# MANAGEMENT PROGRAMME Term-End Examination

December, 2018

04650

MS-09: MANAGERIAL ECONOMICS

Time: 3 hours

Maximum Marks: 100

Note: There are two Sections; Section A and Section B.

Attempt any three questions from Section A.

Section B is compulsory.

#### **SECTION A**

- 1. What is an "Invisible Hand" as explained by Adam Smith? Discuss what are variables and constants.
- 2. What are the determinants of price elasticity of demand? Also explain the role of price elasticity. Is it helpful in decision making?
- 3. Define production function. Distinguish between economic efficiency and technical efficiency of a firm.

- **4.** What are the various types of statistical analysis used in the estimation of production function?
- 5. Explain three types of price discrimination, namely first degree, second degree and third degree price discrimination.

#### **SECTION B**

**6.** Read the following case and answer the questions given at the end:

The automotive sector is one of the core industries of the Indian economy, whose prospect is reflective of the economic resilience of the country. The automobile industry witnessed a growth of 19.35 percent in April – July 2006 when compared to April - July 2005. As per Davos Report 2006, India is the largest three-wheeler market in the world; 2<sup>nd</sup> largest two-wheeler market; 4th largest tractor market; 5th largest commercial vehicle market and 11<sup>th</sup> largest passenger car market in the world and expected to be the seventh largest by 2016. India is among the few countries that are showing a growth rate of 30 percent in demand for passenger cars. The industry currently accounts for nearly 4% of the GNP and 17% of the indirect tax revenue.

The well-developed Indian automotive industry produces a wide variety of vehicles including passenger cars, light, medium and heavy commercial vehicles, multi-utility vehicles, scooters, motorcycles, mopeds, three-wheelers, tractors, etc. Economic liberalisation over the years has made India one of the prime business destinations for many global automotive players, including international giants like Ford, Toyota, GM and Hyundai who have made their presence with a mark.

As per another report, every commercial vehicle manufactured, creates 13.31 jobs, while every passenger car creates 5.31 jobs and every two-wheeler creates 0.49 jobs in the country. Besides, the automobile industry has an output multiplier of 2.24, i.e., for every additional rupee of output in the auto industry, the overall output of the Indian economy increases by  $\geq 2.24$ .

MS-09 4

The Indian automotive sector has a presence across all vehicle segments and key components. In terms of volume, two-wheelers dominate the sector with nearly 80 percent share, followed by passenger vehicles with 13 percent. At present, there are 12 manufacturers of passenger cars, 5 manufacturers of multi utility vehicles (MUVs), 9 manufacturers of commercial vehicles (CVs), 12 of two-wheelers and 4 of three-wheelers, besides 5 manufacturers of engines.

## Table 1 Vehicle Segment-wise Market Share

Item	Percent Share
Commercial Vehicles	3.94
Passenger Vehicles	12.83
Two-Wheelers	79·19
Three-Wheelers	4.04
Total	100.00

Source: Report of Society of Indian Automobile Manufacturers (SIAM).

MS-09

Although the automotive industry in India is nearly six decades old, until 1982, there were only three manufacturers — M/s. Hindustan Motors, M/s. Premier Automobiles and M/s. Standard Motors in the motorcar sector. In 1982, Maruti Udyog Ltd (MUL) came up as a government initiative in collaboration with Suzuki of Japan to establish volume production of contemporary models.

Maruti Udyog Limited (MUL) has become Suzuki Motor Corporation's R&D hub for Asia outside Japan. Maruti introduced upgraded versions of the Esteem, Maruti 800 and Omni, completely designed and styled inhouse, This followed the upgradation of WagonR and Zen models, done inhouse only a year before. Maruti engineers also worked with their counterparts in Suzuki Motor Corporation (SMC) in the design and development of its new model, Swift.

6

MS-09

The company launched superior Bharat Stage III versions of most of its models, well before the Government deadline. Maruti also set up a Centre for Excellence with a corpus of ₹ 100 million. This was done in collaboration with suppliers, who contributed an additional ₹ 50 million. The Centre provides consultancy and training support to Maruti's Suppliers and Sales Network to enable them to achieve standards in Quality, Cost, Service and Technology Orientation.

Maruti has embarked upon this new project in collaboration with SMC for the manufacture of diesel engines, petrol engines and transmission assemblies for four-wheeled vehicles. The project is being implemented in the existing Joint Venture Company viz. Suzuki Metal India Limited (renamed Suzuki Powertrain India Limited).

P.T.O.

### Questions:

- (a) Identify the most important factors of production in the case of automobile industry. Also attempt to explain the relative significance of each of these factors.
- (b) What more information would you like to obtain in order to draw a production function for Maruti Udyog? Explain.
- (c) The automobile industry is a good example of capital augmenting technical progress. Discuss.
- (d) Discuss the vehicle segment-wise market share of the automobile industry. Explain why two-wheelers occupy the maximum market share.