Enrolment No. _____

AHMEDABAD UNIVERSITY

AMRUT MODY SCHOOL OF MANAGEMENT

UNDERGRADUATE PROGRAMMES

2025 - 2026 WINTER SEMESTER

MID SEMESTER EXAMINATION

ECO100 MICROECONOMICS

Date: 24-02-2026 Total Marks: 35

Time: 02.00 p.m. – 04.00 p.m. No. of printed pages: 09

General Instructions:

1. Students must carry their identity card during the examination.
2. No break is allowed during the examination under any circumstances. In case of an emergency, with prior permission of the invigilator and an escort, a break of maximum five minutes is allowed.
3. No unauthorized devices, such as mobile phones, any kind of watches, other gadgets, or any kind of material is allowed on person.
4. Any violation of examination rules and an intent of malpractice will lead to strict disciplinary action, including a possible expulsion from the university.

Course Specific Instructions:

1. The exam consists of five questions. All questions are compulsory.
2. Limit your answers to the space provided below each question. Use the last page for rough work.
3. Ensure all graphs and diagrams are clearly drawn and properly labelled.
4. Questions 1–4 are based on the provided scenarios. Answer each question in the context of that scenario.
5. Keep your answers concise and clear. Marks will be awarded for clarity and accuracy, not length.
6. Adequate time is provided to read the questions carefully before answering.

Question 1.

Scenario -

"Plain (or standardized) packaging is defined as "measures to restrict or prohibit the use of logos, colours, brand images or promotional information on packaging other than brand names and product names displayed in a standard colour and font style". The objectives of plain packaging include:

1. *reducing the attractiveness of tobacco products;*
2. *eliminating tobacco packaging as a form of advertising and promotion;*
3. *eliminating misleading information by addressing package design techniques that may suggest that some products are less harmful than others; and*
4. *increasing the noticeability and effectiveness of health warnings."*

- Source: Tobacco Plain Packaging Update, Global Status 2021 Update World Health Organization Framework Convention on Tobacco Control

Part a) On 1st December 2012, Australia became the first country to implement mandatory plain packaging laws for tobacco products.

Identify the objective they aimed to achieve and using demand and supply curves, explain how this policy would affect the equilibrium price and quantity in the tobacco market. Label the supply curve(s), demand curve(s), old and new equilibrium price and quantity. **[3 marks]**

Part b) In the early 2010s, the Government of Togo (a narrow, tropical country in West Africa bordering Ghana) planned to introduce plain packaging and larger graphic health warnings on cigarette packs as part of its tobacco consumption control strategy. A large tobacco company opposed the policy and put significant pressure on Togo to repeal the law.

Using a demand - supply graph (through the total revenue argument), explain why tobacco companies would oppose such regulations. **[4 marks]**

Question 2.

Scenario -

"Alcohol is a major cause of death and illness in Wales; it leads to a number of health and social harm, particularly for a significant minority of people who drink in excess. In 2017, there were 540 alcohol specific deaths in Wales and in 2017-18, there were nearly 55,000 alcohol-related hospital admissions. All deaths and hospital admissions related to alcohol are preventable and minimum unit pricing for alcohol can make an important contribution to addressing this issue over the long-term. The damage that alcohol can cause not only affects the people concerned but their families, public services and the communities in which they live. Evidence suggests one of the most effective actions available to governments is to control the price and affordability of alcohol."

- Source: Welsh Government, Integrated Impact Assessment Summary Public Health (Wales) Regulations, 2019

The policy described above sets a minimum price per unit of alcohol, meaning drinks cannot legally be sold below this price. The aim is to reduce excessive drinking and alcohol-related harm by making cheap alcohol less affordable.

Part a) Identify the policy and graphically (using demand-supply curves) demonstrate the effect of this policy on quantity supplied and quantity demanded in the cheap alcohol market. Label everything clearly. (Hint: This is a binding price control instrument used by the government). **[4 marks]**

Part b) As an economist, to reduce alcohol consumption would you prefer this policy, or would you prefer a tax on alcohol consumption? Provide a reason for your argument in 2-3 sentences. **[2 marks]**

Question 3.

Scenario –

The soda tax was a ground-breaking public health initiative in Berkley, becoming the first city in the United States to impose a sugary beverage tax. Approved by voters in November 2014 and implemented in March 2015, the tax charged 1 cent per ounce on sugar-sweetened beverages, including sodas, energy drinks, and sweetened teas. The tax was imposed on sellers of sugary beverage.

Part a) Assume that for sugar-sweetened beverages demand is inelastic and supply is relatively elastic. Who would bear the burden of tax? Explain your answer with a diagram. **[4 marks]**

Part b) Explain the effect of soda tax on consumer and producer surplus, through a diagram. Indicate tax revenue and deadweight loss in the diagram. For this, assume the same elasticities as described in Part (a). **[4 marks]**

Part c) Is the deadweight loss in this case socially desirable? Explain in 1-2 sentence/s. **[2 marks]**

Question 4.

Scenario –

The semiconductor crisis of 2020–2023 was mainly caused by demand and supply problems. On one hand, there was a sharp increase in the need for laptops, smartphones, gaming consoles, and other electronics during the COVID-19 because people were working and studying from home. Car demand also rose suddenly after, which led to increase in semiconductor orders by automakers. The rapid adoption of 5G technologies and increased reliance on cloud data centres further accelerated the need for high-performance chips made from semiconductors.

On the other hand, factory shutdowns and global supply chain disruptions during the pandemic reduced production. Trade tensions between the United States and China also affected semiconductor supply, and drought conditions in Taiwan, a key semiconductor-producing country, further limited production.

Part a) For the scenario described above, explain with graphs the change in equilibrium price and quantity for the semiconductor market. Label the supply curve (s), demand curve (s), the old and the new equilibrium price and quantity. (Hint: There should be two outcomes with two graphs) **[5 marks]**

Question 5.

Part a) Critically analyze the role of government in the market, based on the readings and class discussions in 5 – 6 sentences. **[5 marks]**

Part b) The price of a good increases from Rs. 100 to Rs. 200 and the quantity demanded decreases from 500 kgs to 100 kgs. Compute the price elasticity of the demand for this good using the mid-point formula. Is the demand elastic or inelastic? **[2 marks]**

Rough work -