

NAME: \_\_\_\_\_

Student ID No.: \_\_\_\_\_

**Economics 340  
International Economics  
Prof. Alan Deardorff  
First Midterm Exam**

**Form 0**

**Answers**

October 24, 2018

**INSTRUCTIONS: READ CAREFULLY!!!**

1. Please do not open the exam until you are told to do so.
2. **PLACE YOUR NAME AND STUDENT ID NO. (THE EIGHT DIGIT NUMBER FROM YOUR M-CARD) ON THE EXAM AND ON THE SCANTRON SHEET.**
3. Find the **FORM NUMBER** above and enter it where it asks for “KEY” on the scantron sheet. Be sure to fill in the bubbles.
4. This exam has 100 points and you have approximately 80 minutes to complete the test. Check that you have all 16 pages of the exam, including this cover sheet.
5. **Part 1** consists of 25 multiple choice questions worth 2 points each. Answers to these should be marked on the scantron sheet using a #2 pencil. There are no penalties for guessing.
6. **Part 2** consists of short-answer questions for which you must provide written answers on these sheets. Point values for questions in Part 2 are indicated in parentheses. Part 2 has 48 points total.
7. That leaves 2 points unaccounted for. You will get these if (and only if) you put your name and ID number on both this exam booklet and the scantron sheet, **and** if you enter the form number (see above) on the scantron.
8. Good luck!

**FORM 0**

**Economics 340  
First Midterm Exam**

**Part 1: Multiple Choice (2 points each)**

Select the **best** answer of those given. Answers to this part should be marked on the scantron sheet using a #2 pencil. There is only one correct answer per question, and there is no penalty for guessing.

1. How had US average tariffs on imports changed since the end of World War II as of 2016?
  - a. Although some tariffs had fallen, others had risen so that the average remained approximately unchanged.
  - b. Because of the unique position of the US in World War II, we ended the war with zero tariffs. Over time, these rose to about 10%.
  - c. US tariffs against other rich countries remained over 20%, but to help developing countries we reduced tariffs on their exports, so that our average tariff as of 2016 was just under 12%.
  - d. As a result of US participation in trade negotiations, US average tariffs in 2016 were only about 1/10 as large as they were at the end of World War II.
  - e. The US has been the world's strongest champion of free trade since well before World War II, and our tariffs have been near zero, with only minor exceptions, ever since.

*Ans: d*

2. What does it mean that China's value added as a percent of its exports is smaller than that of the US?
  - a. That wages in China are lower than wages in the US.
  - b. That China's currency is undervalued.
  - c. That China's exports are produced with a bigger proportion of imported intermediate inputs than are US exports.
  - d. That China has higher tariffs than the US does, and this adds value to China's exports that elevate them above US exports.
  - e. That China exports mainly to the US, while the US mainly exports to Europe.

Ans: c

3. In class you saw that Singapore's exports are 115% of Singapore's GDP. That is possible because
- Singapore reports more exports than it actually has.
  - Reported exports of Singapore are actually those of the entire Malay peninsula, including Malaysia.
  - GDP measures only value added, while the value of exports includes the value of intermediate inputs that may have been imported.
  - A large part of Singapore's GDP is produced by the informal economy and is therefore unreported.
  - Prices of Singapore's exports are more than 20% higher than of the goods that it keeps for itself.

Ans: c

4. Which of the following was the name of one of the GATT negotiating rounds conducted *before* the WTO was created?
- NAFTA
  - Tokyo
  - Nixon
  - Seattle
  - Doha

Ans: b

5. By definition, public goods are
- excludable
  - nonrival
  - perfectly competitive
  - provided by government
  - imported

Ans: b

6. The term “conditionality” refers to
- the requirements that the IMF imposes on developing countries in return for loans.
  - the advantage that a country has in trade if its labor requirement per unit of output of a good is less than that of all other countries.
  - the tariff reductions that the US and EU expected from developing countries in the Doha Round in return for reducing agricultural subsidies.
  - the bribes that customs officers in some countries require before they let imported goods in.
  - the rules in GATT that permit a country to treat another better than its most favored nation.

*Ans: a*

7. Josh Bivens, in his assigned article “Marketing the Gains from Trade,” argues several things. Which of the following is *not* among his claims?
- The claim by the Peterson Institute that the US could gain roughly 4% of GDP from trade liberalization is not generally accepted by economists.
  - Estimates of trade barriers in services are very uncertain.
  - Trade is not beneficial to countries as a whole.
  - Computer models of the gains from trade typically ignore effects on the distribution of income.
  - Advocates of free trade have greatly exaggerated the benefits from trade.

*Ans: c*

8. Suppose that Japan and Korea require the amounts of labor shown in the table below for producing one unit of steel and one unit of wine. Then
- Korea has an absolute advantage in wine.
  - Japan has a comparative advantage in steel.
  - Korea has a comparative advantage in wine.
  - Japan has an absolute advantage in steel.
  - All of the above.

Good	Country	
	Japan	Korea
Steel	40	50
Wine	2	5

*Ans: d*

9. The New Trade Theory differs from the Ricardian and Factor Proportions theories in that it allows for
- Workers in one country to be more productive than workers in another.
  - Average costs to fall as an industry employs proportionally more of all factors of production.
  - Firms to be perfectly competitive.
  - One country to export a good that is not the same as the good that another country exports.
  - Firms that choose not to maximize their profits.

*Ans: b*

10. The Factor Price Equalization result of the Heckscher-Ohlin Model implies that,
- All workers are equally productive.
  - If a country fails to trade, its skilled workers will earn no more than its unskilled workers.
  - Trade causes the return to human capital to be the same as the return to physical capital.
  - Free trade causes identical factors in different countries to be paid more nearly the same than they were in autarky.
  - In order for countries to trade freely, they must tax wages so that firms in all countries pay the same.

*Ans: d*

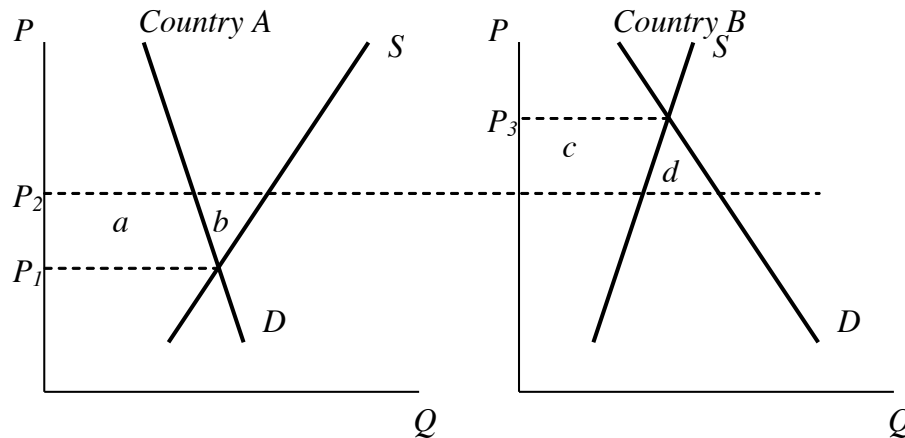
11. Which of the following is likely to happen when a large country levies a tariff *and* would *not* happen if a small country did the same?
- Domestic output of the protected good rises
  - Domestic demand for the protected good rises
  - Domestic price of the protected good rises
  - World price of the protected good falls
  - Government collects tariff revenue

*Ans: d*

12. What could cause the effective rate of protection on a good to be negative?
- A positive tariff on an input to producing the good, together with a zero tariff on the good itself.
  - A specific tariff that is larger than its *ad valorem* equivalent.
  - A tariff imposed by a foreign country in retaliation against the home country's tariff.
  - Failure to collect a tariff because importers bribe customs officers.
  - An import quota that is set larger than the quantity of imports that would enter under free trade.

Ans: a

13. The diagram below shows supply and demand curves for the same good in two countries, A and B. Based on the prices and areas labeled there,
- Country B has a comparative advantage in this good.
  - The autarky price in Country A is  $P_2$ .
  - Moving from autarky to free trade makes demanders in Country B better off by the amount  $c+d$ .
  - Moving from autarky to free trade makes suppliers in Country A worse off by the amount  $a+b$ .
  - All of the above.



Ans: c

14. Which of the following is *not* a NTB?

- a. VER.
- b. Tariff-rate quota.
- c. Variable levy.
- d. National treatment
- e. Discriminatory product standard

*Ans: d*

15. Suppose that a small country is initially importing a good subject to a quota, and that the domestic price of the good is higher than the world price. If the world price of the good now falls, what will happen?

- a. The domestic price of the good will fall.
- b. The quantity of imports of the good will rise.
- c. The tariff equivalent of the quota will rise.
- d. The quota rents will fall.
- e. All of the above.

*Ans: c*

16. The political-economy explanation of why countries have positive tariffs, summarized in the phrase “protection for sale,” says that

- a. Legislators provide tariff protection to industries in response to political campaign contributions.
- b. Importers pay bribes to customs officers to let them pay tariffs that are lower than legally required.
- c. Protection is provided by import quotas that are auctioned off to the highest bidder.
- d. Industries seeking protection from imports pay bribes to customs officers to get them to charge tariffs higher than legally required.
- e. Insurance companies sell policies that promise to pay any tariff charges on traded goods.

*Ans: a*

17. According to the “optimal tariff argument,”

- a. A tariff is the easiest way for a government to raise revenue.
- b. A tariff can benefit a large country by causing the world price of the imported good to fall.
- c. The best tariff is one that raises the cost of imported goods to equal the cost of domestically produced goods.
- d. The best time to levy a tariff is shortly after consumers have come to depend on imports.
- e. Workers should be given extended unemployment compensation if they lose their jobs because of competition from imports.

*Ans: b*

18. Anti-dumping duty is

- a. A tax on imports set equal to the difference between their price in the exporter’s home market and their price here.
- b. A tariff on imports that are in excess supply in foreign markets.
- c. The international obligation not to dispose of waste products in international waters.
- d. Levied whenever imports cause injury to domestic firms or workers.
- e. A requirement imposed by the International Monetary Fund on countries requesting assistance, designed to prevent them from undermining IMF objectives.

*Ans: a*

19. The part of the U.S. government that negotiates trade policy issues with other countries is

- a. The International Trade Commission
- b. The Finance Committee of the U.S. Senate.
- c. The Office of the President.
- d. The Secretary of International Trade
- e. The Office of the United States Trade Representative

*Ans: e*



20. According to the Most Favored Nation principle,
- Tariffs should be zero.
  - Tariffs should be lowest on imports from countries that cooperate with our nation's foreign policy objectives.
  - A country's tariff on imports of a good should be the same for all exporting countries.
  - Under a quota, those imports should be admitted that arrive first at the nation's border.
  - Once foreign goods are inside a country, they should be treated the same as domestically produced goods.

*Ans: c*

21. In the WTO, a Ministerial is
- The land that a country must give to other countries if it loses a trade dispute.
  - The confusion that erupts when trade negotiators are unable to reach agreement.
  - A trade agreement between two or more countries.
  - A meeting of the trade ministers of all member countries.
  - A legal exception to an otherwise inviolable rule of the WTO.

*Ans: d*

22. Compared to 1970, immigration now into the United States, as measured by the foreign-born fraction of the US population, is
- Much greater (more than ten times as large)
  - Somewhat greater (between twice as large and ten times as large)
  - About the same
  - Somewhat smaller (between one tenth as large and half as large)
  - Much smaller (less than one tenth as large)

*Ans: b*

23. According to economic theory, when labor migrates from a low-wage country to a high-wage country
- Wages in both countries rise.
  - Wages in both countries fall.
  - Wages rise in the low-wage country and fall in the high-wage country.
  - Wages fall in the low-wage country and rise in the high-wage country.
  - Wages in both countries remain unchanged because the world supply of labor has not changed.

*Ans:*    *c*

24. Which of the following was reported in recent news about a developing country?
- Sri Lanka negotiated a new free trade agreement with Bangladesh.
  - Nepal reported that its exports had reached 20% of its GDP.
  - India has asked the International Monetary Fund for a bailout.
  - Pakistan announced it would increase import tariffs,
  - A new government in the Maldives announced it would withdraw from the WTO.

*Ans:*    *d*

25. After the US and China imposed tariffs on \$50 billion of each other's exports, recent news reported that
- The US imposed tariffs on an additional \$60 billion of China's exports and China responded with tariffs on \$60 billion more of US exports.
  - The US imposed tariffs on an additional \$60 billion of China's exports and China responded with tariffs on \$200 billion more of US exports.
  - The US imposed tariffs on an additional \$200 billion of China's exports and China responded with tariffs on \$60 billion more of US exports.
  - The US imposed tariffs on an additional \$200 billion of China's exports and China responded with tariffs on \$200 billion more of US exports.
  - After threatening each other with additional tariffs, the US and China agreed in a "truce" not to use them and to engage instead in negotiations.

*Ans:*    *c*

## Part II: Short Answer

Answer on these sheets in the space provided.

1. (5 points) What do the following acronyms stand for in international economics, and/or what do they mean?

- a. USMCA *Ans: U.S.-Mexico-Canada Agreement. The (name given by Trump for the) renegotiated NAFTA.*
- b. DWL *Ans: Dead-weight loss. The net loss in economic welfare due to a policy such as a tariff, measured as the portion of any economic loss by one group (usually consumers) that is not offset by gain to others.*
- c. WIPO *Ans: World Intellectual Property Organization. The United Nations organization that espouses great protection for intellectual property: patents, trademarks, and copyrights.*
- d. VER *Ans: Voluntary Export Restraint. An agreement by an exporting country to limit its exports at the request of an importing country.*
- e. OECD *Ans: Organization for Economic Cooperation and Development. An international organization of mostly high-income countries that collect data and discuss potential policy changes.*

2. (3 points) True-False. Circle the correct answer.

- |  |      |       |              |
|--|------|-------|--------------|
| a. The United States exports less than China but imports more than China                             | True | False | <i>True</i>  |
| b. Over the period 1990-2015, exports of emerging nations grew more than exports of advanced nations | True | False | <i>True</i>  |
| c. The countries of Africa trade more with each other than they do with the developed world.         | True | False | <i>False</i> |

3. (8 points) Each of the first three tables below shows the amounts of labor required to produce one unit of each of two goods, X and Y, in two countries, A and B. These are the only goods, and the only countries, in the world. In each case, fill in the blanks with “X,” “Y,” “A,” “B,” “both,” or “neither.”

a. Country A has absolute advantage in good	both	Labor needed per unit of output												
Country B has comparative advantage in good	X	<table style="border-collapse: collapse; margin-left: 20px;"> <thead> <tr> <th style="border-right: 1px solid black; padding: 5px;">Good</th> <th colspan="2" style="padding: 5px;">Country</th> </tr> <tr> <th style="border-right: 1px solid black; padding: 5px;"></th> <th style="padding: 5px;">A</th> <th style="padding: 5px;">B</th> </tr> </thead> <tbody> <tr> <td style="border-right: 1px solid black; padding: 5px;">X</td> <td style="padding: 5px;">1.4</td> <td style="padding: 5px;">2.8</td> </tr> <tr> <td style="border-right: 1px solid black; padding: 5px;">Y</td> <td style="padding: 5px;">6</td> <td style="padding: 5px;">18</td> </tr> </tbody> </table>	Good	Country			A	B	X	1.4	2.8	Y	6	18
Good	Country													
	A	B												
X	1.4	2.8												
Y	6	18												

b. Country with absolute advantage in good X:	B	Labor needed per unit of output												
Country with comparative advantage in good Y:	A	<table style="border-collapse: collapse; margin-left: 20px;"> <thead> <tr> <th style="border-right: 1px solid black; padding: 5px;">Good</th> <th colspan="2" style="padding: 5px;">Country</th> </tr> <tr> <th style="border-right: 1px solid black; padding: 5px;"></th> <th style="padding: 5px;">A</th> <th style="padding: 5px;">B</th> </tr> </thead> <tbody> <tr> <td style="border-right: 1px solid black; padding: 5px;">X</td> <td style="padding: 5px;">98</td> <td style="padding: 5px;">73</td> </tr> <tr> <td style="border-right: 1px solid black; padding: 5px;">Y</td> <td style="padding: 5px;">420</td> <td style="padding: 5px;">500</td> </tr> </tbody> </table>	Good	Country			A	B	X	98	73	Y	420	500
Good	Country													
	A	B												
X	98	73												
Y	420	500												

c. Country that exports good X:	A	Labor needed per unit of output												
Country that exports good Y:	B	<table style="border-collapse: collapse; margin-left: 20px;"> <thead> <tr> <th style="border-right: 1px solid black; padding: 5px;">Good</th> <th colspan="2" style="padding: 5px;">Country</th> </tr> <tr> <th style="border-right: 1px solid black; padding: 5px;"></th> <th style="padding: 5px;">A</th> <th style="padding: 5px;">B</th> </tr> </thead> <tbody> <tr> <td style="border-right: 1px solid black; padding: 5px;">X</td> <td style="padding: 5px;">10</td> <td style="padding: 5px;">8</td> </tr> <tr> <td style="border-right: 1px solid black; padding: 5px;">Y</td> <td style="padding: 5px;">12</td> <td style="padding: 5px;">8</td> </tr> </tbody> </table>	Good	Country			A	B	X	10	8	Y	12	8
Good	Country													
	A	B												
X	10	8												
Y	12	8												

The table below looks much like the ones above, but this one gives a different kind of information: output per worker (productivity). Fill in the blanks as above.

d. Country that exports good X:	B	Output produced per unit of labor												
Country that exports good Y:	A	<table style="border-collapse: collapse; margin-left: 20px;"> <thead> <tr> <th style="border-right: 1px solid black; padding: 5px;">Good</th> <th colspan="2" style="padding: 5px;">Country</th> </tr> <tr> <th style="border-right: 1px solid black; padding: 5px;"></th> <th style="padding: 5px;">A</th> <th style="padding: 5px;">B</th> </tr> </thead> <tbody> <tr> <td style="border-right: 1px solid black; padding: 5px;">X</td> <td style="padding: 5px;">50</td> <td style="padding: 5px;">100</td> </tr> <tr> <td style="border-right: 1px solid black; padding: 5px;">Y</td> <td style="padding: 5px;">500</td> <td style="padding: 5px;">600</td> </tr> </tbody> </table>	Good	Country			A	B	X	50	100	Y	500	600
Good	Country													
	A	B												
X	50	100												
Y	500	600												

4. (8 points) On planet Oberon, there are just two countries, Apnia and Bubba. Their economies have two goods, oodles and doodles, which they produce using their endowments of labor and capital under the assumptions of the Heckscher-Ohlin factor proportions model, including that the countries have the same technologies. Apnia is endowed with more capital per worker than Bubba. Production of oodles uses more capital relative to labor than does production of doodles. Initially the two countries do not trade.

- a. In autarky, which country has the higher wage of labor, Apnia
- b. And which has the higher relative price of doodles? Apnia
- c. When they now open to free international trade, which country will export oodles? Apnia

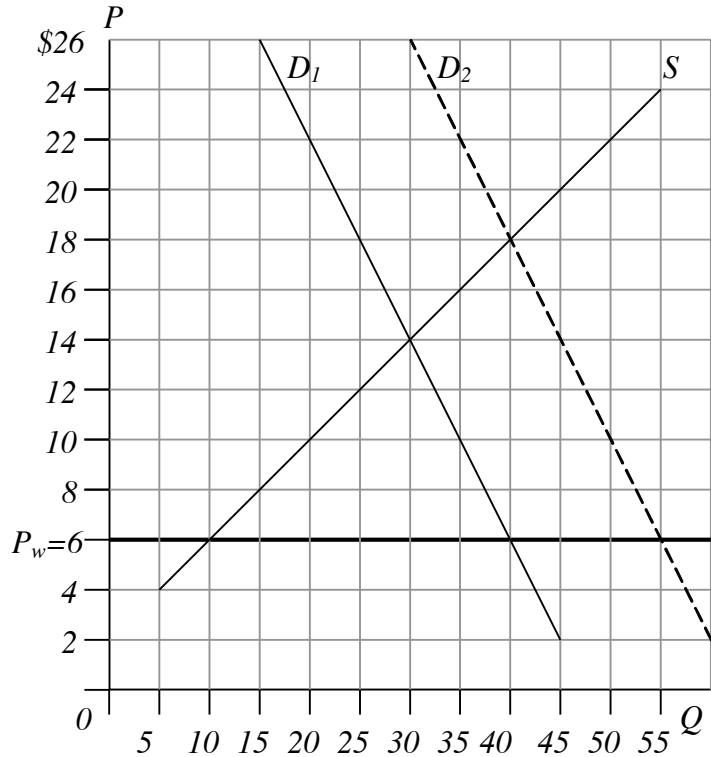
As a result of trade, again using the HO model, indicate what will happen in the two countries assuming that the country you've identified in part c does indeed export oodles. Write in the blanks below one of the following (grading will be based on the answer you gave to part (c)):

- |  | <b>“Rise”</b> | <b>“Fall”</b> | <b>“Not change”</b> | <b>“Can’t tell”</b> |
|--|---------------|---------------|---------------------|---------------------|
| d. Production of doodles in Apnia will                   |               |               |                     | <u>Fall</u>         |
| e. Production of doodles in Bubba will                   |               |               |                     | <u>Rise</u>         |
| f. Employment of labor in producing oodles in Apnia will |               |               |                     | <u>Rise</u>         |
| g. The wage of labor in Apnia will                       |               |               |                     | <u>Fall</u>         |
| h. The return to capital in Bubba will                   |               |               |                     | <u>Fall</u>         |

5. (2 points) In the space below, state two of the three assumptions made in the New Trade Theory that are different from the Heckscher-Ohlin model.

*Answer: Any two of: Increasing returns to scale. Imperfect competition. Product differentiation. (or variety)*

6. (10 points) In the graph at the right, supply and demand curves are drawn on a grid from which you can read corresponding prices and quantities. The curves represent the domestic market for a good in a small country. Use them to answer the questions below in the blanks provided. Feel free to add whatever you need to the graph, but this will not count for or against your answers.



a. For the initial demand curve,  $D_1$ , what is the autarky price?

                  \$14                  

b. Suppose that the world price is \$6, as shown. At this world price, how much would the country demand of the good, how much would it supply, and how much would it import?

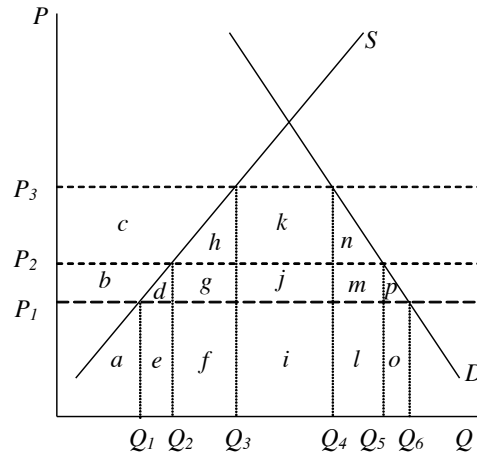
Demand =     40     Supply =     10     Imports =     30    

c. Suppose now that the country imposes a specific tariff of \$4 per unit of the good. What is now the domestic price, and how much does the country demand and supply? Also, how much does the government collect in tariff revenue?

Price =     \$10     Demand =     35     Supply =     20     Revenue =     \$60    

d. If the demand curve were now to shift to the position shown as  $D_2$ , with the \$4 tariff still in place and the world price still \$6, what now are your answers to part (c)?

Price =     \$10     Demand =     50     Supply =     20     Revenue =     \$120



7. (6 points) The figure above shows domestic supply and demand for a good in a small country, together with several prices and quantities labeled on the axes. Initially, with free trade, it faces a world price equal to  $P_2$ . Using the prices, quantities, and areas labeled in the figure, answer the following.

a. What is the quantity of imports with free trade at the world price  $P_2$ ?

Quantity of imports =  $\underline{Q_5 - Q_2}$

b. Suppose that the country now limits imports with a quota and that, as a result, the domestic price rises to  $P_3$ , the world price remaining  $P_2$ . What is the size of the quota, and how much are the quota rents?

Quota =  $\underline{Q_4 - Q_3}$       Quota rents =  $\underline{\text{Area } k}$

c. Assuming that the country gives away the rights to import under the quota to foreigners, how much welfare does this importing country gain or lose as a result of the quota?

Domestic welfare change due to the quota =  $\underline{\text{Loss of area } h+k+n}$

d. Suppose now that the world price falls from  $P_2$  to  $P_1$  in the figure. How does this change the importing country's welfare in the two cases of i) free trade, and ii) the quota? (Record below both the size and the sign of the change in welfare due to the fall in world price in the presence of free trade and the unchanged quota.)

i) Free trade      *Gain*      ii) With quota  
 Welfare change =  $\underline{+(d+g+j+m+p)}$       Welfare change =  $\underline{0 \text{ (no change)}}$

8. (6 points) Define the following terms as they are used in international economics:

- a. Terms of trade *Ans: The relative price, on world markets, of a country's exports compared to its imports.*
- b. Increasing returns to scale *Ans: A fall in average cost as an industry produces larger output by proportional increase in all inputs. (Or: a rise in output that is larger than proportional to the expansion of all inputs.)*
- c. Trade adjustment assistance *Ans: A government program that provides financial assistance to workers who have lost their jobs due to imports.*
- d. Tariff-rate quota *Ans: A tariff that is set at two levels, one for imports up to a certain quantity, and a higher one for imports above that quantity.*
- e. Brain drain *Ans: The migration out of a country of its most educated and skilled people.*
- f. Dumping *Ans: Export of a good at a price below the "fair" price, the latter defined either as cost, or as the price on the home market.*