markets, identifying and separating consumers into groups with different price elasticities of demand, such as charging students lower prices than adults for movie tickets, based on their differing willingness to pay.

There must be no resale of the product between markets; consumers should not be able to buy the product at a lower price in one market and sell it in another where the price is higher, which is why airline tickets are often non-transferable to prevent such arbitrage.

Consumers in different segments must have varying elasticities of demand, allowing the firm to charge higher prices to those with inelastic demand, like business travelers, and lower prices to those with elastic demand, like leisure travelers, maximizing revenue across groups.

The cost of segmenting and charging different prices must not exceed the additional revenue gained from price discrimination; if the administrative costs of implementing different pricing strategies are too high, the firm may not find it profitable to engage in price discrimination.

3. (b) Give five reasons to justify industrial localization.

Industrial localization, the concentration of industries in a specific area, can be justified by access to resources; industries often locate near raw materials or energy sources, such as steel plants near iron ore deposits, to reduce transportation costs and ensure a steady supply of inputs.

A skilled labor pool is another reason; a concentrated area attracts specialized workers, making it easier for firms to hire skilled labor, as seen in tech hubs like Silicon Valley, where a large pool of tech professionals supports industry growth.

Shared infrastructure supports localization; industries in the same area benefit from developed infrastructure like roads, ports, and utilities, reducing individual firm costs and improving efficiency, as seen in industrial parks with shared facilities.

Economies of scale are facilitated by localization; firms in the same area can share suppliers, technology, and knowledge, leading to cost savings and innovation, such as in the automotive industry where suppliers cluster around manufacturing hubs.

Market access is improved through localization; being close to customers or distribution networks in a concentrated area reduces delivery times and costs, making it easier for firms to serve their markets efficiently, as seen in textile industries located near fashion markets.

4. (a) Briefly explain five features of Land as a factor of production.

Land as a factor of production has a fixed supply; its quantity is limited and cannot be increased, making it a scarce resource that must be used efficiently to meet production needs.

Land is geographically immobile; it cannot be moved to another location, which affects its use in production, as a factory must be built where the land is available, regardless of other factors like market proximity.

The quality of land varies; not all land is equally productive, with differences in fertility, location, or suitability, such as fertile farmland being more productive for agriculture than arid desert land.

Land is a passive factor; it does not produce on its own and requires labor and capital to be productive, such as needing farmers and machinery to cultivate crops on agricultural land.

Land is permanent in nature; it is durable and does not depreciate over time, unlike other factors like machinery, making it a long-term resource for production, though its productivity can be affected by misuse.

4. (b) Critically examine five factors that affect land productivity.

Soil fertility significantly affects land productivity; fertile soil increases agricultural yields by providing essential nutrients, but overuse or erosion can degrade it, reducing productivity, though modern fertilizers can help restore fertility if applied correctly.

Climate and weather play a crucial role; favorable conditions like adequate rainfall and sunlight boost productivity, but unpredictable weather, such as droughts or floods, can harm output, and climate change poses a growing challenge to maintaining consistent productivity.

Technology and inputs impact productivity; irrigation, mechanization, and quality seeds can enhance land output, but high costs may limit access for small farmers, and over-reliance on chemical inputs can lead to long-term soil degradation.

Land management practices influence productivity; sustainable practices like crop rotation and organic farming enhance long-term yields, while poor practices like overgrazing or monocropping can degrade land, and lack of education on best practices often hinders adoption.

Access to infrastructure affects productivity; proximity to markets and transportation reduces waste and increases efficiency, but remote areas suffer from poor infrastructure, leading to spoilage of perishable goods and lower returns for farmers.

5. (a) Explain five main types of unemployment.

Frictional unemployment occurs when workers are temporarily unemployed while transitioning between jobs or entering the workforce, such as a graduate searching for their first job, reflecting the natural time it takes to match workers with suitable employment.

Structural unemployment arises from a mismatch between workers' skills and job requirements, often due to technological changes or shifts in industries, like coal miners losing jobs as the economy shifts to renewable energy, highlighting the need for retraining programs.

Cyclical unemployment results from economic downturns or recessions, where reduced demand for goods and services leads to layoffs, as seen during the 2008 financial crisis when many workers were let go due to decreased consumer spending.

Seasonal unemployment happens when jobs are tied to specific seasons, leaving workers unemployed during off-seasons, such as farm workers who are jobless after the harvest period, a common occurrence in agriculture-dependent economies.

Hidden unemployment refers to underemployment, where workers are employed but not fully utilized, such as a skilled engineer working as a taxi driver due to a lack of opportunities, which masks the true extent of unemployment in an economy.

5. (b) Elaborate five causes of unemployment in Tanzania.

Rapid population growth in Tanzania contributes to unemployment; the country's high birth rates outpace job creation, leading to a surplus of labor, particularly among the youth, who struggle to find employment in a competitive job market.

Limited industrialization exacerbates unemployment; Tanzania's economy relies heavily on agriculture, which cannot absorb the growing workforce, leaving many without jobs in other sectors like manufacturing or services, which remain underdeveloped.

An education-skill mismatch is a significant cause; the education system often produces graduates with skills that do not match market needs, resulting in structural unemployment, as many lack the technical or vocational training required for available jobs.

Rural-urban migration increases unemployment; many Tanzanians move to cities like Dar es Salaam seeking better opportunities, but urban areas lack sufficient jobs, leading to high unemployment rates and the growth of informal, low-paying work.

Economic instability affects employment; fluctuations in global commodity prices, such as for coffee or cotton, impact Tanzania's export earnings, leading to job losses in dependent sectors, as reduced revenues limit businesses' ability to hire or retain workers.

6. (a) Describe why the long run cost curve is flatter than the short run cost curve.

In the long run, all inputs are variable, allowing firms to fully adjust their production processes, such as changing factory size or adopting new technology, which minimizes costs and results in a flatter long run average cost curve (LRAC) compared to the short run.

The short run has at least one fixed input, like a factory, which limits cost adjustments; as output increases beyond capacity, costs rise sharply due to diminishing returns, making the short run average cost curve (SRAC) steeper than the LRAC.

Economies of scale in the long run allow firms to reduce average costs over a wider output range by expanding production efficiently, flattening the LRAC, while the short run lacks this flexibility, leading to a more pronounced cost increase at higher outputs.

Firms have greater flexibility in the long run to adopt cost-saving technologies or production methods, which smooths out cost increases, whereas the short run is constrained by existing technology, contributing to the steeper SRAC.

In the long run, there are no fixed costs, as all costs are variable, leading to a more gradual change in average costs across output levels, while the short run's fixed costs, like rent, cause the SRAC to rise sharply when output exceeds optimal levels.

6. (b) With the help of diagrams explain why the average cost curve is U-shaped.

The average cost (AC) curve is U-shaped because at low output levels, firms experience economies of scale; fixed costs, like machinery, are spread over more units, reducing average costs as production increases, causing the curve to slope downward initially.

As output rises, specialization of labor and efficient resource use further lower average costs, continuing the downward slope of the AC curve, reflecting the benefits of producing at a larger scale with better division of labor.

The AC curve reaches its lowest point at the minimum efficient scale, where the firm fully exploits economies of scale, achieving the lowest possible average cost before additional output begins to increase costs, marking the bottom of the U-shape.

Beyond this point, diseconomies of scale set in; increasing output leads to coordination problems, such as overburdened management or inefficiencies, causing average costs to rise, which makes the AC curve slope upward.

In a diagram, the X-axis represents output, and the Y-axis represents average cost; the AC curve starts high, slopes down to a minimum point (economies of scale), and then rises (diseconomies of scale), forming a U-shape that illustrates these cost dynamics.

6. (c) Evaluate six wastes of monopolistic competition.

Monopolistic competition leads to excess capacity; firms produce below their optimal capacity to maintain product differentiation, resulting in underutilized resources, as they prioritize variety over efficiency, which wastes potential output.

Higher prices are a waste; firms charge prices above marginal cost due to market power, reducing consumer surplus compared to perfect competition, as consumers pay more for differentiated products that may not offer proportional value.

Advertising costs represent inefficiency; firms spend heavily on marketing to differentiate their products, such as through branding, which increases costs without necessarily adding value to consumers, diverting resources from production improvements.

Resource allocation is inefficient; monopolistic competition focuses on product differentiation rather than cost minimization, leading to resources being used for minor variations, like multiple shampoo brands, rather than their most productive uses.

Product proliferation can be wasteful; the market often sees too many similar products, which confuses consumers and wastes resources on creating and marketing minor variations that do not significantly enhance consumer welfare.

There is a lack of long-term innovation; firms in monopolistic competition may prioritize short-term differentiation, like packaging changes, over significant innovation, as they face less competitive pressure than in perfect competition, slowing technological progress.

7. (a) “Perfect competition market does not exist”. Justify the statement by giving five points.

Perfect competition assumes many buyers and sellers, but in reality, most markets have a limited number of dominant firms, like in the tech industry where companies like Apple and Google hold significant market power, making perfect competition unrealistic.

The model requires identical products, yet most markets feature differentiated goods; for example, even agricultural products like apples vary by quality or brand, preventing the homogeneity needed for perfect competition to exist.

Perfect competition assumes perfect information, but consumers and firms often lack complete knowledge; for instance, buyers may not know all prices or product qualities, leading to market inefficiencies that deviate from the perfect competition ideal.

There are no barriers to entry or exit in perfect competition, but real-world markets often have barriers, such as high startup costs in the airline industry or patents in pharmaceuticals, which prevent new firms from entering freely.

Perfect competition assumes firms are price takers, but in practice, many firms have some control over pricing due to branding or market power, as seen with coffee shops like Starbucks, which set prices above marginal cost, contradicting the model.

7. (b) Distinguish between monopoly and oligopoly markets (give five points).

A monopoly has a single seller dominating the market, like a utility company providing electricity, while an oligopoly consists of a few large firms, such as the automobile industry with companies like Toyota and Ford, sharing the market.

In a monopoly, there are high barriers to entry, such as patents or government regulations, preventing competition, whereas an oligopoly has moderate barriers, like high capital costs, which allow a few firms to dominate but still permit potential entry.

Monopolies often produce a unique product with no close substitutes, like a patented drug, while oligopolies produce either homogeneous products, such as oil, or differentiated products, like smartphones, offering consumers some variety.

Price control in a monopoly is absolute, as the firm sets prices without competition, often leading to higher prices, whereas in an oligopoly, firms have some price control but are interdependent, meaning price wars or collusion, as seen with OPEC, can influence pricing.

Monopolies typically lack competitive pressure, leading to potential inefficiencies, like reduced innovation, while oligopolies face competition among the few firms, which can drive innovation, as seen in the tech industry, but may also lead to collusion that harms consumers.

8. (a) Elaborate seven causes of increase in inflation rate.

A rise in demand, known as demand-pull inflation, occurs when consumer spending increases faster than the economy's ability to produce goods, such as during economic booms, leading to higher prices as businesses struggle to meet demand.

Cost-push inflation results from rising production costs, like increased wages or raw material prices, such as oil price hikes, which force firms to raise prices to maintain profit margins, contributing to an overall increase in inflation.

Monetary expansion can cause inflation; when a central bank prints more money or lowers interest rates excessively, as seen in some hyperinflation cases like Zimbabwe, the increased money supply devalues currency, driving up prices.

Exchange rate depreciation increases inflation; if a country's currency weakens, imported goods become more expensive, as seen in countries reliant on imports, raising the cost of living and pushing inflation higher.

Supply chain disruptions, such as those caused by natural disasters or pandemics like COVID-19, reduce the availability of goods, leading to higher prices for scarce items, as seen with global semiconductor shortages affecting electronics prices.

Inflation expectations play a role; if businesses and consumers expect prices to rise, they may increase wages and prices preemptively, creating a self-fulfilling prophecy, as seen in economies with a history of high inflation.

Government policies, such as increased taxes or reduced subsidies, can raise costs for businesses, which are then passed on to consumers, as seen with fuel tax hikes, contributing to higher inflation rates across the economy.

8. (b) Explain three monetary measures against inflation.

Raising interest rates is a key measure; by increasing the cost of borrowing, central banks reduce consumer spending and investment, as seen with the U.S. Federal Reserve's actions, slowing demand and helping to lower inflation.

Reducing the money supply is another approach; central banks can sell government bonds through open market operations, taking money out of circulation, which decreases spending power and helps control demand-pull inflation.

Increasing reserve requirements for banks limits the amount of money they can lend, as more funds must be held in reserve, reducing the money supply in the economy, which can help curb inflationary pressures by slowing economic activity.

This completes all questions from both sections, with each point presented in its own paragraph as requested. Let me know if you need further clarification!