

**Tribhuvan University**  
**Patan Multiple Campus**  
**Humanities and Social Sciences**  
**Department of Economics**  
**MA Economics**  
**Pre-Board Examinations**

**Subject: Microeconomics I**  
**Subject Code: Eco-551**  
**Semester: First Semester**

**Full Marks: 100**  
**Time: 2 hours**  
**Pass Marks: 50**

**Attempt All questions.**

1. In 2007 BHP [Broken Hill Propriety] Billiton, a large mining group, made a bid to takeover Rio Tinto, the world's third largest mining group. Such a takeover would create the largest producer of copper and aluminum in the world.
  - (a) Explain whether increasing its scale of production will always reduce a company's costs. [12]
  - (b) BHP Billiton and Rio Tinto have monopoly powers and are mining a natural resource. Discuss why the governments of the countries in which these companies operate might become concerned about this. [13]
2. Airbus, a large aircraft manufacturing company, announced in 2007 that its goal was to increase its \$475 million research budget by 25% in order to try to develop a more environmentally friendly aircraft that had lower fuel consumption.
  - (a) Explain why Airbus is likely to be in an imperfect rather than a perfect market structure. [10]
  - (b) Economics textbooks sometimes criticize firms in imperfect competition as being against the public interest. What does this mean, and how far does the Airbus announcement prove the textbooks wrong? [15]
3.
  - (a) Explain the consumer's equilibrium under attribute approach and justify the law of demand with a suitable example under this approach. [12]
  - (c) Decompose price effect into income and substitution effects under Hicksian approach when price of good Y (an inferior good) is increased. [13]
4. Read the following statement and refer to Table carefully and answer the following questions. [25]
  - a) Draw the production possibility frontier (PPF) of Nepal from Table 1.
  - b) How does the PPF change after the pandemic in Nepalese economy?
  - c) How does the new PPF look like and what does that shape represent?

## PRODUCTION POSSIBILITY FRONTIER OF NEPALESE ECONOMY BETWEEN NOBEL CORONA VIRUS-19

Military expenditures data of Nepal from SIPRI is derived from the NATO definition, which includes all current and capital expenditures on the armed forces, including peacekeeping forces; defense ministries and other government agencies engaged in defense projects; paramilitary forces, if these are judged to be trained and equipped for military operations; and military space activities. Such expenditures include military and civil personnel, including retirement pensions of military personnel and social services for personnel; operation and maintenance; procurement; military research and development; and military aid (in the military expenditures of the donor country). Excluded are civil defense and current expenditures for previous military activities, such as for veterans' benefits, demobilization, conversion, and destruction of weapons.

This definition cannot be applied to all countries, however, since that would require much more detailed information than is available about what is included in military budgets and off-budget military expenditure items. (For example, military budgets might or might not cover civil defense, reserves and auxiliary forces, police, and paramilitary forces, dual-purpose forces such as military and civilian police, military grants in kind, pensions for military personnel, and social security contributions paid by one part of the government to another.)

Government expenditure on education, total (% of GDP) in Nepal was reported at 5.1021 % in 2018, according to the World Bank collection of development indicators, compiled from officially recognized sources. General government expenditure on education (current, capital, and transfers) is expressed as a percentage of GDP. It includes expenditure funded by transfers from international sources to government. General government usually refers to local, regional and central governments.

Expenditure percent of Gross Domestic Product for Military and Education Expenditure of Nepal. Statistics of the percentage of expenditures are presented in Table 1.

Table 1: Military and Education Expenditure (% of GDP of Nepal)

S. No.	Military	Education
1	1.564	4.66
2	1.541	3.63
3	1.432	3.84
4	1.542	3.76
5	1.629	3.48
6	1.557	3.99
7	1.701	3.70
8	1.729	4.44
9	1.558	5.52
10	1.563	5.12

Source: World Bank Database, <https://data.worldbank.org/indicator/SE.XPD.TOTL.GD.ZS?locations=NP>.