

KE 5 - COMMERCIAL INSIGHT FOR MANAGEMENT
Suggested Answers and Marking Grid

SECTION 1

Question 01

1(a)

1.1.

Learning Outcome:
2.7.1 Discuss the concept of opportunity cost and scarcity and their relevance to economic choice.

Correct answer: C

Due to the scarcity, it is necessary to sacrifice other best alternatives. But, if a company has to increase its spending on another thing, due to another decision which has already been taken, it is not an example of economic scarcity.

1.2.

Learning Outcome:
2.7.1 Discuss the concept of opportunity cost and scarcity and their relevance to economic choice.

Correct answer: D

The student is being tested on an accurate comprehension of the concept of the Production Possibility Frontier.

1.3.

Learning Outcome:
2.7.1 Discuss the concept of opportunity cost and scarcity and their relevance to economic choice.

Correct answer: D

The student is being tested on a clear and accurate understanding of the concept of scarcity.

1.4.

Learning Outcome:
3.6.1 Explain the concepts of price elasticity of demand and supply, income elasticity, cross price elasticity and advertising elasticity on business decisions.

Correct answer: C

PED measures the percentage change in quantity demand ($\% \Delta Q_d$) of a product with respect to a given percentage change in its price ($\% \Delta P$).

1.5.

Learning Outcome:
6.7.1 Define short run and long run production concepts and related production measurements (total production, average production, marginal production), using graphical means.
6.7.2 Explain the “Law of Diminishing Marginal Returns” and its impact on businesses.

Correct answer: C

If Marginal Product (MP) is less than Average Product (AP), the marginal product curve moves below the average product curve, then the average product curve declines.

1.6.

Learning Outcome:
2.4.1 Identify the key roles played by a manager in an organisation including 10 managerial roles by Mintzberg.

Correct answer: C

The statement contains two errors. There are ten roles; he labeled one group informational, not inter-organisational.

1.7.

Learning Outcome:
6.6.1 Define main production methods (job production, batch production, and flow production).

Correct answer: A

Batch production involves the manufacture of a number of similar items in groups.

1.8.

Learning Outcome:
2.1.1 Define “management” in business organisations, from different perspectives.

Correct answer: B

Doing the right things is known as effectiveness. Doing them in right way is known as efficiency. Management mainly focuses on effectiveness and efficiency of the organisations.

1.9.

Learning Outcome:
1.4.1 Define “vision”, “mission”, “goals” and “objectives” of business organisations.

Correct answer: B

The mission statement of an organisation is mainly used to develop clear objectives and targets.

1.10.

Learning Outcome:
2.5.1 Identify the skills required by managers to perform their roles successfully.

Correct answer: B

The student is being tested on an understanding of the skills required by first level or supervisory managers.

Marking Guide
Each question carries 2 marks.
Total 20 marks.

1(b)

1.11

Learning Outcome
4.4.1 Explain demand-pull/cost-push inflation and identify the cost of inflation on business and the national economy.

It is necessary to mention that the main reason for the demand pull inflation is the increase in money supply at a higher rate than the increase in production of the economy.

Agree with the statement.

Demand pull inflation occurs when total demand for goods and services exceeds total supply. This type of inflation happens when there has been excessive growth in aggregate demand and there is an inflationary gap.

Demand-pull inflation is often monetary in origin - because the authorities allow the money supply to grow faster than the ability of the economy to supply goods and services. The phrase that is often used is that there is "too much money chasing too few goods".

Marking Grid

1 mark for defining the demand pull inflation and 2 marks for explaining the relationship between money supply and demand pull inflation

1.12

Learning Outcome:

3.6.1 Explain the concepts of price elasticity of demand and supply, income elasticity, cross price elasticity and advertising elasticity on business decisions.

It is necessary to highlight that there are two factors affecting to price elasticity of demand. Accordingly, it should be stated that one factor changes from point to point even if the other factor is constant.

Do not agree with the statement.

The value of the PED depends on two factors.

- Slope of the demand curve
- Price quantity relationship at the point where the measurement is made.

Even if the value of the slope along a downward sloping straight-line demand curve is constant, price quantity relationship is different from point to point. Therefore, the value of PED is also different and it varies from infinity to zero.

Marking Grid

1 mark for highlighting the two factors affecting to price elasticity of demand and 2 marks for explaining that the price quantity relationship varies even if the slope remain unchanged.

1.13

Learning Outcome:

6.5.1 Discuss the concepts of economies of scale and economies of scope in a business.
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Economies of scale for a firm primarily refers to reductions in the average cost (cost per unit) associated with increasing the scale of production for a single product type whereas economies of scope refers to lowering the average cost for a firm in producing two or more products (joint production) than to produce them separately.

Marking Grid

For reasonable explanation of one concept 1.5 marks each.

1.14

Learning Outcome:

4.5.2 Discuss the pros and cons of market versus control exchange rates regimes.
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- Automatic balance of payments adjustment
- No need to hold large reserves of foreign currency with which to adjust the exchange rate by buying and selling its own currency
- No need for international management of exchange rates
- No need for frequent central bank intervention
- No need for elaborate capital flow restrictions

Marking Grid

1 mark each for one point.

1.15

Learning Outcome:

2.7.1. Discuss the concept of opportunity cost and scarcity and their relevance to economic choice.

The question tests a student's understanding or comprehension of the concept of opportunity cost which is a fundamental concept in Economics.

Opportunity cost is the cost or value of the next best alternative that has to be sacrificed or given up in order to get something else. Suppose a manufacturer was

producing two goods A and B. Given the resource constraint, if he wants to produce more of good B in response to an increased market demand for good B, then he has to transfer resources from good A to good B. The opportunity cost of increasing the output of good B is the reduction in the output of good A.

Marking Grid

3 marks

1.16

Learning Outcome:

1.5.1 Explain the role of the accountant in a business (including risk management expert, business generalist / source of business intelligence and compliance and control).
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This is a question to test the students' understanding (comprehension) of the roles that an accountant in a business has to perform.

As a risk management expert, the Accountant has to support the organisation in understanding associated risks in the business such as fraud risk, investment risk, interest rate risk, exchange rate risk etc. and take required actions to ensure that necessary controls are in place to minimise the negative impacts of the same.

Other roles the Accountant plays in an organisation would include Business generalist, source of business intelligence and ensuring compliance with internal controls/ procedures and external regulations.

Marking Grid

3 marks

1.17

Learning Outcome:

2.4.1 Identify the key roles played by a manager in an organisation including 10 managerial roles by Mintzberg.

The question tests a students' ability to remember the roles of managers and correctly categorise them.

The three role categories identified by Henry Mintzberg are informational, interpersonal and decisional.

Informational roles: Monitor; Disseminator; Spokesperson.

Interpersonal roles: Figurehead; Leader; Liaison.

Decisional roles: Entrepreneur; Disturbance handler; Resource allocator;

Negotiator

Marking Grid

3 marks

1.18

Learning Outcome:

2.5.1. Identify the skills required by managers to perform their roles successfully.
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The question tests the student's ability to state the different types of skills which should be possessed by managers (whatever their level in the organisational hierarchy) and then discuss the importance of these skills for different levels of managers.

Managers, at all levels of the organisation, must possess three types of skills viz. technical, interpersonal, and conceptual skills. However, the degree of importance of each skill category would vary from top management to lower management.

Conceptual (or brain) skills are most important for top managers as they must develop an overall view of the organisation and its interface with the external environment, besides their understanding of how the various parts of the organisation relate to each other. In contrast, lower level (or first line) managers have the greatest need for technical skills because they directly supervise the workers. However, all levels of managers must have strong interpersonal or human skills because they have to interact with other employees, clients etc.

Marking Grid

3 marks

1.19

Learning Outcome:

6.14.1 Identify basic of information systems
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- a. Executive Support Systems (ESS)
- b. Decision Support Systems (DSS)
- c. Management Information Systems (MIS)
- d. Knowledge Work Systems (KWS)
- e. Office Automation Systems (OAS)
- f. Transaction Processing Systems (TPS)

Marking Grid

0.5 marks each for one information system.
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1.20

Learning Outcome:

1.2.1 Identify the value offerings made by business organisations, in serving their customers (including goods, services, events, person, experience, place, properties, information, organisation and idea).

Goods, Services, Experience, Events, Persons, Places, Properties, Information, Organisation, and Ideas

Marking Grid

For identifying at least 06 items 0.5 marks each. Total 3 marks.

SECTION 2

Question 02

1.

Learning Outcome:

3.12.1 Explain how businesses determine the optimum output, price and profit in the short and long run in different markets

Introduction

According to the given scenario AB (Pvt) Ltd is planning to diversify their business from female beauty care market to men's beauty care market. As per the details given in the case, the men's beauty care market is rapidly growing in the global market. Therefore the market potential for the new product range of the company mainly depends on the impact of the general environment in the given industry. The impact of the general environment to the new business can be explained under four main dimensions;

Political environment

The political environment represents the general political condition of the country. It will be determined by government policies and rules & regulations for controlling the businesses. Accordingly, the AB (Pvt) Ltd should consider the import tax structures and new rules applied to import products. Further political stability will have to be considered in the case of increasing the capital in the share market. Furthermore, rules & regulations for manufacturers of beauty care products should be considered. Finally, the impact of the government policies towards the new business of AB (Pvt) Ltd will also have to be considered before a final decision is taken.

Economic environment

The economic environment represents the general economic condition of the country. It will be determined by economic growth, prevailing interest rates, exchange rates, inflation, per capita income, unemployment and disparity of income distribution etc. Therefore those factors may have a direct influence on the men's beauty care market. According to the current situation of the Sri Lankan economy, per capita income is continuously growing. Economic growth is also higher than other Asian countries. Currently, the inflation is prevailing at a moderate level. Prevailing low interest rates are also favourable for making new investments. Therefore some dimensions of the economic environment will bring a positive influence (e.g. inflation and interest rates etc.) and some dimensions (e.g. exchange rates) will bring a negative impact on the new business.

Socio-cultural environment

The most important environment to the new business is the socio-cultural environment. It directly represents the social and cultural trends of the country. Even today in Sri Lankan markets, most of the males are adapting to feminine characteristics. As a result of that, most young males are purchasing feminine products like beauty cream and face wash etc. Further, the masculine role of males is gradually changing. Therefore, growth of the men's beauty care market is commonly applicable to the Sri Lankan context as well. With aforesaid background, the socio-cultural environment will positively affect the new business.

Technological environment

The technological environment represents the new technological development of the industry. Therefore it will directly affect the manufacturing process of new products. However, the company plans to import the products at the initial stage, technological environment is not much significant in the given business.

Marking Grid

For identifying major dimensions in general environment – 1 mark

For reasonable explanation about influence of political, economic, socio-cultural and technological environment to respective business - 4 marks

2.

Learning Outcome:

4.4.1 Explain demand pull/cost push inflation and identify the cost of inflation on business and the national economy

4.5.1 Explain how exchange rates are determined and how changes in exchange rates affect businesses

Introduction

According to the details given in the scenario, the company has planned to introduce a men's beauty care product range to the domestic market. Further, they expect to import the new product at the initial stage due to lack of production facilities in Sri Lanka. Therefore both inflation and interest rates will have an influence on the business more than other dimensions of the economic environment.

Influence of Inflation

Inflation is a sustained increase in the general level of prices for goods and services. Therefore, general inflation will directly influence the cost of the operations of businesses. Even though products are imported, other operational cost (e.g. cost of transport, energy, office expenses etc.) will increase under high inflationary conditions. Further, inflation will also have an impact on turnover as there will be a

fall in business due to increased prices. However, as the country is currently not experiencing an inflationary situation, no impact would be felt on the new business from that point of view.

Influence of exchange rate

Exchange rates of the currency have a direct impact on the business which is involved in imports or exports. According to the information given, AB (Pvt) Ltd is planning to import men's beauty care products and distribute them in the local market under their own brand names. Currently, especially due to the insufficiency in export growth, there are reasons to believe that the Sri Lankan rupee would be depreciated and such a happening would cause the cost of imported items to increase. Such a situation, in turn, would cause a reduction in the competitiveness of the products relating to the new business at the introductory stage of the product life cycle.

Marking Grid

For reasonable discussion about influences of inflation to the new business in terms of cost, price and consumer behavior – 2.5 marks

For reasonable discussion about influences of exchange rate to the new business in terms of imported cost, price and competitor reactions– 2.5 marks

Question 03

1.

Learning Outcome:
6.12.1 Define Human Resource Management (HRM).

Human resources management is about getting the right employees, in the right place, at the right time, and ensuring that they work effectively.

HRM includes the following steps.

- 1) Conducting job analyses (determining the nature of each employee's job)
- 2) Planning labour needs and recruiting job candidates
- 3) Selecting job candidates
- 4) Orienting and training new employees
- 5) Managing wages and salaries and providing incentives
- 6) Appraising performance
- 7) Training and developing managers
- 8) Building employee commitment

Marking Grid
<ul style="list-style-type: none">• Definition of HRM - 1 mark• Listing steps in the correct sequence - 4 marks

2.

Learning Outcome:
6.12.2 Identify the importance of HRM to a business.

Every manager manages people in the organisation and that is the reason why human competency is important to all managers. If the managers are not competent in HRM, the company might face many issues such as,

- 1) Might hire the wrong person for the job
- 2) Would waste time over unproductive interviews
- 3) Would experience high employee turnover
- 4) Would have its employees not doing their best
- 5) Might commit unfair labour practices
- 6) Might have the company taken to court because of discriminatory practices and actions.

Marking Grid
Importance of HRM to managers. For correct description of HRM and the negative consequences that result from a wrong hiring decision. Award 1 mark per point Total 5 marks.

Question 04

1.

Learning Outcome:

5.2.1 Identify the 'functions of organising' and types of organizational structures

5.2.2 Discuss pros and cons of different organisational structures
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Main issue of the Virtual (Pvt.) Ltd is the incompatibility of the nature of work that has to be carried out within the current organizational structure. As mentioned in the scenario, the nature of the market place is changing to be dynamic and competitive. If to sustain in the heavy competition, minimizing the time taken to deliver the product into the market place and improving the quality of the product is critical. As it is stated in the scenario, decision making process in the Company has slowed down due to the prevailing tall organization structure. It is a fact that a hierarchical structure normally consumes more time for decision making because it requires communicating and getting authorization from each hierarchical level. Therefore the prevailing tall hierarchical structure is a hindrance for the efficient functioning of the organization.

Another related issue to be witnessed in the Company, as it is functioning with a functional structure, is that it does not support the cross functional activities required to be carried out. As mentioned in the scenario, since the authority and the overall responsibility for the tasks to be completed is not assigned to anyone, the identity of the outcomes gets lost in halfway.

Further, from the facts given in the scenario, it is evident that the work should be carried out as it takes place in projects. But with the present organizational structure, Virtual (Pvt.) Ltd is finding it hard to carryout project type of work. Project type of work requires cross functional coordination and cross functional resources sharing. But the current organizational structure does not support to maintain a conducive environment for handling such project works.

Marking Grid

For identifying the main issues relating to the current organizational structure of the Company, in the competitive market place – 2 marks
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For reasonable discussion to elaborate the nature and the impact of those issues – 4 marks (sub total 6 marks)
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2.

Learning Outcome:
5.2.2 Discuss pros and cons of different organisational structures
6.16.1 Identify the basic concepts of change management

To overcome the above issues, a hybrid type of a structure should be suggested. Therefore, most suitable structure is a matrix organizational structure.

When it comes to matrix structure, the organization places the employees based on the function and the product. The matrix structure gives the best of both structures, functional and divisional structures. In this type of organizations, the Company can exercise the team approach to complete its tasks. The teams are formed based on the functions they belong to and product they are involved in.

Justification:

One advantage of the matrix organizational structure in a business is that it can lead to an efficient exchange of information. Departments or Divisions within the organization work closely together and communicate with each other frequently to solve issues, if any. Efficient lines of communication enhance the productivity and allow for quick decision-making. For example, in a matrix structure, individuals from the marketing, finance and product Departments may confer with each other to formulate strategies. The specialized information exchange allows managers to respond quickly to the needs of customers and the organization.

Another advantage is that the matrix structure encourages a democratic leadership style. This style incorporates the input of team members before managers make decisions. The ability to contribute valuable information before decisions are made leads to employee satisfaction and increased motivation. In a matrix structure, each employee brings his expertise to the table. Managers are involved in the day-to-day operations, which allow them to make decisions through the viewpoint of employees.

However it is pertinent to state that changing the current hierarchical structure in to a matrix structure in the current organization is a challenging task. It is because, there would be lot of barriers to overcome, in the process. Some of the possible barriers are: there will be employee resistance to change due to the fear of having to give up some of their authority and losing the power they have at present.

Another issue is that people who had very little contact with each other may now have to work together in projects.

Employees may have doubts about the performance evaluation process of the proposed structure because they have a dual responsibility to the function and to the project.

To overcome the above barriers, one solution is that the roles and responsibilities to be redefined to reduce the problem of role ambiguity and conflicts that may arise. There can be a requirement to renew and recreate job descriptions before starting to work with them, as the set of roles and responsibilities have changed now. The changes are not only required in the written set of roles and responsibilities but also in new and/or changed job titles, competency requirements, employee grades, policy charters, work timings, sitting arrangements etc. Revising the performance management process can be another solution to overcome the barriers identified. The new structure comes with changed Key Performance Indicators and Competency set.

Most important of all is the establishment of a efficient and effective communication plan to help in success of the implementation by reducing the chances of conflicts. Clearly define who is responsible for what, who reports to whom and when etc.

Marking Grid
For reasonable explanation about the solution for the issues identified – 2 Marks.
For making a reasonable discussion on possible barriers for changing current organizational structure– 2 marks (sub total 4 marks)

Question 05

1

Learning Outcome:

6.6.1. Define main production methods (job production, batch production, and flow production).

Batch Production is a mass production method where production will take place according to a pre-defined lot/ batch size. It is a form of production that is applied to a large number of items, all at once. For example, the production of Denim pants in large batches of 1,000 units.

Job Production is one-time production for a specific order. The production will commence only after the order is made and for one specific order only. For example, placing an order with a jeweler to make a specific diamond ring.

Marking Grid

- For making an explanation to enable to recognize the difference between the two methods of production - 2 marks

2

Learning Outcome:

6.6.2 Discuss implications of each production method for the business

I agree with the statement made by the Marketing Manager. In the volatile and complex business environment of today, customers have wide access to information and they enjoy a wide choice due to the availability of substitutes and alternative suppliers. At the same time it is difficult for companies to maintain stocks from many varieties due to space and cash constraints.

In batch production, as the production is made in pre-determined batch sizes, customers would be compelled to buy the full order quantity even though their demand for the particular style is less than the batch size. Under this arrangement, they will have an over stock of inventory.

In lean manufacturing, the orders are made based on the customer demand. At the same time, lean focuses on elimination of waste in the process and completing ~~making~~ the orders faster. This way a firm that follows lean production could cater

to their customer demand with more flexibility, with lower cost and at higher speed.

“Just in Time” ordering and manufacturing takes a prominent place in lean manufacturing which facilitates for manufacturing to orders rather than manufacturing to stock which is necessarily a feature in batch productions.

Another important aspect in lean manufacturing is single piece flow. When a single piece flow is maintained, the through put time of the process would be faster and work in progress between process locations would be minimized. This would also support the firm to minimize their working capital requirements and increase productivity.

Lean concentrates on elimination of waste and focuses on seven types of waste.

- 1) Transport
- 2) Inventory
- 3) Motion
- 4) Waiting
- 5) Over Production
- 6) Over Processing
- 7) Defects/Rework

When these defects are eliminated or reduced from the process it would become more productive and cost would ~~reduce~~ come down to enhance the profitability as well. Hence following the lean manufacturing would be definitely more beneficial than in traditional batch production.

Marking Grid

- For reasonably satisfactory and complete answer – 8 Marks.

SECTION 3

Question 06

1

Learning Outcome:

3.11.1 Explain characteristics of perfect competition, monopolistic competition, monopoly, oligopoly and their impact on businesses

According to the details given in the scenario, the type of XYZ industry is more close to the oligopoly market situation.

Oligopoly is a situation where a few large firms compete against each other and there is an element of interdependence in the decision-making of these firms. Therefore in oligopolies, small numbers of firms are dominating the industry and product differentiation becomes a key strategy due to the existence of price rigidity. Further, due to scale of economies, patents, technology, name recognition or strategic action, there are more barriers to entry into the market. In the given situation, following characteristics are observed.

1. High barriers to entry
2. High competition
3. High interdependence

Accordingly, firm A, B and C will increase the price, it may affect to each other intensively. Therefore given industry is prevailing in oligopoly market structure.

Marking Grid

For recognizing the market as oligopoly market- 1 marks

For giving reasons by stating the characteristic in oligopoly market situation for the justification of the said conclusion - 2 marks. (sub total 3 Marks)

Learning Outcome:

3.9.1 Discuss the five forces model in industry analysis
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The five forces model identifies and analyzes five (5) competitive forces that shape every industry, and helps to determine an industry's weaknesses and strengths.

Those are;

- 1) Competition in the industry
- 2) Threat of new entrants
- 3) Bargaining power of suppliers
- 4) Bargaining power of customers
- 5) Threat of substitute products

Competition in the industry

According to the given scenario, the firm A is offering product with only the primary package and advertising it through print media. However they are in the process of making value additions by introducing new packaging. However the given details implied that direct competition of the industry is very intensive. Specially three firms are aggressively promoting their products by the advertising and making product differentiations.

Threat of new entrants

As market is close to the oligopoly market situation, threat of new entrants is low. However, a new firm, firm D, is planning to enter into the market in 2015. Therefore, if it would take place, it reduces the competitive position of the firm A would come down.

Bargaining power of customers

The bargaining power of customers is relatively low. It is because of the fact that few firms are dominating the industry and the price elasticity of demand for the products of few firms depicts inelastic demand for those products.

Bargaining power of suppliers

Due to the fact that all firms purchase raw materials from one supplier in India and the supplier is a powerful company, firm A cannot control or influence the raw material supplier. Therefore, bargaining power of supplier is fairly very high.

Threat of substitute products

Finally it is to be observed that there are no perfect substitutes for the products in the domestic market. Therefore threats of substitute products are also relatively low.

Marking Grid

- For introducing market forces of five forces model- 2 mark
- For reasonable discussion about each competitive force relevant to given scenario- 1 mark for each market force - 5 marks. (sub total 7 Marks)

3

Learning Outcome:

3.6.1 Explain the concepts of price elasticity of demand and supply, income elasticity, cross price elasticity and advertising elasticity on business decisions.

3.6.2 Compute the different types of elasticities.

Based on the Economic theories, price increment can be justified through calculating price elasticity of demand for the relevant products.

With the given details, price elasticity could be calculated for the given three price increments of the three firms by considering the percentage change in the quantity demanded to the percentage change in the price to take place. Finally it could be evaluated the impact of the change of price to the total revenue, in order to make the final decision as to the price increments proposed to be effected.

Even though the price elasticity has two types, namely, point elasticity and arc elasticity, arc elasticity has been chosen to justify the answer.

Based on the given details, arc price elasticity can be calculated as follows.

Firm	Arc Price Elasticity	Answer
A	$((-20/50)*((50+100)/2)/(380/2))$	= 0.16 inelastic
B	$(-25/60) * ((50+110)/2)/(150+125)/2))$	= 0.24 inelastic
C	$(-80/70) * ((50+120)/2)/((100/20)/2))$	=1.61 elastic

According to the price elasticity given in the table, it is to be observed that the demand for products A and B are inelastic. Therefore, the products A and B would respond to the quantity of demand at a less rate than the increase made in their prices. Therefore when price is increased for those two products, total revenue of each product would also increase. The reason behind the inelastic demand is to be considered as customer loyalty towards those two products due to perceived quality and uniqueness.

However since product C shows elastic demand for it, situation denotes that when the price of C is increased, quantity demanded will respond at a higher rate, resulting a decrease in the total revenue collected on its sales.

Accordingly, following calculation shows the overall impact on the revenue with the increase of the price of all three products, assuming that the total demand will be acquired by the given firm despite of sharing the market.

A		Total Revenue
P	Q	
50	200	Rs. 10,000/=
100	180	Rs. 18,000/=

B		Total Revenue
P	Q	
50	150	Rs. 7,500/=
110	125	Rs. 13,750/=

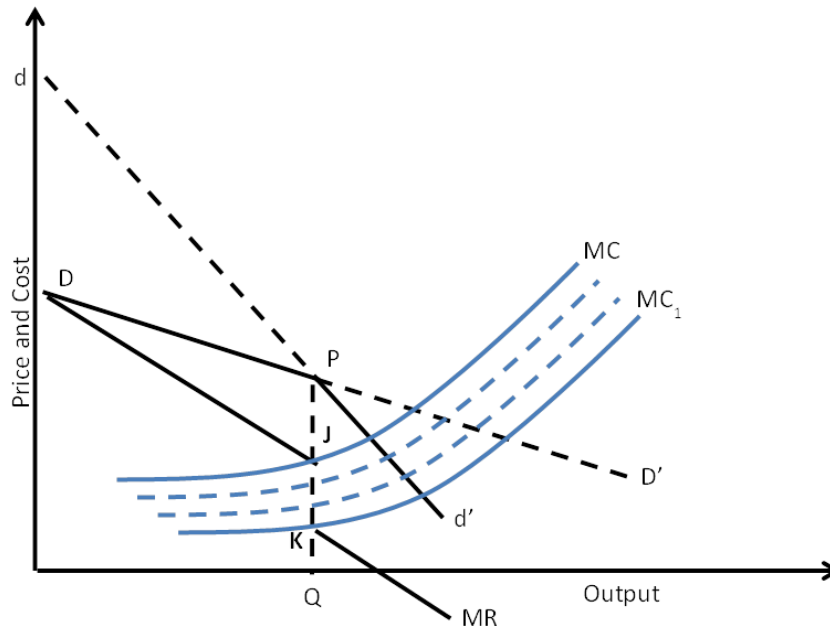
C		Total Revenue
P	Q	
50	100	Rs. 5,000/=
120	20	Rs. 2,400/=

Conclusion: Price increment of the firm A and firm B is profitable whilst price increase of the firm C is not profitable. However, this may not be the reality to be witnessed all the time in a market situation like Oligopoly. It because of the fact that the final outcome to be witnessed by one firm would depend on the reactions made by rival firms to any change of price introduced by one particular firm.

Therefore, it is very appropriate to mention that the impact on a price change will have to be analyzed under three scenarios, depending on the competitor reactions to a price increase or price cut of one firm.

- 1) The rival firms follow the price rise and the price cut.
- 2) The rival firms do not follow the price rise and the price cut.
- 3) Rival firms do not react to price rise and follow the price cut.

Those scenarios can be elaborated through following graph.



Graph 01: Kinked Demand Curve Analysis

dd' = Market demand curve

DD' = Firm demand curve

Dpd' = Kinked demand curve

$DJKQ$ = Marginal Revenue

MC = Marginal Cost

J and K of the MR (dotted line) shows that even though MC is increased up to point J, profit will not be affected. Therefore, whether a price increase or decrease will have an impact on the firm would depend on the responses made to it by rival firms.

When the rival firms follow both the price increase or decrease made by the firm, then the firm will move along **dd'** demand curve. Further when the rival firms do not follow the price change made, the firm will be moving along the **DD'** curve. It means that any price increase of the firm will cause to lose its market share and any price cut will cause to gain a new market share.

If a price increase is not followed, relevant part of the demand curve would be **PD** part of the curve and when a price decrease made by the is not followed by rival firms, **PD'** part of the curve is applied. **PD'** is the situation which any oligopoly firm would prefer to have.

Finally, when the rival firms do not follow any price increase, but will follow only a price cut, **PDD'** curve will be applied. This **PDD'** curve is called as kinked demand curve. Due to the heavy competition, the firm realizes that it would not be not profitable to move beyond point **P**, which is referred to as kinked point of the demand curve. Thus, firms will sell OQ level of output at PQ level of price.

As per the example it would be profitable for the firm to maintain its current level of prices rather than increasing it. Further there is a possibility to have heavy competition as a result of price increase of one firm. Thus, kinked point of the kinked demand curve is the best option that an oligopoly firm can have.

Marking Grid

- For calculation of arc elasticity relevant to three firms- **2 marks**
- For reasonable discussion about possibilities to price increase with calculating total revenue of each firm - **2 marks**
- For identifying possible competitive reactions to the price increments relevant to the given scenario - **1 marks**
- For graphical representation of Kinked Demand Curve Analysis - **2 marks**
- For reasonable explanation about how competitors react to the price increment of one firm in Oligopoly market based on Kinked Demand Curve - **3 marks** (sub total 10 Marks)