

**FINAL EXAMINATION
GROUP - III
(SYLLABUS 2012)**

**SUGGESTED ANSWERS TO QUESTIONS
JUNE - 2017**

Paper-15 : BUSINESS STRATEGY AND STRATEGIC COST MANAGEMENT

Time Allowed : 3 Hours

Full Marks : 100

The figures in the margin on the right side indicate full marks.

**Section – A (20 Marks)
Answer Question No. 1 which is compulsory.**

1. (a) State whether the following statements are True or False. Give reasoning for your answers in each case. No credit will be given for answers without reasoning. If the statement is False, give the correct statement: 1×5=5
- (i) Loss Leader is the leader who is unable to conceptualise and analyse strategic issues.
 - (ii) CPV Analysis is a simple Break-Even Analysis.
 - (iii) Network analysis refers to problems in which observations are collected at regular time intervals and there are correlations among successive observations.
 - (iv) The higher the contribution (sales less variable costs), the higher will be the profit irrespective of the amount of operating fixed costs.
 - (v) The process of change is a continuous journey.

- (b) Match the statement under Column I with the appropriate statement under Column II: 1×5=5

Column I	Column II
(A) Strategic Plan	(i) Entrance value and do not include waste reduction.
(B) Value Drivers	(ii) It refers to the purposes an organisation strives for.
(C) Conglomerate Merger	(iii) A unified, comprehensive and integrated plan.
(D) Strategic Intent	(iv) When a firm in an industry combines with another in an unrelated industry.
(E) Mission	(v) It is the essence or purpose for which a firm stands.

- (c) Define the following terms in just one or two sentences.

- (i) Competitive advantage (CA)
- (ii) Core Competency (CC)
- (iii) Transfer Price (TP)
- (iv) Life Cycle Costing (LCC)
- (v) Net Present Value (NPV)

1×5=5

- (d) In each of the following one of the alternatives is correct. Indicate the correct answer: 1×5=5

- (i) Following are the balanced scorecard perspectives EXCEPT:
 - (A) Financial
 - (B) Time series analysis
 - (C) Customer or Market
 - (D) Internal Business Processes
- (ii) One of the most important features of Strategic Cost Management which differs it from Traditional Cost Management is:

SUGGESTED ANSWER TO QUESTION_SYL2012_JUNE2017_PAPER-15

- (A) Internal Focus
 (B) Cost Impact as Primary Concern
 (C) Reactive Management as Management Responsibility
 (D) Value Chain Perspective
- (iii) Nulook Ltd. uses a JIT system and backflush accounting. It does not use a raw material stock control account. During May, 8000 units were produced and sold. The standard cost per unit is ₹ 100. This includes materials of ₹ 45. During May, ₹ 4,80,000 of conversion costs were incurred.
 The debit balance on Cost of Goods Sold Account for May was:
 (A) ₹ 8,00,000
 (B) ₹ 8,40,000
 (C) ₹ 8,80,000
 (D) ₹ 9,20,000
- (iv) For an Entrepreneur:
 (A) Vision is before the mission
 (B) Mission is before the vision
 (C) Both are developed simultaneously
 (D) Vision or mission is an unimportant issue
- (v) Given the following particulars:
 Sales ₹ 2,00,000
 Fixed cost ₹ 40,000
 Break-even Point ₹ 60,000
 The C/S ratio in respect of the above would be:
 (A) 50.6%
 (B) 60.7%
 (C) 66.7%
 (D) 48.6%

Answer:

1. (a) (i) False
Explanation: In marketing, a loss leader is a type of strategy, where a product is sold at a loss (below cost) to promote sale of other profitable products. It is a kind of Sales Promotion.
- (ii) True
Explanation: Break-Even Analysis is based on Cost-Volume-Profit (CVP) Analysis of a firm.
- (iii) False
Explanation: It is time series analysis that refers to problems in which observations are collected at regular time intervals and there are correlations among successive observations.
- (iv) False
Explanation: Increase in contribution will lead to increase in profit so long on operating fixed costs remain constant.
- (v) True
Explanation: Because change is never static.

(b)

Column I	Column II
(A) Strategic Plan	(iii) A unified, comprehensive and integrated plan.
(B) Value Drivers	(i) Entrance value and do not include waste reduction.
(C) Conglomerate Merger	(iv) When a firm in an industry combines with another in an unrelated industry.
(D) Strategic Intent	(ii) It refers to the purposes an organisation strives for.
(E) Mission	(v) It is the essence or purpose for which a firm stands.

SUGGESTED ANSWER TO QUESTION SYL2012_JUNE2017_PAPER-15

- (c) (i) **Competitive Advantage (CA):** When a firm enjoys advantage in the matter of cost, Product uniqueness or profit compared to its competitors in the market, it is said to be having a Competitive Advantage.
- (ii) **Core Competency (CC):** CC represents unique skill or technology that creates distinct customer value. The unique capabilities are personified in the collective knowledge of employees to produce better results.
- (iii) **Transfer Price (TP):** TP is the price of one segment (sub-unit, department, division etc..) of an organization charges for a Product or service supplied to another segment of the same organization. TPs are used when individual entities of a larger multi-entity firm are treated and measured as separately run entities.
- (iv) **Life Cycle Costing (LCC):** LCC is the accumulation of costs for activities that occurs over the entire life cycle of a product from the very inception to the abandonment by the manufacturer and consumer.
- (v) **Net Present Value (NPV):** NPV is the difference between the present value of aggregate of net cash flows from a product or project and the present value of its capital outlay. It is one of the scientific methods of project evaluation.
- (d) (i) (B)
- (ii) (D)
- (iii) (B) [Cost of Goods Sold = Material Cost + Conversion Cost
= (8,000 units × ₹ 45) + ₹ 4,80,000 = ₹ 8,40,000]
- (iv) (A)
- (v) (C) [BEP = $\frac{FC}{C/S \text{ Ratio}}$ or, C/S Ratio = $\frac{FC}{BEP} = \frac{₹ 40,000}{₹ 60,000}$ or 66.7%

Section – B (80 MARKS)

Answer any five questions from the following. Each Question carries Sixteen Marks. 5×16=80

2. (a) **Business performance management is need creating business strategy in eight steps. Write them with examples.** 8
- (b) **A master strategy of a firm consists of two inseparable parts: Business strategy and Corporate strategy. Differentiate them with examples.** 4+4=8

Answer:

2. (a) Business Performance management is a need creating business strategy and are in eight steps , as listed below:
- (i) **Set a vision statement:** A vision statement is sometimes called a picture of the company in the future but it is so much more than that. The vision statement is the company's inspiration. It is the framework for all the strategic planning of the company. For e.g., the vision of Coal India Ltd., is "To emerge as a global player in the primary energy sector committed to provide energy security to the country by attaining environmentally & socially sustainable growth through best practices from mine to market".
- (ii) **Set a Mission statement:** A mission statement is a statement that defines the essence or purpose of a company. For e.g., the mission statement of Coal India Ltd., is: "To produce and market the planned quantity of coal and coal products efficiently and economically in an eco-friendly manner with due regard to safety, Conservation and quality".
- (iii) **Doing a SWOT analysis:** Strength, Weaknesses, Opportunities and Threats. Examples of Organizational strengths could be huge financial resources. Weakness could be huge debts. Opportunity could be say increasing demand for goods. Threat could be price wars.
- (iv) **Creating a Balanced Scorecard:** This is a methodology for managing a business or organization. Goals or objectives should be related in a hierarchy of strategy map

based on the principles behind the Balanced Scorecard so that their relationship can be understood.

- (v) **Setting Goals/Objectives:** Goals set should be specific, measurable, achievable, relevant and time-based.
- (vi) **Creating a Strategy Map:** This Strategy map should be broken down into sub-topics that all work towards the business' ultimate goals.
- (vii) **Setting key performance Indicators or KPIs:** KPIs are quantifiable measurements, agreed to beforehand, that reflect the critical success factors of an organization.
- (viii) **Creating Dashboards to monitor KPIs:** Dashboards often provide at-a-glance views of KPIs relevant to a particular objective or business process.

(b) A Master Strategy of a firm consists of two inseparable parts:

Business Strategy and Corporate Strategy.

- (i) **Business Strategy:** A Business Strategy is set at the outset with goals or objectives and targets. Progress against the targets set can be routinely measured and communicated. Business strategy is an art of war. It is the skill in managing any affairs of the business in order to succeed. The business environment is always changing. Therefore, it is necessary for an organization to match its resources to the changing environment and to determine what the firm ought to do in future and to know the means of taking advantage of future market opportunities. Once a firm has decided to be active in a particular business area, it must then determine how to compete in that field. For example, gaining 'market share' as one of the sources of competitive advantage is a strategy at the business level.

For many companies, which are dealing in number of product mix, dealing with different types of buyers & different types of market, a single business strategy is inadequate and inappropriate. It needs multiple business strategies at different levels. In order to separate different units, it is necessary to organize them on the basis of operating divisions. These divisions may also be known as profit centres or Strategic Business Units (SBUs). Business level strategy is a comprehensive plan providing objectives for SBUs, allocation of resources among functional areas and co-ordination between them for making contribution to the achievement of the corporate level objectives.

- (ii) **Corporate Strategy:** defines the nature and range of businesses a firm intends to operate, for example, a tobacco company's move from Cigarettes to say beer and then soft drinks are examples of Corporate strategy decisions. Corporate Strategy is the top management plan to direct and run the enterprise as a whole. It represents the pattern of industrial actions and goal underlying the organization's strategic interest in different business, divisions, product lines, customer groups, technologies etc., Corporate Strategy emphasises upon the fact that how one should manage the scope of the various activities and how the resources should be allocated over the different activities.

The highest level of strategic management involves establishing the corporate-level strategies. Corporate -level strategies are concerned with defining how the business will remain sustainable in the long term. They are focused on maximising long term profitability and business growth. Corporate-level strategies allow the firm to focus its organization's investment on areas of business that will help the firm to achieve its long-term goals and objectives.

Corporate strategy is fundamentally concerned with the selection of businesses in which the company should compete and with the development and coordination of that portfolio of businesses.

SUGGESTED ANSWER TO QUESTION_SYL2012_JUNE2017_PAPER-15

A clear understanding of the above two strategies will help a firm to set realistic objectives, develop plans for achieving them and ensure that the business remains sustainable in the long term. The two strategy levels are not completely independent of each other and must be developed and implemented in a coordinated manner.

3. (a) **Change is inevitable, and those organizations who do not keep up with change will become unstable, with long-term survivability in question. As CMA what can you change in your company?** **4+4=8**

- (b) **According to Glueck, possible strategic alternatives at Corporate Level Strategy are Expansion, Stability, Retrenchment and any combination of these three. Explain all four with examples.** **4+4=8**

Answer:

3. (a) As a CMA, I entirely agree with the statement that "Change is inevitable and those organizations, who do not keep up with change will become unstable, with long-term survivability in question".

Further, as a CMA, I would like to induce changes under the following broad areas.

- (i) **Mission, Vision & Strategy:** Organizations should continually ask themselves, "What is our business and what should it be?". Answers to these questions can lead to changes in the Organization's mission (the purpose of its business), its vision for the future (what the organization should look like) and its competitive strategy.
- (ii) **Technology:** Organizations can change their technology (for example the way they produce whatever they sell) in order to increase efficiency and lower costs.
- (iii) **Human-Behavioral Changes:** Training can be provided to managers and employees to provide new knowledge and skills or people can be replaced or downsized. As a result of the recent financial crisis, many Organizations downsized creating massive unemployment that continues to this day.
- (iv) **Task-Job Design:** The way work is performed in the organization can be changed with new procedures and methods for performing work.
- (v) **Organizational Structure:** Organizations can change the way they are structured in order to be more responsive to their external environment. Again to be more responsive to the marketplace, this also includes where decisions should be made in the organization (centralized or decentralized).
- (vi) **Organizational Culture:** Entities can attempt to change their culture, including management and leadership styles, values and beliefs. Of all the things Organizations can change, this is by far the most difficult to undertake.

These are the major elements that Organizations can change. It is important to note that changes in one of these elements will usually have an impact on another element. As an example, changing technology may require changes in the human-behavioral area (new knowledge and skills on how to use the technology).

- (b) According to Glueck, the following are the possible strategic alternatives at the Corporate Level Strategy:
- (i) Expansion
 - (ii) Stability
 - (iii) Retrenchment
 - (iv) Any combination of the above three strategies.

- (i) **Expansion Strategies:** The corporate Strategy of Expansion is followed when an organization aims at high growth by substantially broadening the scope of one or

more of its businesses in terms of their respective customer groups, customer functions and alternative technologies-singly or jointly-in order to improve its overall performance. Expansion strategies are also known as growth or intensification strategies.

Expansion strategies are extremely popular. This strategy is adopted because:

- It may become imperative when the environment demands increase in pace of activity.
- Psychologically, strategists may feel more satisfied with the prospects of growth from expansion. CEOs may take pride in presiding over organizations perceived to be growth-oriented.
- Increasing size may lead to more control over the market vis-a-vis competitors.
- Advantages from the experience curve and scale of operations may accrue.

- ii. **Stability Strategies:** The corporate Strategy of stability is adopted by an organization when it attempts at incremental improvement of its performance by marginally changing one or more of its businesses in terms of their respective customer groups, customer functions and alternative technologies-singly or collectively.

Stability Strategy is adopted because:

- It is less risky, involves less changes and people feel comfortable with things as they are.
- The environment faced is relatively stable.
- Expansion may be perceived as being threatening.
- Consolidation is sought through stabilising after a period of rapid expansion.

- iii. **Retrenchment Strategies:** The corporate Strategy of Retrenchment is followed when an organization aims at contraction of its activities through a substantial reduction or elimination of the scope of one or more of its businesses in terms of their respective customer groups, customer functions and alternative technologies-singly or jointly - in order to improve its overall performance.

Retrenchment Strategy is adopted because:

- The management no longer wishes to remain in business either partly or wholly, due to continuous losses and the organization becoming unviable.
- The environment faced is threatening.
- Stability can be ensured by reallocation of resources from unprofitable to profitable businesses.

- iv. **Combination Strategies:** This strategy is followed when an organization adopts a mixture of Expansion, Stability and Retrenchment strategies, either at the same time in its different businesses or at different times in one of its businesses, with the aim of improving its performance.

Combination Strategy is adopted because:

- The organization is large and faces complex environment.
- The organization is composed of different businesses, each of which lies in a different industry, requiring a different response.

4. (a) **The idea behind Responsibility Accounting is that each manager's performance should be judged by how well he manages those items under his control. In the light of this statement, what would be the basic requirements for a successful Responsibility Accounting in an organisation?** 5

- (b) **Despite many advantages, the strategy of differentiation pursued by some organisations is not altogether free of pitfalls. Elucidate.** 5

SUGGESTED ANSWER TO QUESTION SYL2012_JUNE2017_PAPER-15

- (c) Ace Engineering Ltd. engaged in the manufacture of four products has prepared the following budget for 2017.

	A	B	C	D
Production Units	20,000	5,000	25,000	15,000
Selling price ₹/unit	21.75	36.75	44.25	64.00
Direct Materials ₹/unit	6.00	13.50	10.50	24.00
Direct Wages ₹/Unit	7.50	10.00	18.00	24.00
Variable Overheads ₹/unit	2.25	5.00	6.00	6.50
Fixed Overheads ₹ p.a.	75,000	25,000	2,25,000	1,80,000

When the budget was discussed, it was proposed that the production should be increased by 10,000 units for which capacity existed in 2017.

It was also decided that for the next year, i.e. 2018, the production capacity should be further increased by 25,000 units over and above the increase of 10,000 units envisaged as above for 2017. The additional production capacity of 25,000 units should be used for the manufacture of product 'B' for which new production facilities were to be created at an annual fixed overhead cost of ₹ 35,000. The direct material costs of all the four products were expected to increase by 10% in 2018 while the other costs and selling prices would remain the same. As a Management Accountant of the organization you are required to:

- Find the profit of 2017 on the assumption that the existing capacity of 10,000 units is utilised to maximize the profit.
- Prepare a statement of profit for 2018.
- Assuming that the increase in the output of product 'B' may not fully materialise in the year 2018, find the number of units of product B to be sold in 2018 to earn the same overall profit as in 2017.

6

Answer:

4. (a) Responsibility Accounting is the collection, summarization and reporting of financial information about various decision centres throughout an organization. It can also be called "Profitability Accounting" or "Activity Accounting". It tracks costs, revenues or profits to the individual managers who are responsible for making the decisions about costs, revenues or profits and taking action about them.

"The idea behind Responsibility Accounting is that each manager's performance should be judged by how well he manages those items under his control". In the light of this statement, the following are the basic requirements for a successful Responsibility Accounting in an organization:

- The business must be organised so that responsibility is assignable to individual managers.
- The various managers and their lines of responsibility should be fully defined.
- The organization chart is usually used as a basis for responsibility reporting.
- If clear lines of responsibility cannot be determined, it is very doubtful that responsibility accounting can be implemented effectively.
- While the decision-making power may be delegated for many items, some decisions (related to particular revenues, expenses, costs or actions) may remain exclusively under the control of top management.
- Several items will be directly traceable to a particular manager's area of responsibility but not actually be controllable by that manager.

It may also be added that the controllability criterion is crucial to the context of performance reports for each manager.

- (b) The strategy of differentiation, pursued by some organizations, is not altogether free of pitfalls. Some of the common pitfalls are:

SUGGESTED ANSWER TO QUESTION_SYL2012_JUNE2017_PAPER-15

- Over differentiating, so that price is too high. Perhaps the company is providing a greater level of uniqueness than what the customers are willing to pay for.
- Attempting to charge too high a premium price.
- Ignoring the need to signal value and depending only on intrinsic product attributes to achieve differentiation.
- Not understanding or identifying what buyers consider as value.
- Trying to differentiate on the basis of something that does not lower a buyer's cost, as perceived by a buyer.
- Another pitfall is concerned with counterfeiting. Increasingly, counterfeit goods are a concern for many companies using the differentiated strategy.

(c) (i) Statement showing computation of profit for 2017

	Particulars	A (₹)	B (₹)	C (₹)	D (₹)	Total (₹)
1.	Selling Price	21.75	36.75	44.25	44.00	
2.	Variable Cost [Materials + Wages + Overheads]	15.75	28.50	34.50	54.50	
3.	Contribution	6.00	8.25	9.75	9.50	
4.	No. of units [The additional 10,000 units have been allocated to C, since its contribution per unit is the highest]	20,000	5,000	35,000	15,000	
5.	Total Contribution	1,20,000	41,250	3,41,250	1,42,500	6,45,000
6.	Fixed Costs	75,000	25,000	2,25,000	1,80,000	5,05,000
7.	Profit (Loss)	45,000	16,250	1,16,250	(37,500)	1,40,000

(ii) Statement Showing Computation of Profit for 2018:

Particulars	A	B	c	D	Total (Rs.)
Selling Price	21.75	36.75	44.25	64.00	
Variable Cost [110% of Materials + Wages + Overheads]	16.35	29.85	35.55	56.90	
Contribution	5.40	6.90	8.70	7.10	
Number of units	20,000	30,000	35,000	15,000	
Total Contribution	1,08,000	2,07,000	3,04,500	1,06,500	7,26,000
Fixed Overhead	75,000	60,000	2,25,000	1,80,000	5,40,000
Profit (Loss) (Rs.)	33,000	1,47,000	79,500	(73,500)	1,86,000

(iii) In order to get the profit of 2017, the Contribution to be recovered is as follows:

Particulars	Rs.
Profit for the year 2017	1,40,000
Fixed Cost [Existing (Rs.5,05,000) + Additional (Rs.35,000)]	5,40,000
Adjusted Contribution	6,80,000
Less: Contributions received from products A,C and D [1,08,000 + 3,04,500 + 1,06,500]	5,19,000
Contribution to be recovered from B	1,61,000

To recover a Contribution of ₹ 1,61,000 the output of B = $\frac{1,61,000}{6.90} = 23,333$ units.

5. (a) What are relevant costs? Explain and give some examples.

(b) Explain the term Business Process Re-engineering.4+4+8=16

(d) A Company has just completed the manufacture of 40 units of a new product. The manufacturing costs (₹) are:

SUGGESTED ANSWER TO QUESTION_SYL2012_JUNE2017_PAPER-15

Direct materials	2,00,000
Direct labour: 8000 hours at ₹ 20 per hour	1,60,000
Variable overheads	80,000
Special tools (re-usable)	10,000
Fixed overhead apportioned	1,00,000
Total	₹ 5,50,000

The Company policy is to add a profit of 12% on selling price.

The Company received another order for 120 units of this product for which the company quoted, based on its policy on absorption cost basis, a price of ₹ 15,625 per unit. The customer struck the order to ₹ 11,000 per unit. The company is short of work and so is keen to take up more orders but it is reluctant to accept this order at the quoted price because it is against the policy to accept any price below its cost. The Company experiences a learning curve of 90%.

- (i) Compute the gain or loss arising from acceptance of the order of ₹ 11,000 per unit.
(ii) Advice whether the company should accept this order for 120 units or not. 6+2=8

Answer:

5. (a) For decision-making purpose, it is necessary to classify costs and revenues based on whether they are relevant or irrelevant to the decision. Relevant costs and revenues are those, that are influenced by the decisions. Irrelevant costs and revenue are those that are not affected or influenced by the decisions.

Relevant costs are those expected costs that are essential but differ for alternative courses of action. It is a future cost that would arise as a direct consequence of the decision under review.

CIMA defines relevant costs as 'Costs appropriate to aiding the making of specific management decisions'.

All variable costs are relevant because they vary between alternatives at hand in the future. Fixed costs are irrelevant because they remain constant between alternative courses of action and are going to be incurred anyway, irrespective of facts, whether the production is on or off. But when fixed costs change, the changed portion (incremental) becomes relevant in a decision context.

- (b) Business Process Re-engineering:

BPR is a business process management strategy, originally pioneered in the early 1990s. Focusing on the analysis and design of workflows and process within an organisation. BPR is also known as Business Process Redesign, Business Transformation, or the Business Process Change Management. BPR aimed to help organizations fundamentally rethink how they do their work in order to dramatically improve customer service, cut operational costs, and become world-class competitors. Competition is continuously increasing with respect to price, quality and selection, service and promptness of delivery. Removal of barriers, international cooperation, technological innovations cause competition to intensify. All these changes impose the need for organizational transformation, whether the entire processes, organisation climate and organization structure is changed.

BPR application ways:

- (i) Empowering people: i.e., ability to do their work: the right information, the right tools, the right training, the right environment, and the authority they do.
(ii) Providing information in many different ways.
(iii) Providing right tools - with the right tools, the numerical parts of the plans arrive in a consistent, electronic format permitting consolidation by a computer. This leaves

SUGGESTED ANSWER TO QUESTION_SYL2012_JUNE2017_PAPER-15

the analyst free to do the more productive work of analysing the quality of the plan.

- (iv) Providing efficient training.
- (v) Eliminating unproductive uses of time.
- (vi) By improving data processing eliminate unnecessary papers.
- (vii) Eliminating unnecessary variations in the procedures and systems.
- (viii) Minimising the burden of record keeping. It means more efficient and effective with the six components of data processing like computing, transmitting, storing, retrieving, manipulating, and displaying data.

Characteristics of Re-engineering Process:

- (i) Several jobs are combined into one
- (ii) Often workers make decisions
- (iii) The steps in the process are performed in a logical order
- (iv) Work is performed, where it makes most sense
- (v) Quality is built in.
- (vi) Manager provides a single point of contact
- (vii) Centralized and decentralized operations are combined.

(c) Cost Sheet for order of 120 units:

Particulars	Computation	₹
Direct Material	$\text{₹}2,00,000 \div 40 = \text{₹}5,000 \times 120 \text{ units}$	6,00,000
Direct Labour	$17,920 \text{ hours}^* \times \text{₹}20 \text{ per hour}$	3,58,400
Variable Overheads	$17,920 \text{ hours} \times \text{₹}10 \text{ per hour}$	1,79,200
Special Tools (Re-usable)	Hence, Relevant Cost is Nil	---
Fixed Overheads	Idle Capacity-Not relevant	---
Total Cost		11,37,600
Cost/unit	$\text{₹} 11,37,600 \div 120$	9,480
Price offered		11,000
Hence, Profit per unit		1,520
Total Profit from 120 units		1,82,400

Decision: The Order should be accepted.

Supporting Workings:

1. Computation of selling price of First order for 40 units.

a. Total Costs (As given)	₹5,50,000
b. Number of units	40 units
c. Average cost per unit	₹13,750
d. Since profit is 12% on price, it is 12/88 on cost ($12/88 \times 13,500$)	₹ 1,875
e. Price quoted (cost + Profit)	₹ 15,625

2. Computation of Time required for 120 units

No. of units	Time required per unit	Total time required	Cumulative time
40	$8,000 \text{ hrs} \div 40 \text{ units} = 200 \text{ hours}$	8,000 hrs (given)	8,000 hours
80	$200 \times 90\% = 180 \text{ hours}$	80 units x 180 hours per unit	14,400 hours
160	$180 \times 90\% = 162 \text{ hours}$	160 units x 162 hours per unit	25,920 hours

Time required for 120 units = Cumulative time required for 160 units - Time required for first 40 units. = $25,920 - 8,000 = 17,920 \text{ hours}$.

SUGGESTED ANSWER TO QUESTION SYL2012_JUNE2017_PAPER-15

6. A Company with two manufacturing divisions is organised on profit centre basis. Division A is the only source for the supply of a component that is used in Division B in the manufacture of a product KLIM. One such part is used in each unit of the product KLIM. As the demand for the product is not steady, Division B can obtain orders for increased quantities only by spending more on sales promotion and by reducing the selling prices. The Manager of Division B has accordingly prepared the following forecast of sales quantities and selling prices:

Sales units per day	Average Selling price per unit of KLIM (₹)
1,000	5.25
2,000	3.98
3,000	3.30
4,000	2.78
5,000	2.40
6,000	2.01

The manufacturing cost of KLIM in Division B is ₹ 3,750 for first 1,000 units and ₹750 per 1,000 units in excess of 1,000 units.

Division A incurs a total cost of ₹ 1,500 per day for an output of 1,000 components and the total costs will increase by ₹ 900 per day for every additional 1,000 components manufactured. The Manager of Division A states that the operating results of his Division will be optimised if the transfer price of the component is set at ₹ 1.20 per unit and he has accordingly set the aforesaid transfer price for his supplies of the component to Division A. You are required to:

- Prepare a schedule showing the profitability at each level of output for Division A and Division B.
- Find the profitability of the Company as a whole at the output level when:
 - Division A's net profit is maximum.
 - Division B's net profit is maximum.
- If the Company is not organised on profit centre basis, what level of output will be chosen to yield the maximum profit. 8+4+4=16

Answer:

6. (a) (i) Statement showing profit of division A:

Sale per day (units)	Sale value (₹)	Cost (₹)	Profit/Loss (₹)
1,000	1,200	1,500	(300)
2,000	2,400	2,400	---
3,000	3,600	3,300	300
4,000	4,800	4,200	600
5,000	6,000	5,100	900
6,000	7,200	6,000	1,200

Profit of division B:

No. of units	Sales (₹)	Transfer Price (₹)	Other manufacturing cost (₹)	Total cost (₹)	Profit/(Loss) (₹)
1,000	5,250	1,200	3,750	4,950	300
2,000	7,960	2,400	4,500	6,900	1,060
3,000	9,900	3,600	5,250	8,850	1,050
4,000	11,120	4,800	6,000	10,800	320
5,000	12,000	6,000	6,750	12,750	(750)
6,000	12,060	7,200	7,500	14,700	(2,640)

SUGGESTED ANSWER TO QUESTION SYL2012_JUNE2017_PAPER-15

- (b) (i) Profitability of the company at the output level where Division A's net profit is maximum

	₹
Profit of division A at 6,000 units	1,200
Profit of division B at 6,000 units	(2,640)
Profit/(Loss)	(1,440)

- (ii) Profitability of the Company when Division B's net profit is maximum:

	₹
Profit of Division A at 2,000 units	---
Profit of Division B at 2,000 units	(2,640)
Profit/(Loss)	1,060
	1,060

- (c) Computation of level of output for yielding the maximum profit, when the company is not organized on Profit centre basis:

Units	Division A (₹)	Division B (₹)	Total (₹)
1,000	(300)	300	---
2,000	---	1,060	1,060
3,000	300	1,050	1,350
4,000	600	320	920
5,000	900	(750)	150
6,000	1,200	(2,640)	(1,440)

Best output level is 3,000 units where profit is maximum at ₹ 1,350/-

7. (a) What are the determinants of Actively Based Costing (ABC)? Explain them in brief. 4

- (b) What are Costs of Quality? How can you classify Quality Costs into several useful groups for better management? 4

- (c) ABC Ltd., a machine tool company, repairs and services machine tools. A summary of its estimated costs, analysed by activity, for 2016 is given below:

	(₹)	(₹)
(1) Servicing machine tools:		
Materials	50,000	
Labour	80,000	1,30,000
(2) Material handling costs		20,000
(3) Material procurement and inspecting costs		15,000
(4) Rework costs		20,000
(5) Cost of expediting delayed work		10,000
(6) Break-down maintenance		30,000
(7) Preventive maintenance	Total	20,000
		2,45,000

- (i) Classify the above items of costs into value added and non-value added groups.
 (ii) Assuming that some portion of material handling and material procurement and of preventive maintenance cost is avoidable, how would you reclassify the above items? 4+4=8

Answer:

7. (a) There are generally three factors (determinant) that influence the application of Activity Based Costing (ABC). They are:
 (i) Disproportionate or increasing volume of overhead cost;
 (ii) Product diversity leading to disproportionate consumption of services of service or

SUGGESTED ANSWER TO QUESTION_SYL2012_JUNE2017_PAPER-15

support departments;

- (iii) Volume diversity – that is due to market demand some products are produced in higher volume than others.

- (b) Costs of quality are costs of non-conformance i.e., for having poor quality of product or service. If perfect quality is maintained, then there is no cost.

Costs of quality can be classified into the following groups for better management:

- (i) **Prevention Costs:** are those costs incurred in the process of preventing poor quality from occurring.
- (ii) **Appraisal Costs:** are costs of determining whether defects exist. They include the cost of quality inspections, product testing and performing audits to make sure that quality standards are being met.
- (iii) **Internal failure costs:** are associated with discovering poor product quality before the product reaches the customer site. One type of internal failure cost is rework, which is the cost of correcting the defective item.
- (iv) **External failure costs:** are costs incurred after the delivery of the products (e.g., customer complaints, product liability, replacement arising out of warranty, etc.,)
- (v) **Opportunity costs:** are costs of opportunities foregone (e.g., loss of contribution on lost sales due to defects, poor design, etc.,)

- (c) (i) Statements showing classification of Costs into value-added and non-value added items:

	Category	Item of Cost	Amount (₹)
1.	Value-added	Material and labour (for serving machine tools)	1,30,000
		Material handling costs	20,000
		Material procurement and inspection	15,000
		Preventive maintenance	20,000
		Total	1,85,000
2.	Non-value-added	Re-work Costs	20,000
		Cost of expediting delayed work	10,000
		Break-down maintenance	30,000
		Total of (i) + (ii)	2,45,000

- (ii) Statements showing classification of Costs into value-added and non-value added items:

	Category	Item of Cost	Amount (₹)	Amount (₹)
1.	Value-added	Material and labour		1,30,000
2.	Non-value-added	Re-work Costs	20,000	
		Cost of expediting delayed work	10,000	
		Break-down maintenance	30,000	60,000
3.	Grey (Mixed area)	Material handling	20,000	
		Material procurement etc.	15,000	
		Preventive maintenance	20,000	55,000
				2,45,000

8. (a) What are the pre-requisites for successful Benchmarking? 8

(b) Distinguish between Strategy and Policy. Exemplify a situation when a Policy and a Strategy are identical. 8

SUGGESTED ANSWER TO QUESTION_SYL2012_JUNE2017_PAPER-15

Answer:

8. (a) Pre-requisites for successful Benchmarking:

The following are the Pre-requisites for successful Benchmarking:

- (i) **Commitment:** Senior Management should support benchmarking fully and must be committed to continuous improvements.
- (ii) **Clarity of Objectives:** The objectives should be clearly defined at the preliminary stage. Benchmarking teams have a clear picture of their firm's performance before approaching others for comparisons.
- (iii) **Appropriate Scope:** The scope of the work should be appropriate in the light of the objectives, resources, time available and the experience level of those involved.
- (iv) **Resources:** Sufficient resources must be available to complete projects within the required time scale.
- (v) **Skills:** Benchmarking teams should have appropriate skills and competencies.
- (vi) **Communication:** stakeholders and also staff and their representatives are to be kept informed of the reasons for benchmarking.

(b) Difference between Strategy and Policy:

Strategy: The word 'Strategy' refers to the determination of the purpose or mission and the basic long term objectives of an organisation and the adoption of courses of action and allocation of resources necessary to achieve these aims.

Policy: Policies are general statements or understandings that guide managers' thinking in decision making. They ensure that decisions fall within certain boundaries. They usually do not require action but are intended to guide managers in their commitment to the decision they ultimately make.

The essence of policy is direction. Strategy, on the other hand, concerns the direction in which human and material resources will be applied in order to increase the chance of achieving selected objectives.

The broad differences between Strategy and Policy are as detailed below:

Strategy	Policy
i. Strategy is the determination of the basic long-term goals and objectives of an enterprise and the adoption of the courses of action and the allocation of resources necessary for carrying out these goals.	i. Policy is a general statement of an organization's intention to act in certain ways in specific situation. It represents a general decision establishing a normal pattern of conduct.
ii. It is concerned with the direction in which resources are applied.	ii. It is a guideline to the thinking of final decision.
iii. It is a rule for taking decision.	iii. It is a contingent decision.
iv. Since Strategy requires last minute executive decisions, it cannot be delegated downward.	iv. Since the policy is prescribed for the people so it can be delegated downward in the organization.

Certain major Policies and Strategies may be essentially the same. A policy of developing only through retailers may be an essential element of a Company's strategy for new product development or marketing.

One company may have a policy of growth through the acquisition of other companies. While another may have a policy of growing only by expanding present markets and products. While these are policies, they are also essential elements of major strategies.