SUGGESTED SOLUTIONS

KE5 – Commercial Insight for Management

March 2015

SECTION 1

Answer 01

1(a)

1.1

Learning Outcome: 1.2.1
Correct answer: B "**Profit"** is not a value offering made by business organizations, **in serving their customers.**

1.2

Learning Outcome: 2.9.1
Correct answer: D Accounting Profit = (Sales Revenue) – (Explicit Costs of the Business, i.e. Material costs, Labour costs, Depreciation etc.) = (70,000) – (50,000+2,000) = Rs. 18,000 Economic Profit = (Sales Revenue) – (Explicit Costs + Implicit Costs, i.e. Opportunity cost of factors of production) = (70,000) - (52,000 + 10,000) = Rs. 8,000

1.3

Learning Outcome: 3.4.1.
Correct answer: B Acting rationally means that the consumer attempts to **maximise his total utility attainable with his limited income.**

1.4

Learning Outcome: 3.11.1
Correct answer: D **Oligopoly is a market structure where a few** large suppliers dominate the market and there is a behavioral relationship between them. Accordingly, one of the key features of oligopoly is that each firm's production decisions are interdependent. One firm cannot decide its output level and price of his product without considering how its rivals' response will affect its own profit.

1.5

Learning Outcome: 4.3.1.
Correct answer: A Injections means introduction of income into the flow. Injections increase the flow of income. Injections can take the forms of (a) investment,(b)government spending and (c) exports.

1.6

Learning Outcome: 4.5.2
Correct answer: D. Under the Fixed Exchange Rate System, country's exchange rate is tied up with another country's currency by the Central Bank. Therefore, as it is not subject to change due to market forces, exchange rate uncertainties are eliminated.

1.7

Learning Outcome: 4.6.1.
Correct answer: B The introduction of new money into the money supply by a central bank is an unconventional monetary policy in which a central bank purchases government securities or other securities from the market in order to lower interest rates and increase the money supply.

1.8

Learning Outcome: 5.3.1.
Correct answer: A The power or right to give orders and make decisions related with "authority".

1.9

Learning Outcome: 6.7.2.
Correct answer: D LDMR is a concept in economics that if one factor of production (number of workers, for example) is increased while other factors are held constant, the output per unit of the variable factor will eventually diminish. Therefore, it relates to economies to be gained in the short run. However, economies of scale relates to the reduction in the long-run average and marginal costs arising from an increase in size of an operating unit.

1.10

Learning Outcome: 6.11.1
Correct answer: C
The company attempts to produce the ideal product for a single segment of the market is known as concentrated marketing.

[Total marks for 1(a) (MCQs) 2x10= 20 marks]

1(b)

1.11

Learning Outcome : 1.3.1
Money, Men, Material, Method, Machine, Market and Minutes.

1.12

Learning Outcome: 1.4.1
Goal - The intentions behind decision or actions or desired end results. Goals can be either qualitative (aims) or quantitative (objectives). Usually goals are long term, requires time and planning. By their nature, long-term goals are also typically more general, such as more labour intensive to use ecologically sustainable energy sources An example of a long-term business goal; double the business revenue by the end of the year 2016, 10% increase in annual turnover by 31.12.2015.

1.13

Learning Outcome: 2.6.1
The three (3) basic questions an economic system must answer are; a) What to produce, b) How to produce and c) For whom to produce.

1.14

Learning Outcome: 3.2.1
Micro-economics is concerned with the interaction between individual buyers and sellers and the factors that influence the choices made by buyers (consumers) and sellers (Firms). In particular, microeconomics focuses on patterns of supply and demand and the determination of price and output in individual markets, namely in perfect competition, monopoly, monopolistic competition etc. Microeconomics looks at the smaller picture and focuses more on basic theories of supply and demand and how individual businesses decide how much of something to produce and how much to charge for it. It helps to learn the rationale behind the pricing of particular products and services in different market structures and also to understand consumer behavior in such situations.

1.15

Learning Outcome: 3.3.1
Customer need is to have better quality products and services at a lower price. In this regard, strength of customer's position depends on a number of factors. a. How much the customer buys? Higher the volume of purchase, higher the bargaining power. b. How critical the product is to the customer's own business. c. Switching costs of the customer, i.e. cost involved in switching to a new supplier. Lower the switching cost, higher the bargaining power. d. Whether the products are standardized items or specialised. In the case of standardized items, bargaining power is higher. e. When the product quality is important to the customer, the customer is less likely to be price sensitive. f. The skill of the customer's purchasing staff or the price awareness of the customer. g. Customer's ability to bypass the supplier. h. Customer's own profitability. A customer who makes low profits will be compelled to insist to have lower price.

1.16

Learning Outcome: 4.3.2
Nominal GNP is GNP evaluated at current market prices. Therefore, nominal GNP will include all of the changes in market prices that have occurred during the current year due to inflation or deflation. i.e. a Gross National Product (GNP) figure that has not been adjusted for inflation or deflation. Real Gross National Product (real GNP) is a macroeconomic measure of the value of economic output adjusted for price changes (i.e., inflation or deflation). This adjustment transforms the money-value measure, (nominal GNP), into an index for quantity of total output. i.e. a Real Gross National Product (GNP) figure that has been adjusted for inflation or deflation.

1.17

Learning Outcome: 4.7.1
Common money market instruments T-Bills – These are the most liquid money market instrument. They are issued by the Central Bank on behalf of the government. Most common maturities are 90 days, 180 days and 360 days. Certificates of Deposit – Short term debt instrument offered by banks. They offer better returns than T-Bills due the fact that there is a slight degree of credit risk. Commercial Paper - an unsecured, short-term loan issued by a corporation, typically for financing accounts receivable and inventories. It is usually issued at a discount, reflecting current market interest rates. Maturities on commercial paper are usually no longer than nine months.

1.18

Learning Outcome: 6.1.1.
If workers can concentrate on one small aspect of production, this increases overall efficiency – so long as there is sufficient volume and quantity to be produced. This increase in productivity reduces unit costs in the following ways. a) Workers need less training and less time to learn the job as they only have to master in a small number of tasks and not all the tasks. b) Learning effects will be employed as staff members learn and find ways to perform their tasks more quickly. c) Time is not wasted with staff switching between tasks, such as in moving from machine to machine or in putting tools away before selecting different tools.

d) Tasks can be allocated to the staff members with greater aptitude for the task
e) It makes possible the use of mechanization using specialist machinery dedicated to each task.
f) There is no need to move around the factory, the work can be brought to the worker.
g) Workers can concentrate on those jobs which best suit their skills.

When production has very high volumes, division of labour is necessary to get economies of scale.

1.19

Learning Outcome: 6.7.1

In economics, diminishing returns (also called law of diminishing marginal returns) is the decrease in the marginal (incremental) output of a production process, after a particular point, as the amount of a single factor of production is increased gradually, while other factors of production are fixed.

As per information given in the question, as the number of new workers increases gradually one by one, the marginal product of an additional worker increases up to the 3rd worker and thereafter, marginal product of an additional worker continues to decrease.

No. of Workers	Total Product (In Units)	Marginal Product (In Units)
1	10	
2	21	11
3	33	12
4	43	10
5	52	9

1.20

Learning Outcome: 6.8.1

The concept of marketing begins with analyzing the customer needs. The success of a business depends on how well it could satisfy customer needs at a profit. In order to achieve this, the business should be able to provide the right product or service that could satisfy the customer needs at the right place at the right time. In order for this to be done successfully, the business is required to focus on customer needs and develop its marketing strategies accordingly.

[Total marks for 1(b) 3 x10= 30 marks]

SECTION 2

Answer 02

Learning Outcome: (In order to test learning Outcome: 2.3 (i.e. Types of Managers) and 2.4 (i.e. Managerial Roles)

1.

i. Overseeing the operation of the entire organization and review the performance to ensure that whether the Company is achieving its goals and objectives.

ii. Determine and communicate the Company's strategic direction.

iii. Ensure that the Company has timely and accurate accounting and reporting systems.

iv. Developing financial intelligence.

v. Organize the financial human resources that are necessary to achieve the goals of the Company.

vi. Build a sound management culture within the Company.

vii. Helps a transformation succeeded by communicating its significance, modeling the desired changes, building a strong top team and getting personally involved. (3 marks)

2.

Line authority;

The officially sanctioned ability to issue orders to subordinate employees, down the vertical chain of command, within an organization. For example, Production and Sales managers who have been empowered with line authority typically also have the responsibility of achieving their company's business goals with the greatest possible efficiency.

Staff Authority;

The authority / power, one manager or department may have in giving specialist advice, support and service to line departments, over which there is no line authority. Staff authority does not entail the right to make or influence the decisions in the advisee department. For example, staff authority is found in personnel, purchasing and finance. The management accounting function is usually "staff" with responsibilities for providing line managers and also the other staff people with a specialized service, which includes budgeting, controlling, pricing and special decisions.

Therefore, the **line authority** is the right to assign responsibility to people in high position within the organization and **staff authority** is the right to provide advice to all the departments but not be responsible with them for attaining for goals. (4 marks)

3

Managers will have **functional authority** across the Company, and so have the authority to compel other departments to take action, if the matter is within their area. Accordingly, the finance manager requiring financial reports from other departments has the authority to compel such other departments in the Company to take action to furnish such financial reports. (3 marks)

(Total: 10 marks)

Answer 03

Learning Outcome: 4.4

1.

i. Uncertainty about the value of money makes the business planning more difficult and as a result, the business environment wouldn’t be conducive for new investments. Inflation also eats into business profits. Things are technically becoming more expensive, hence people will naturally not be so inclined to purchase goods and services, thus could lead to decreased spending.

ii. Constantly changing (rising) prices impose extra costs. It means that people's spending power will fluctuate. For example, if wage rates don't increase with inflation rates, people's spending power would ultimately be limited, compared to what it was before the change took place.

iii. Inflation redistributes income and wealth. Due to inflation, funds would fluctuate between current assets and current liabilities, as the current lender would be faced with a situation of depreciating values of their lending and the borrower would be benefitted in settling the debts.

iv. Adverse impact to the external stability. In an inflationary situation, imports would become cheaper and as a result, propensity to import would go up resulting Balance of Payment difficulties causing damages to external stability, i.e. deteriorating the exchange rate.

(6 marks)

2.

i. Reducing the government expenditure,
ii. Imposing higher taxation to control the purchasing power etc.
iii. Increasing interest rates to control borrowings.

(4 marks)

(Total: 10 marks)

Answer 04

Learning Outcome: 6.3/6.4/6.5/6.6

1.

(a) **Loading;**

The Production Management Department has to draw the time table for various production activities, specifying when to start and when to finish the process required.

Loading is the amount of work allocated to an operating unit. Planner defines which style to be loaded to the production line and how much quantity to be loaded.

(b) **Sequencing;**

Sequencing means that an arrangement of two or more things in a successive order. Decisions have to be taken when work comes in about the order in which different jobs will be done or different orders fulfilled. The sequencing of operations could be on the basis of any of the following.

Customer Priority; Due Date; Last in First out; FIFO; Longest Operation time first; Shortest Operating time first.

(c) **Scheduling;**

Once the work has been sequenced, it might be necessary to prepare a detailed time table. Scheduling involves fixing the priorities for different jobs and deciding the starting and finishing time (or date) of each job. It also includes the scheduling of different materials, parts, machines, tools, equipment, inspection, etc.

Main purpose of scheduling is to prepare a time-table indicating the time and rate of the production, as indicated by starting and finishing time of each activity. The scheduling can be effective when it utilizes the informational inputs, such as: existing work-load, lead time, manufacturing time, importance of each job, due date, priority rule to handle each part when there is a queue before an operational facility.

For an operation that processes a large number of jobs, there is a risk that, with poor scheduling, bottlenecks will occur in different part of the operation at different times.

(d) **Monitoring and Control;**

Having loaded, sequenced and scheduled the work, management must monitor the operation to make sure that the work is proceeding as planned. If a deviation from the plan is shown, corrective measures may be required, so that the work can be re-scheduled.

As to control, the terms “push control” and “pull control” refer to when control action is taken to manage the flow of work.

With push control, production and inventory levels are forecast and the focus is on pushing work through each stage of the process, regardless of whether the next stage is ready to receive it.

With pull control, the focus is on each stage of the process calling of work to be delivered from the previous process when it is needed. The work is not delivered from the previous process until it is needed. With pull control, there should be less inventory in the system.

(maximum 4 marks)

2.

1. **Technical Economies- Plant Economies of Scale**.

   They are found mostly in plants and arise mostly because neither the capital cost nor the running cost of plants increase in proportion to their size. The main idea is to spread the fixed costs over as large output as possible, so average fixed costs decreases.

2. **Managerial or Administrative Economies**. / **Organizational Economies**

   These economies arise because the decrease in the costs of running the business. Centralization of the functions such as, administration, R&D and marketing may reduce the burden of overheads on individual operating locations. In other words, same people can usually manage with bigger output, so average administrative cost decreases when production increases.

   Another reason for decrease in costs is that more efficient use of management, as the numbers of management and supervisory staff does not increase in the same rate as output. E.g. only one GM, CFO, etc. irrespective of the volume of output or size of the firm.

   Large firms can employ specialists in IT, HR, Finance etc. and their skills can be fully utilized in their specialist areas which lead to the increase in efficiency.

3. **Financial Economies**.

   A major part of running costs of many firms is the interest cost they pay on borrowings capital from banks. Therefore, these economies arise because of the comparatively low costs on interest in getting a loan, compared to smaller firms. This is because large firms have large assets and bank trusts them more. It is also relatively easier for large firms to raise their share-capital by issuing shares.

Another aspect is that, due to technical economies, assets/ turnover ratio for larger firms are much lower than that for smaller firms. Therefore, larger firms need to pay less interest on such assets, relative to their turnover.

4. **Marketing Economies**.

They are available both in purchases of raw material and in selling of the product.

E.g. Buying Economies, i.e. a large firm may have a bulk discount when purchasing raw materials in big quantities; In terms of promotion, advertising, distribution etc. costs incurred by large firms are comparatively smaller, because the prices of advertisements are the same for all firms, irrespective of the size.

5. **Social Economies**.

They may be developed into two groups: those which build up the goodwill of the community and so attract customer (sponsorship), and those that develop the loyalty of the firm's employers (New Year Bonuses). External economies of scale arise when there is a growth in the size of the industry and are available for many firms in it.

(4 marks)

3.

Continuous production is a flow production method used to manufacture, produce, or process materials without interruption. Continuous production is called a continuous process or a continuous flow process because the materials, either dries bulk or fluids that are being processed are continuously in motion, undergoing chemical reactions or subject to mechanical or heat treatment. Continuous processing is contrasted with batch production.

Continuous usually means operating 24 hours per day, seven days per week with infrequent maintenance shutdowns, such as semi-annual or annual. Some chemical plants can operate for more than one or two years without a shutdown. Blast furnaces can run four to ten years without stopping. Production workers in continuous production commonly work in rotating shifts.

Processes are operated continuously for practical as well as economic reasons. Most of these industries are very capital intensive and the management is therefore very concerned about losses in operating time.

E.g. Manufacture of soap; paint; textile; paper; food; etc.

Advantages;

There are several advantages of the continuous production of products over production in batches in terms of production volume, cost, energy, and quality.

High volume production is possible in a shorter amount of time due to ongoing production and eliminating unnecessary start-up and shutdown steps. Lower unit cost and energy savings can be achieved through automation and reduction of unnecessary labor.

Better quality control can also be maintained as there are fewer opportunities for the process to be changed or for human error to impact production.

Continuous production is a method used to maximize the amount of product that is made in a given amount of time and production space. Production generally takes place 24 hours a day, year-round without interruption. With the exception of an unusual outage, equipment is in use at all times and output from the production flow is similarly ongoing.

The most obvious advantage of continuous production is the ability to produce high product output in a short amount of time. This method also avoids wasting time shutting down and restarting equipment on a regular basis that otherwise could be used for production.

(2 marks)

(Total: 10 marks)

Answer 05

Learning Outcome: 5.4

1.
One of the definitions given for "Leadership" is that "the activity of influencing people to strive willingly for group objectives" (Terry). Accordingly, to be an effective leader, someone should have certain qualities, skills and traits of a great leader, to enable to influence people to achieve the set group objectives. Such important qualities include, (a) Creating Direction and Energy; (b) Orientation to Change; (c) Interpersonal Influence; and (d) Securing Willing Commitment to Shared Goals.

2.

The challenging situation to be addressed by the new Health Secretary immediately is the identification of a suitable person for the said post within the given period of two weeks, as it seems be a fairly a very short period given to complete the task. Availability of the proposed Health Program would depend on the completion of the said task within the stipulated time period and the future success of the Health Program in its implementation would mainly depend on the selection of the right person for the job. Therefore, efficient and effective handling of this situation is the critical issue to be resolved by the new Health Secretary.

3.

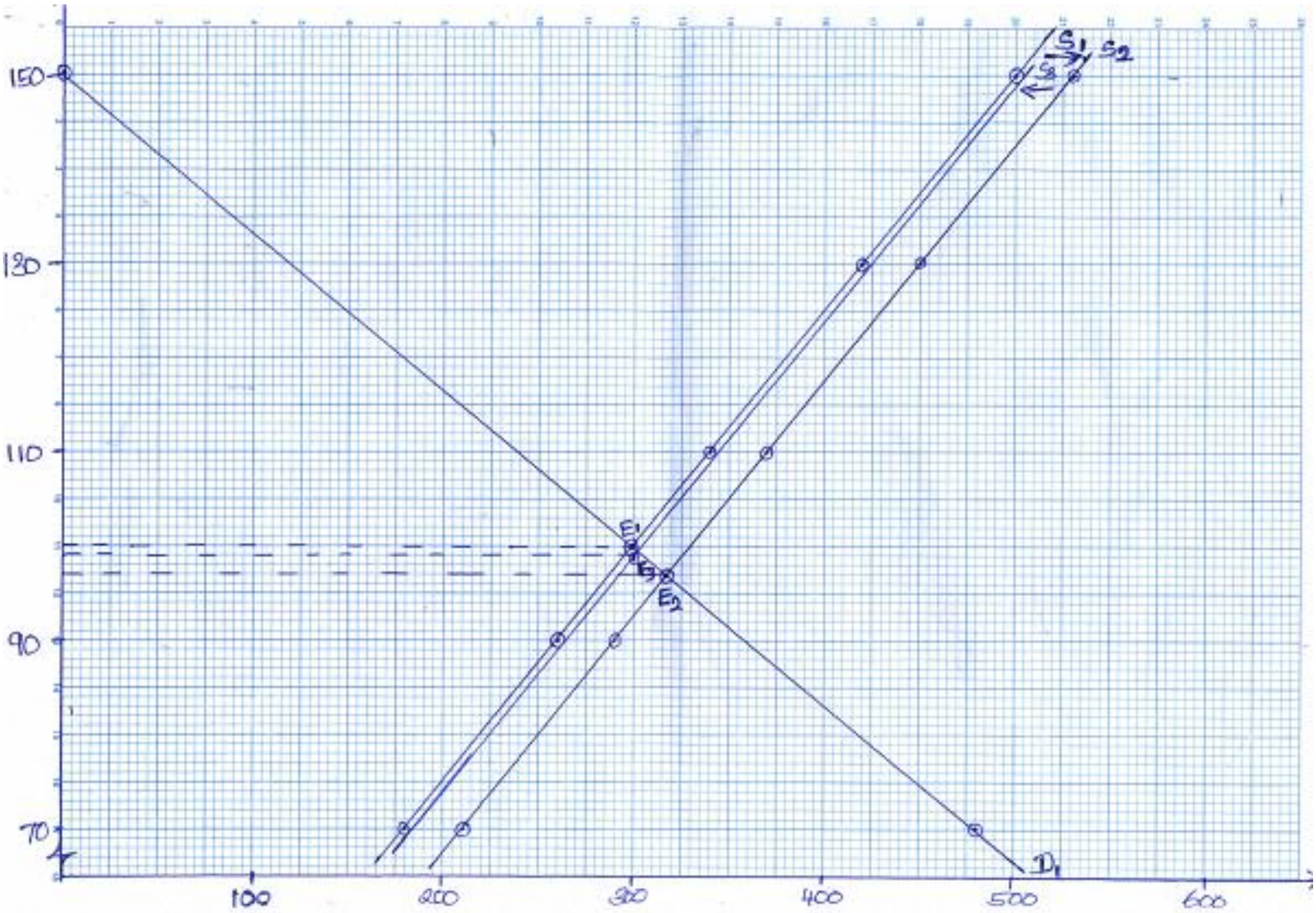
Required leadership skills that would be required in the Program Manager in a broader perspective would include; (a) Creating Direction and Energy for the proposed Health Program; (b) Initiative Power; (c) Foresightedness; (d) Objectivity; (e) Making Judgments; (f) Interpersonal Skills; (g) Entrepreneurial Skills to mobilize resources effectively; (h) Decision-making and Problem solving skills etc.

SECTION 3

Question 06.

Learning Outcome: 3.5/3.6/3.7

1.



Original demand curve D1 and original supply curve S1; using the graph above;
Equilibrium Price = Rs. 100
Equilibrium Supply = 300,000 metric tons

(5 marks)

Alternative answer:

Functional relationships of the Demand Schedule and the Supply Schedule of the question could be presented in the following two equations.

I. Demand Function; Q(d) = 900 + (-6) P
II. Supply Function; Q(s) = -100 + 4P

Based on the formulae:
Equilibrium Price; 900 + (-6) P = -100 + 4P
P = 1,000 / 10P = **Rs. 100**

Equilibrium Supply = 300,000 metric tons
(By substituting the P value to, one of the two equations.)

2.

Consumer Surplus; The point at which Demand Curve intersects the Price axis, is Rs. **150.**

i.e. Q (d) = 900 + (-6) P
6P = 900 - Q(d)
P **= 150 –** 1/6 Q (d)

Rs.150 per Kg., is the maximum price, the consumer is willing to pay when he is going to purchase the first kg. of potatoes under the Demand Curve drawn to depict the Demand Function of Q(d) = 900 + (-6) P

Therefore, the Consumer Surplus, when the Equilibrium Quantity is at 300,000;

= (Rs. **150** – Rs. 100) × (300,000) / 2 = **Rs. 7,500,000**

i.e. the difference between the following;
(summation of the total amounts, the consumers are willing to pay, when they purchase **up to 300,000 m.tons**, under the demand curve drawn to represent the said Demand Function) **minus (**the actual total sum paid for all 300,000 m.tons., at the market equilibrium price of Rs. 100 per kg).

(2 marks)

3.

Price per Kg. Rs.	Total Supply (Original) Mt. (,000)	Total Supply (New) Mt. (,000)
70	180	210
90	260	290
110	340	370
130	420	450
150	500	530

New supply curve is drawn is the above graph as S2

(5 marks)

4.

New Supply function: Q(Supply 2) = -70+4P

New Equilibrium Price: Q(Supply 2) = Q (d);

-70 + 4P = 900 + (-6) P

= Rs. 97

Estimated decrease of the equilibrium price = 100-97 = Rs. 3

(3 marks)

5.

New Equilibrium Price, after tariff = (Original market price – Rs. 1)

= Rs 99

Quantum of tariff imposed per kg. = Rs. 99 – Rs. 97 = **Rs. 2**

i.e. second market equilibrium price determined at **Rs. 97 per m.ton**, due to the sudden increase in the supply of potatoes, has gone up to **Rs. 99 per m.ton**. due to the imposition of tariff at Rs. 2 per m.ton.

(2 marks)

6.

The market structure explained in this scenario could be identified as Perfect Competition or Pure Competition, as the following characteristics of Perfect Competition could be witnessed in it.

1) All firms sell an identical product;
2) All firms are price takers - they cannot control the market price of their product;
3) All firms have a relatively small market share;
4) Buyers have complete information about the product being sold and the prices;

5) The industry is characterized by freedom of entry and exit.

(3 marks)

(Total: 20 marks)

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