**DELHI SCHOOL OF BUSINESS**
By Vivekananda Institute of Professional Studies - TC

# Delhi School of Business
## PGDM & PGDM (FINTECH) Program
## END-TERM EXAMINATION, October 2023
## TERM – I (Batch: 2023-25)

| Course Name | Managerial economics | Course Code | ME |
|---|---|---|---|
| Duration | 2.5 Hours | Max. Marks | 40 |

### Instructions:

1. **Start all questions in a fresh page**
2. **All the sub-sections should be separate for writing any comment or *to allocate marks***
3. **In question 1, the credit will be given for precise answers**
4. **Question 2 and 3 answers should be limited to maximum of 1 page and *each argument* should be in a different paragraph with a sub-heading; (e.g-Poor management: XXXX as an explanation)**
5. ***Copy paste of the case facts only will attract penalty;* Application of economic concepts and *theory is required for explaining your arguments***

**Q.1** State whether the statement is "True or false" **(0.5 marks)** and ***give an explanation* (1.5 marks)** for the same.

A. Fixed inputs are always variable in short run but is constant in the long run as the firm is aware of its capacity due to operationalization of its investment plans.
B. The output elasticity of labour cannot be more than one in any production scenario.
C. It is more economical to operate on the rising portion of the isoquant as the firm increases its overall usage of its unutilized input resources.
D. The degree of economies and diseconomies of scale determines the economies of scale of a firm at any point of time.
E. Opportunity cost of an input is nothing, but the payment made by the firm during its purchase process.
F. Large firms have higher economies of scale only due to high capacity and specialization within the firm.

Break even volume of a firm is more than its targeted Profit Volume.



G. Cost-volume -profit volume is more than targeted profit volume of any firm.
H. All firms should operate at that level when marginal revenue is equal to its marginal cost of production.
I. Monopoly is necessarily bad for any economy.
J. Cartelization phenomena is beneficial for both consumers and producers.

**(1.5*10=15 Marks) CO 1;**

**Q.2** Explain with examples how a firm achieves economies of scale in their international operations **(8 Marks) CO 2;**

**Q.3** A firm with a higher operating leverage have higher creditworthiness **(7 Marks) CO 2;**

**Q.4 Analyse the following case on Indian Steel Industry and answer the question following the same**

*During the golden period of growth of steel industry from 2003 to 2007, the steel industry in India registered a compound annual growth rate (CAGR) of 24.5 percent, primarily due to huge demand of steel from China in the run up to the Beijing Olympics. However, between 2010 to 2015, the profits of steel industry declined by more than 46 percent in nominal terms. Despite demand from China cooled down after 2008, the Indian companies made fresh investments and remain over invested beyond the Chinese boom. The upshot was skyrocketing of non-performing assets, spreading panic to the banking sector. Moreover, the higher cost of capital accompanied with expanded plant capacity, forced the companies to operate a lower capacity with associated higher production costs, because of which the Indian companies could not withstand import competition (Table 2)*

**Table 1: Per capita Steel Consumption vs GDP per capita in PPP terms**

| Country | Per capita Steel Consumption (in Kg) | GDP per capita (in 2013 PPP US$) |
|---|---|---|
| India | 57.8 | 5411.6 |
| China | 545.0 | 11906.5 |
| Brazil | 132.1 | 15037.5 |
| Iran | 219.0 | 15590.3 |
| Russia | 304.6 | 24111.6 |
| Italy | 359.5 | 35597.3 |
| Japan | 516.8 | 36449.1 |
| France | 213.5 | 37871.9 |
| Canada | 402.8 | 43247.0 |
| Germany | 463.2 | 44469.4 |
| USA | 300.8 | 53042.0 |

**Table 2: Competitiveness Ratios for Indian Steel Companies**

| Particulars | Nippon (Japan) | POSCO (Korea) | TISCO | SAIL | Severstal (Russia) | BAO (China) |
|---|---|---|---|---|---|---|
| Lb cost / tonne pdn (USD) | 58.2 | 43.1 | 86.5 | 123.9 | 119.9 | 8.6 |
| Material and other cost/tonne steel pdn. | 843.3 | 762.4 | 549.3 | 578.5 | 659.4 | 870.5 |
| Operating Rate (%) | 94 | 99.4 | 73.5 | 80 | 93.3 | 92.5 |
| Value Added per employee (000 USD) | 326.4 | 419.2 | 91.3 | 30 | 77.4 | 97.8 |

According to RBI, steel, power, and other infrastructure related firms had a share of 27.8 percent in the total advances from banks as of second quarter of 2015-16, their share of non-performing assets was a whopping figure of 56.1 percent, indicating higher risk profile for the sector. The banks have been working on the debt restructuring with steel companies to salvage whatever value of their principal component they can recover before liquidation. As an added Chinese blow, steel imports to India surged to 10 MT with 3.6 MT coming from China during the period.

I. Analyse the reasons for low competitiveness of Indian Steel firms.

II. How the international firms out competed Indian firms in the domestic and international steel market.

III. What are possible ways through which Indian Steel Companies can improve their performance.

**(4+3+3 =10; CO 3)**