Time allowed: 2 Hrs 30 Min

Max Marks: 50

Roll No: _____

Instruction: Students are required to write Roll No on every page of the question paper, writing anything except the Roll No will be treated as **Unfair Means**. In case of rough work please use answer sheet.

SECTION A

Note: Attempt any 3 questions

1. Discuss the following theories of Internationalization
   a. OLI Theory
   b. Monopolistic Advantage Theory

2. Discuss the following schemes of Foreign Trade Policy (2009-14)
   a. EPCG Scheme
   b. SFIS Scheme
   c. Deemed Exports

3. "In the recent past Indian Rupee has depreciated against dollar to great extent." In light of this explain the reasons of depreciation and its impact on India's Trade. Why do you think Indian exporters are not able to take advantage of it?

4. What is Balance of Payment? Explain various components of BOP and bring forward the recent issues related to it.

5. Explain the various steps of determining duty on products coming into India? What is the rationale behind levying anti-dumping and countervailing duty?

3X5 = 15 Marks

SECTION B

Note: Attempt any 2 questions

1. Gems and Jewelry Sector has been one of the significant export sectors that contribute significantly to total merchandize export from the country. In light of this statement discuss the structure of market, sources of competitive advantage,

and opportunities that exist across each of the elements of value chain. What in *your opinion should be the strategies for future growth?*

2. "In last one decade the basket of Indian Exports have undergone a big shift from traditional items to more technological intensive products" In light of above statement explain the current structure of Indian Exports and its major markets. What do you think are the problems faced by Indian exporters and what should be done to overcome them.

3. Indian Leather Industry is one sector that provides employment to large number of people and is significant foreign exchange earner. Conduct SWOT analysis of the industry. What in your opinion should be done to improve the competitiveness of the sector in International Markets?

2X10=20 Marks

SECTION C

Note: Case study is compulsory

15 Marks

The Rise of the Indian Software Industry

As a relatively poor country, India is not normally thought off as a nation capable of building a major presence in a high-technology industry, such as computer software. In little over a decade, however, the Indian software industry has astounded its skeptics and emerged from obscurity to become an important force in the global software industry. Between 1991–1992 and 1999–2000, sales of Indian software companies grew at a compound rate in excess of 60 percent annually. In 1991–1992, the industry had sales totaling $388 million. By 2000 they were around $6 billion. By the late 1990s, more than 900 software companies in India employed 200,000 software engineers, the third largest concentration of such talent in the world.

Much of this growth was powered by exports. In 1985, Indian software exports were worth less than $10 million. They surged to $1.8 billion in 1997 and hit a record $4 billion in 2000. The future looks very bright. Powered by continued export-led growth, India's National Association of Software and Service Companies projects that total software revenues generated by Indian companies will hit $28 billion by 2004–2005 and $87 billion by 2007–2008. As a testament to this growth, many foreign software companies are now investing heavily in Indian software development operations including Microsoft, IBM, Oracle, and Computer Associates, the four largest U.S.-based software houses. Equally significantly, two out of every five global companies now source their software services from India.

Most of the current growth of the Indian software industry has been based on contract or project-based work for foreign clients. Many Indian companies, for example, maintain applications for their clients, convert code, or migrate software from one platform to another. Increasingly, Indian companies are also involved in important development projects for foreign clients. For example, TCS, India's largest software company, has an alliance with Ernst & Young under which TCS will develop and maintain customized software for Ernst & Young's global clients. TCS also has a development alliance with Microsoft under which the company developed a paperless National Share Depositary system for the Indian stock market based on Microsoft's Windows NT operating system and SQL Server database technology. Indian companies are also moving aggressively into e-commerce projects. From almost zero in 1997, e-commerce or e-business projects now account for about 10 percent of all software development and service work in India and are projected to reach 20 percent within two years.

The Indian software industry has emerged despite a poor information technology infrastructure. The installed base of personal computers in India stood at just 3 million in 1999, and this in a nation of nearly 1 billion people. With just 22 telephone lines per 1,000 people, India has one of the lowest penetration rates for fixed telephone lines in Asia, if not the world. Internet connections numbered less than 100,000 in 1998, compared to 60 million in the United States. But sales of personal computers are starting to take off, and the rapid growth of mobile telephones in India's main cities is to some extent compensating for the lack of fixed telephone lines.

In explaining the success of their industry, India's software entrepreneurs point to a number of factors. Although the general level of education in India is low, India's important middle class is highly educated and its top educational institutions are world class. Also, India has always emphasized engineering. Another great plus from an international perceptive is that English is the working language throughout much of middle-class India — a remnant from the days of the British raja. Then
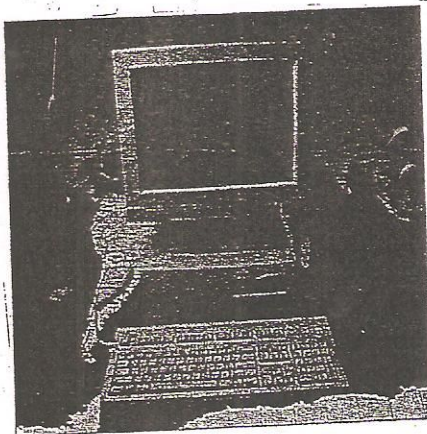
there is the wage rate. American software engineers are increasingly scarce, and the basic salary has been driven up to one of the highest for any occupational group in the country, with entry-level programmers earning $70,000 per year. An entry-level programmer in India, in contrast, starts at around $5,000 per year, which is very low by international standards but high by Indian standards. Salaries for programmers are rising rapidly in India, but so is productivity. In 1992, productivity was around $21,000 per software engineer. By 1997, the figure had risen to $45,000. As a consequence of these factors, by 2000 work done in India for U.S. software companies amounted to $25 to $35 an hour, compared to $75 to $100 per hour for software development done in the United States.

Another factor helping India is that satellite communications have removed distance as an obstacle to doing business for foreign clients. Because software is nothing more than a stream of zeros and ones, it can be transported at the speed of light and negligible cost to any point in the world. In a world of instant communication, India's geographical position between Europe and the United States has given it a time zone advantage. Indian companies have been able to exploit the rapidly expanding international market for outsourced software services, including the expanding market for remote maintenance. Indian engineers can fix software bugs, upgrade systems, or process data overnight while their users in Western companies are asleep.

To maintain their competitive position, Indian software companies are now investing heavily in training and leading-edge programming skills. They have also been enthusiastic adopters of international quality standards, particularly ISO 9000 certification. Indian companies are also starting to make forays into the application and shrink-wrapped software business, primarily with applications aimed at the domestic market. It may only be a matter of time, however, before Indian companies start to compete head to head with companies such as Microsoft, Oracle, PeopleSoft, and SAP in the applications business.

Sources: P. Taylor, "Poised for Global Growth," *Financial Times: India's Software Industry*, December 3, 1997, pp. 1, 8; P. Taylor, "An Industry on the Up and Up," *Financial Times: India's Software Industry*, December 3, 1997, p. 3; Krishna Guha, "Strategic Alliances with Global Partners," *Financial Times: India's Software Industry*, December 3, 1997, p. 6; "Indian SW Industry to Touch $13 Billion in 2001–02," *Computers Today*, December 15, 2000, pp. 14–17; and United Nations, *Human Development Report*, (New York: Oxford University Press, 2000), and Table 12.

Case Discussion Questions

1. To what extent does the theory of comparative advantage explain the rise of the Indian software industry?

2. To what extent does the Heckscher-Ohlin theory explain the rise of the Indian software industry?

3. Use Michael Porter's diamond to analyze the rise of the Indian software industry. Does this analysis help explain the rise of this industry?

4. Which of the above theories—comparative advantage, Heckscher-Ohlin, or Porter's—gives the best explanation of the rise of the Indian software industry? Why?