Assignment: Applied Economics

Question 1:

Using the expenditure and income methods, calculate the GDP, GNP, and NNP at market price of a country using the following data:

- Consumption expenditure: $300 billion
- Investment expenditure: $200 billion
- Government expenditure: $150 billion
- Exports: $100 billion
- Imports: $50 billion
- Net factor income from abroad: $20 billion
- Depreciation: $30 billion
- Indirect taxes: $40 billion
- Subsidies: $10 billion
- Compensation of employees: $400 billion
- Operating surplus: $200 billion
- Rental income: $50 billion
- Interest income: $30 billion
- Corporate profits: $100 billion
- Net indirect taxes: $20 billion

Question 2:

Using the expenditure and income methods, calculate the GDP, GNP, and NNP at market price of a country using the following data:

- Consumption expenditure: $500 billion
- Investment expenditure: $300 billion
- Government expenditure: $200 billion
- Exports: $150 billion
- Imports: $100 billion
- Net factor income from abroad: -$50 billion
- Depreciation: $40 billion

- Indirect taxes: $30 billion
- Subsidies: $20 billion
- Compensation of employees: $600 billion
- Operating surplus: $400 billion
- Rental income: $80 billion
- Interest income: $60 billion
- Corporate profits: $200 billion
- Net indirect taxes: $40 billion

Question 3:

Using the expenditure and income methods, calculate the GDP, GNP, and NNP at market price of a country using the following data:

- Consumption expenditure: $400 billion
- Investment expenditure: $200 billion
- Government expenditure: $300 billion
- Exports: $100 billion
- Imports: $50 billion
- Net factor income from abroad: $50 billion
- Depreciation: $30 billion
- Indirect taxes: $40 billion
- Subsidies: $10 billion
- Compensation of employees: $500 billion
- Operating surplus: $400 billion
- Rental income: $70 billion
- Interest income: $40 billion
- Corporate profits: $150 billion
- Net indirect taxes: $30 billion

Question 4:

A company sells a particular product with the following information:

- Original price: $10 per unit
- New price: $12 per unit
- Original quantity demanded: 1,000 units
- New quantity demanded: 800 units

a) Calculate the price elasticity of demand using the point elasticity formula.

b) Interpret the calculated price elasticity value and discuss the elasticity category (elastic, inelastic, or unitary elasticity) of the product.

Question 5:

A market analysis firm conducted a study on the demand for a specific good. The study collected the following data:

- Original price: $5 per unit
- New price: $6 per unit
- Original quantity demanded: 1,000 units
- New quantity demanded: 900 units

a) Calculate the price elasticity of demand using the arc elasticity formula.

b) Discuss the difference between using the point elasticity formula and the arc elasticity formula in this scenario.