

**MASTER OF ARTS EXAMINATION, 2019**  
(2nd Year, 3rd Semester)  
**ECONOMICS**

**INTERNATIONAL ECONOMICS I: Pure Theory of Trade**

Time: Two hours

Full Marks: 30

Answer any *three* questions

1. (a) In a two-country Ricardian model with continuum of goods defined over the unit interval  $[0, 1]$ , how is the pattern of trade determined *for any given ratio of national wages*?  
(b) If there are transport costs in exporting goods, then show that a sub-set of goods will *not* be exported by either country. 4+6 = 10
  
2. What do you mean by excluded-middle phenomenon when price of traded goods change? What implications does this phenomenon have for factor owners being better-off or worse-off? Does this phenomenon hold for all factors in a many-good many-factor HOS model? Explain. If not, then what can you say about whether a factor is made better-off by changes in price of traded goods? 1 + 1 + 3 + 5 = 10
  
3. (a) Mention briefly the recent empirical observations regarding wage inequality.  
(b) Suppose India produces a high-skill specific good and a medium-skill specific good. Both goods use unskilled labour in production along with the specific skilled workers. Production functions follow CRS and wages are fully flexible. Does opening up of trade with the rest of the world lead to symmetric changes in wage-gap between high-skill and unskilled workers, between medium-skill and unskilled workers, and between high-skill and medium skill workers? Explain. (Answer without deriving changes in wages or price magnification effect algebraically).  
(c) Can a tariff reduction by a relatively skill rich country offer a plausible explanation for symmetric rise in wage inequality between skilled and unskilled workers in both countries in the context of a generalized HOS model? Explain. 2+ 4+4=10

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4. Consider two countries having fixed endowments of a quality-differentiated good. The quality is unobservable to the consumers who pay a price according to their perception about average industry quality, and such perceptions are same for all but different for products with different country-of-origin. Consumers are heterogeneous in their willingness to pay (or types), and are distributed continuously and uniformly over different types. Show that, *ceteris paribus*, pre-trade price of the good will be higher in the country with higher perception of average industry quality. When trade opens up and home and imported products are distinguishable, will the country with higher average industry quality gain? Explain. 3 + 7 = 10
5. (a) When a capital scarce country allows perfect and unrestricted foreign capital inflow, and two goods are produced under perfectly competitive conditions with constant returns to scale technology, what impact does it have on wages and relative prices in this host country and in the source country?  
 (b) Show that when a small country allows small capital inflow in presence of a tariff on its imports, such capital inflow immiserizes the country. Does small capital inflow allowed under free trade immiserize the country? 5 + 3 + 2 = 10
6. (a) Consider a North-country which innovates different varieties of a product through R&D using labour and knowledge capital. Production of innovated varieties requires labour only, and consumers have love for variety. If this country exports its innovated products to a South-country, which does not innovate but imitates the imported varieties and has significant cost advantage in production of the imitated varieties, will such trade augment the rate of innovation and product growth? If the government in South implements TRIPS, what would be its impact on the innovation rate in the North in the long run?  
 (b) Explain your answers intuitively. 7 + 3 = 10