22MBAFM303

Third Semester MBA Degree Examination, Dec.2023/Jan.2024 Strategic Cost Management

Max. Marks: 100

Note: 1. Answer any FOUR full questions, choosing ONE full question from each module.

2. M: Marks, L: Bloom's level, C: Course outcomes.

3. Q.No. 8 is compulsory.

SANGATime: 3 hrs.

		M	L	C
Q.1 a.	What are the elements of cost?	3	L1	CO1
b.	Demonstrate the implications of cost management in IT sector.	7	L3	CO3
c.	Vijay industries manufactures a product X. On 1st January 2007, there were 5000 units of finished product in stock. Other stocks on 1st January 2007 were as follows: Work-in-progress Rs.57,400 Raw material Rs.1,16, 200 The information available from cost records for the year ended 31st December 2007 was as follows: Rs. Direct Materials 9,06,900 3,26,400 Freight on raw material purchased Indirect labour 1,21,600 Other factory overhead 3,17,300 Stock of raw material on 31/12/2007 96,400 Work in progress on 31/12/2007 78,207 Sales (1,50,000 units) 30,00,000	10	L4	CO1
	Indirect materials 2,13,900 There are 15,000 units of finished stock in hand on 31 st December 2007. You are require to prepare: A statement of cost and profit assuming that opening stock of finished goods to be valued at the same cost per unit as finished stock at the end of period.	al e		
	No. 1.11 1100	3	L2	CO
Q.2 a.	Match the differences between fixed budget and flexible budget.	3	112	
		_	T 4	00
b.	Explain the uses and limitations of standard costing.	7	L2	СО
	1 of 4			1

			stributions			Commiss	Danautmant	7		
		2		n Department	Ċ	Service I	Department Y	-		
		D: 1	A D = 7000	B		Rs.100		-		2
		Direct wages	Rs.7000			Rs.150				
		Direct materials	Rs.3000	2	Rs.2000					
		Employees (Nos)	400	. 300	300	100	100			
		Electricity (kwh)	8000	6000	600	2000	3000			
		Light points (Nos)	10	15	11	5	5			
		Asset values	Rs.50,000	Rs.30,000	Rs.20,000	Rs.10,00	0 Rs.10,000			
		Area occupied (sq yards)	800	600	600	200	200	8	•	
		The overheads	for 6 month	is were as und	er			-1		
		The overheads	Rs.			Rs.				
		Sales overhead		Depreciation	\$ P	6000				
		Motive power	1500	Repairs and n	naintenance	1200				
		Electric lighting		General over		10,000				5. "
		Labour welfare	9	Rent and taxe		600				
		Apportion the department Y respectively.	expenses of in propor	of department tion to direct	X in the rate wages, to	tio of 4:3 departm	ents A, B, C	of a		
Q.3	a.	What is meant by activity based costing?								CO2
	b.	Explain the principles of transfer pricing. CMRIT LIBRARY BANGALORE - 560 037							L2	CO3
	c.	The product of a manufacturing concern passes through two processes A and B, and then to finished stock. It is ascertained that in each process normally 5% of the total weight is cost and 10% is scrap which from process A and B							L4	CO2
		realizes Rs.80 p	er tonne ar	nd Rs.200 per	tonne respec	tively. Th	e following ar	e		
		the figures relat	ing to both	the processes						
					Proce		cess B			
	2000		als in tones		1,00		70	3		
	0.0	Cost o	f material i	n rupees per to			200			
			in rupees	Cath, Br	28,0		0,000			
		Manuf	acturing ex	penses in rupe			,250	9		
			in tones	4	83		780			
		Prepare process			cost per ton	ne of each	n process. Als	0		

		22	MB	AFN	M303
Q.4	a.	What is CVP analysis?	3	L1	CO2
	b.	Explain cost audit. What are the objectives and advantages of cost audit?	7	L2	CO3
	c.	Finolex Co, uses a standard cost system and manufactures product Z. Standard cost per 1000kg of output is as under:	10	L4	CO2
Q.5	a.	Distinguish between allocation and apportionment of overheads.	3	L1	CO2
7-	b.	Define cost control and cost reduction. Distinguish between the two.	7	L2	CO3
	c.	 G.S Ltd manufactures a single product for which market demand exists for additional quantity. Present sales of Rs.60,000 per month utilizes only 60% capacity of the plant. Marketing manager assures that with the reduction of 10% in the price he would be in a position to increase the sale by about 25% to 30%. The following data are available: I. Selling price → Rs.10 per unit II. Variable cost → Rs.3 per unit III. Semi-variable cost → Rs.6,000 fixed + 50 paise per unit IV. Fixed cost → Rs.20,000 at present level estimated to be Rs.24,000 at 80% output You are required to prepare the following statements: i) The operating profit at 60%, 70% and 80% level at current selling price ii) The operating profit at proposed selling price at the above levels. 	10	L4	COS
		CMRIT LIBRARY	1		604
Q.6	a.	Define margin of safety. Relate marginal costing. How it is different from absorption costing?	7	L1 L2	CO
	b.	You are given the following data:	10	L4	CO3
		Year Sales (Rs.) Profit (Rs.) 2009 1,20,000 9,000 2010 1,40,000 13,000 Assuming that the cost structure and selecting price remain unchanged in two years, find out: i) P/V ratio ii) Break even point iii) Profit when sales are Rs.1,00,000 iv) Sales required to earn profit of Rs.20,000 v) Margin of safety in 2010.			
		3 of 4			

			22N	IBAF	M 3
Q.7	a.	Define variance analysis.	c .	3 L1	C
	b.	Explain the requisites of good report.	7	L2	C
	c.	Explain features and purposa/of balance score card	1	0 L3	C
	C.	Explain features and property of the second	dista	*	
Q.8		CASE STUDY (Compressive)	2	20 L4	C
		Auto parts Ltd. has an annual production of 90,000 units for a	motor		
		component. The components cost structure is as below: Materials → 270 per unit			
		Labour (25% fixed) \rightarrow 180 per unit			<u> </u>
		Expenses: Variable → 90 per unit			v
		Fixed \rightarrow 135 per unit			
		i) The purchase manager has an offer from a supplier who is	willing t	to supp	oly
		component at Rs.5.40. Should the component be purchased and pro- ii) Assume the resources now used for this components manufacture	duction s	topped's	?
		produce another new product for which selling price is 48.	5	3	
		In the latter case the material price will be Rs,200 per unit 90,000 units produced on the same cost basis as above for labour and expenses. Dis	scuss wh	ether it	WC
¥		be advisable to divert the resources to manufacture the new products, component presently being produced would, instead of being produced,	on the fo	ooting t	hat
		market. CMRIT LIBRARY	oo paren	idbed II	0111
		BANGALORE - 560 037 * * * * *			
				·.	
				*	

VTU III Sem. MBA Degree Examination Strategic Cost Management

Q.1(a) What are the elements of cost?

Elements of costs

- 1. Direct Material Cost 2. Direct Wages 3. Direct or Chargeable Expenses 4. Indirect Materials 5. Indirect Labour 6. Indirect Expenses 7. Overheads.
- "A classification has to be made to arrive at the detailed costs of departments, production orders, jobs or other cost units. The total cost of production can be found without such analysis, and in many instances an average unit cost could be obtained but none of the advantages of an analysed cost would be available". Harold. J. Wheldon.
- (b) Implications of cost management in IT Sector

IT Cost Optimization Framework

Defining Organization Vision

Any amount of spending carried out in relation to the Information Technology requirements of the organization needs to be aligned to the organizational vision and long term objectives. Business owners should have a sense of ownership and thereby control the IT costs in an effective manner.

The perspectives of the key stakeholders i.e. CEO, CFO and directors must be taken into consideration when deciding upon the IT consumption within the organization.

The additional visibility through the model needs to determine the appropriate method of cost allocation in relation to the IT cost burden. Thus, the allocation model that is chosen needs to be both flexible and at the same time avoid being too complex in nature. The organization can eitheropt for a simple method of dividing the entire IT cost by the number of hours consumed by each department or a more complex but accurate method of ABC costing could be used for allocation of the costs based upon the associated cost drivers associated with each set of activities.

Documentation of the current state

The next step involves documentation of the current state of the IT department implemented within the organization in order to identify gaps and potential weaknesses identified in relation to the current state for the purpose of identification of the appropriate pain points as well as identification of areas for potential automation

Delineation of target business architecture

Once the current state of the IT architecture has been documented, the next step is developing a target business architecture for the purpose of addressing the gaps and limitations identified and laying down the foundation with regards to the formation of the crux of the IT cost management framework.

(c) Vijay Industries

1(c)	Units	Amount in Rs.
STATEMENT OF COST AND PROFIT		
Opening Stock of Raw material		
Raw material		116200
Direct Material		906900
Direct Labour		326400

Freight on Raw material		55700
less Closing stock of raw material RM		96400
PRIME COST		1308800
Indirect Labour		121600
Other Freight overheads		317300
Work-In-Progress		57400
Less Closing stock of Work in progress		78207
WORKS COST		1726893
Indirect Material		213900
Cost of Output	160000	1940793
ADD: Opening Stock of Finished Goods	5000	60650
Finished Goods	15000	181950
Cost of Goods Sold	150000	1819493
Sales	150000	3000000
Profit		1180507

Q.2(a) Fixed and Flexible Budgets

<u>FIXED BUDGET</u>: A fixed budget is prepared for one level of output and one set of condition. This is a budget in which targets are tightly fixed. It is known as a static budget. It is firm and prepared with the assumption that there will be no change in the budgeted level of motion.

<u>FLEXIBLE BUDGET</u>: This is a dynamic budget. In comparison with a fixed budget, a flexible budget is one "which is designed to change in relation to the level of activity attained."

(b) Uses and Limitations of Standard Costing

Uses of Standard Costing

The following are the important uses of standard costing:

- (1) It guides the management to evaluate the production performance.
- (2) It helps the management in fixing standards.
- (3) Standard costing is useful in formulating production planning and price policies.
- (4) It guides as a measuring rod for determination of variances.
- (5) It facilitates eliminating inefficiencies by taking corrective measures. .

Limitations of Standard Costing

Besides all the benefits derived from this system, it has a number of limitations which are given below:

- (1) Standard costing is expensive and a small concern may not meet the cost.
- (2) Due to lack of technical aspects, it is difficult to establish standards.
- (3) Standard costing cannot be applied in the case of a- concern where non-standardised products are produced.
- (4) Fixing of responsibility is' difficult. Responsibility cannot be fixed in the case ofuncontrollable variances.
- (5) Frequent revision is required while insufficient staff is incapable of operating system

2(c)			
OVERHEAD	\mathbf{D}	ISTI	RIBUTION
SUMARY			
	D 4 0 T 0		1 DD 0 D D

ITEM	BASIS OF APPORT-INMENT	TO- TAL	PRODUCING MENTS	DEPART-	SERVI MENTS		EPART-
			\mathbf{A}	В	C	\mathbf{X}	\mathbf{Y}
Direct wages	Actual	2000				1000	1000
Direct Mate-							
rials	Actual	2500				1500	1000
Stores Over-							
heads	DM	400	120	100	80	60	40
Motive							
Power	KwH	1500	480	360	360	120	180
Lighting	No of points	200	40	60	60	20	20
Labour Wel-							
fare	No of employees	3000	1000	750	750	250	250
Depreciation	Assets value	6000	2500	1500	1000	500	500
Repairs &							
Maint	Assets value	1200	500	300	200	100	100
General							
Overhads	D wages	10000	3500	3000	2500	500	500
Rent & Taxes	Area occupied	600	200	150	150	50	50
Total		27400	8340	6220	5100	4100	3640
Department							
X	4:3:3 given		1640	1230	1230	4100	
Department							
Y	DW 7:6:5		1416	1213	1011		3640
						0	0
Total		27400	11396	8663	7341		

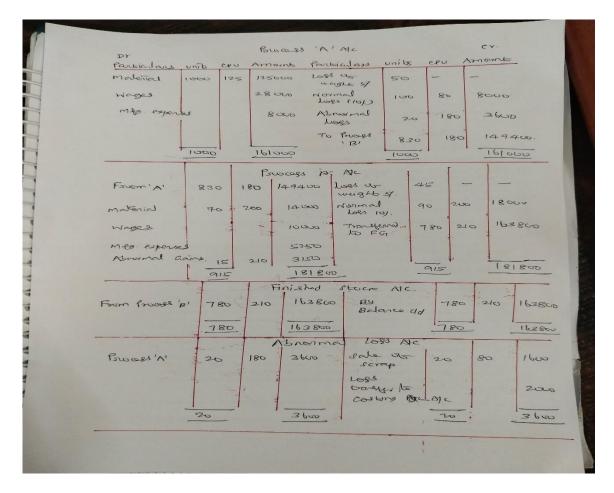
3(a) ABC

A powerful tool for measuring performance, Activity-Based Costing (ABC) is used to identify, describe, assign costs to, and report on agency operations. A more accurate cost management system than traditional cost accounting; ABC identifies opportunities to improve business process effectiveness and efficiency by determining the "true" cost of a product or service. Activity Based Costing is a method for developing cost estimates in which the project is subdivided into discrete, quantifiable activities or a work unit.

(b) Transfer Pricing

Transfer pricing as a concept traditionally began with the amount charged by one segment of an enterprise for a product or service that it supplied to another segment of the same enterprise. With the evolution of MNC concept, segments of the enterprise started spreading as independent entities operating in various parts of the globe. Accordingly, the term has evolved to mean *price which is charged between two or more entities of a MNC [associated enterprises (AEs)] operating in different countries.* Two enterprises are "associated enterprises" if one of the enterprises participates directly or indirectly in the management, control or capital of the other or if both enterprises are under common control. Today, transfer pricing is one of the most important issues

(c) Process Costing



4(a) CVP Analysis

It is a technique that may be used by the management to evaluate how costs and profits are affected by changes in the volume of business activities. Managers are quite often faced with decisive situations involving sales level, sales mix, selling prices and the right combination of these factors that will produce acceptable profits. As a result of change in operating conditions or change in economic environmental factors, the value of and the relationship among these variables also change.

(b) Objectives and Advantages of Cost Audit

Cost audit is an independent examination of cost records and other related information of an entity including a non-profit entity, when such an examination is conducted with a view to expressing an opinion thereon. Cost audit comprises of the followings:

- (a) Verification of the cost accounting records for the accuracy of the cost accounts, cost reports, cost statements and cost data and
- (b) Examination of these records to ensure that they adhere to the cost accounting principles, plans, procedures and objectives. It, therefore, means that the cost auditors' approach should be to ensure that the cost accounting plan is in consonance with the objectives set by the organisation and the system of accounting is geared towards the attainment of these objectives. The cost auditor should also establish the correctness or otherwise of the figures by the processes of vouching verification, reconciliation etc.

The primary purpose of Cost audit is to express an opinion on the cost accounts of the company whether these have been properly maintained and compiled according to the cost accounting system followed by the enterprise or not.

However the purposes of cost audit may be segregated into general and social objectives. The general objectives can be described to include the following:

(1) Verification of cost accounts with a view to ascertaining that these have been properly maintained and compiled according to the cost accounting system followed by the enterprise.

- (2) Ensuring that the prescribed procedures of cost accounting records rules are duly adhered to.
- (3) Detection of errors and fraud.
- (4) Verification of the cost of each "cost unit" and "cost centre" to ensure that these have been properly ascertained.
- (5) Determination of inventory valuation.
- (6) Facilitating the fixation of prices of goods and services.
- (7) Periodical reconciliation between cost accounts and financial accounts.
- (8) Ensuring optimum utilization of human, physical and financial resources of the enterprise.
- (9) Detection and correction of abnormal loss.
- (10) Inculcation of cost consciousness.
- (11) Advising management, on the basis of inter-firm comparison of cost records, as regards the areas where performance calls for improvement.
- (12) Promoting corporate governance through various operational disclosures.

Advantages to Management

- (i)Management gets reliable data for its day-to-day operations like price fixing, control, decisionmaking, etc.
- (ii) A close and continuous check on all wastages will be kept through a proper system of reporting to management.
- (iii) Inefficiencies in the working of the company will be brought to light to facilitate corrective action.
- (iv) Management by exception becomes possible through allocation of responsibilities to individual managers.
- (v) The system of budgetary control and standard costing will be greatly facilitated.
- (vi) A reliable check on the valuation of closing stock and work-in-progress can be established.

(c) Variance

Problem No.4© A B C Normal Loss	Std Qty 800 200 200 200 1000	Rate 2.5 4 1	2000 800 200	160000 40000 40000 40000		Actual Qty 157000 38000 36000 231000	Rate 2.4 4.2 1.1	376800 159600 39600
160000 40000								
MPV	15700 -7600 -3600 4500	F	MCV 160000 400	23200 400 400 24000	F	MMV 184800 46200 46200	69500 32800 10200 112500	
MUV	160000 40000	7500 8000 4000 19500	MCV=M 24000 F	IPV+MVU 24000		MYU 160000 40000 MVU = MM 19500	-62000 -24800 -6200 -93000 19500 (V+MYV 19500	F

5(a) Allocation of overheads Apportionment of overhead

<u>Allocation of overheads</u> – Allocation of overheads is assigning a whole item of cost directly to a cost centre. An item of expense which can be directly related to a cost centre is to be allocated to the cost centre. For example, depreciation of a particular machine should be allocated to a particular cost centre if the machine is directly attached to the cost centre.

<u>Apportionment of overhead</u> - Apportionment of overhead is distribution of overheads to more than one cost centre on some equitable basis. When the indirect costs are common to different cost centres, these are to be apportioned to the cost centres on an equitable basis. For example, the expenditure on general repair and maintenance pertaining to a department can be allocated to that department but has to be apportioned to various machines (Cost Centres) in the department. If the department is involved in the production of a single product, the whole repair & maintenance of the department may be allocated to the product

(b) Cost control and Cost reduction

Cost control is prime function of cost accounting. Under cost control, cost accountant measures actual costs, compare it with the standards and find the deviations. Then redial actions are taken to reduce the variances. It involves various actions taken to keep the cost within budgeted standards and not rising beyond the limit.

Cost Control focuses on decreasing the total cost of production.

Cost reduction is real and permanent reduction in unit cost of goods and services provided by the organization with effecting their quality and efficiency. There are different techniques used for cost reduction which can be budgetary control, standard costing, material control, labour control and overhead control.

Cost reduction focuses on decreasing per unit cost of a product. Cost reduction is a continuous process. It has no visible end.

GS Ltd

5(C) Budget			
Units	6000	7000	8000
Sales	60000	70000	80000
Less VC	18000	21000	24000
Less SV Cost	9000	9500	10000
Contribution	33000	39500	46000
Less FC	20000	20000	24000
Profit	13000	19500	22000

Proposed reduction in selling price and profit at current levels

Units	6000	7000	8000
Sales	54000	63000	72000
Less VC	18000	21000	24000
Less SV Cost	9000	9500	10000
Contribution	27000	32500	38000
Less FC	20000	20000	24000
Profit	7000	12500	14000

6(a) Margin of safety

Margin of safety is the difference between the actual sales and sales at break-even point. Margin of safety is calculated as follows: Margin of safety = Total sales - Break even sales.

(b) Marginal and Absorption Cost:

Marginal cost is the cost of one unit of product or service which would be avoided if that unit were not produced or provided. In other words marginal cost is the amount at any given volume of output by which the aggregate costs are changed if the volume of output is increased or decreased by one unit.

Absorption costing means that all of the manufacturing costs are absorbed by the total units produced. In short, the cost of a finished unit in inventory will include direct materials, direct labour, and both variable and fixed manufacturing overhead. As a result, absorption costing is also referred to as full costing or the full absorption method. Absorption costing is often contrasted with variable costing or direct costing. Under variable or direct costing, the fixed manufacturing overhead costs are not allocated to the products manufactured. Variable costing is often useful for management's decision-making. However, absorption costing is required for external financial reporting and for income tax reporting. It is also referred to as the full- cost technique

(c) Marginal Costing

Marginal Cost	Year PV Ratio	120000 140000 Difference in profit/Diff. in sales*100	8000 13000 25%
Contribution in Less Profit Fixed cost	30000 8000 22000		
(ii) BEP	FC/PV Ratio	88000	
(iii) Profit when sales are Rs. Contribution Less: FC Profit	180000 45000 22000 23000		

(iv) Sales to earn a profit of Rs.20000 FC+Desired profit/PV Ratio 102000

(v) MOS Actual sales-BE Sales 52000

7(a) Variance:

A 'variance' in standard costing refers to the divergence of actual cost from standard cost. Variances of different cost items provide the key to cost control. They indicate whether and to what extent standards set have been achieved. This enables management to correct adverse tendencies. After standard costs have been established, the next step is to ascertain the actual cost under each element and compare them with the standard cost. The difference between these two is termed as cost variance. Cost variance is the difference between a standard cost and the comparable actual cost incurred during a given period.

(b) Requisites of a good report

The concept of the MIS has evolved over a period of time comprising many different facets of the organizational function. MIS is a necessity of all the organizations.

Management Information System is a systematic process of providing relevant information in right time in right format to all levels of users in the organization for effective decision making.

MIS is also defined to be system of collection, processing, retrieving and transmission of data to meet the information requirement of different levels of managers in an organization.

According to CIMA MIS is a set of procedures designed to provide managers at different levels in the organization with information for decision making, and for control of those parts of the business for which they are responsible. MIS is a necessity of all the organizations. The initial concept of MIS was to process data from the organization but presently it is required for the reports at regular intervals. The system was largely capable of handling the data from collection to processing. It was more impersonal, requiring each individual to pick and choose the processed data and use it for his requirements. This concept was further modified when a distinction was made between data and information. The information is a product of an analysis of data. This concept is similar to a raw material and the finished product.

What are needed are information and not a mass of data. However, the data can be analyzed in a number of ways, producing different shades and specifications of the information as a product. The system should present information in such a form and format that it creates an impact on its user, provoking a decision or an investigation. It was later realized then even though such an impact was a welcome modification, some sort of selective approach was necessary in the analysis and reporting.

Feature of MIS

- 1. The MIS is a system which provides information support for decision making in the organization.
- 2. The MIS is an integrated system of man and machine for providing the information to support the operations, the management and the decision making function in the organization.
- 3. The MIS is a system based on the database of the organization evolved for the purpose of providing information to the people in the organization.
- 4. The MIS is a Computer based Information System.

(c) Features and purposes of Balanced Scorecard

The Balanced Scorecard is a framework to implement and manage strategy by linking a vision and mission to strategic priorities, objectives, measures, and initiatives. The Balanced Scorecard provides a view of an organisation's overall performance. It integrates financial measures with other objectives and key performance indicators related to customers, internal business processes, and organisational capacity.

It was originally published by Dr Robert Kaplan and Dr David Norton as a paper1 in 1992 and then formally as a book 'The Balanced Scorecard' in 1996. Both the paper and the book spread the knowledge of the Balanced Scorecard leading to its widespread success.

The Balanced Scorecard is not just a scorecard, it is a methodology that identifies of a small number of financial and non-financial objectives related to strategic priorities. It then looks at measures, setting targets for the measures and finally strategic initiatives (often called projects). It is in this latter stage that the Balanced Scorecard approach differs from other strategic methodologies. It forces an organisation to think about how objectives can be measured first and then what initiatives can be put in place to satisfy the objectives. The rationale is to avoid creating costly initiatives or projects that have no impact on the strategy.

The 'balance' that a Balanced Scorecard achieves is brought about by a focus on financial and non-financial objectives that are attributed to four areas of an organisation and described as Perspectives.

They are: Financial, Customer, Internal Processes and Organisational Capacity.

Questions often arise about the four 'Perspectives' described in the Balanced Scorecard methodology.

Why should we only look at Financial, Customer, Business Process and Organisational Capacity?

Why not include Health and Safety? The answer is, of course, there is nothing stopping us.

The four perspectives are simply a framework. However, over decades of use it has become clear that they work. More importantly, there is a causal relationship between the perspectives. Working from the bottom to the top: Changes in Organisational Capacity will drive changes in Business Processes that will impact Customers and improve Financial results. If a new perspective were added, the causal relationship may not be maintained. The result might be a useful scorecard, but it would not, by definition, be a Balanced Scorecard.

In brief, the four perspectives are:

- 1. Financial The high level financial objectives and financial measures of the organisation that help answer the question How do we look to our shareholders?
- 2. Customer Objectives and measures that are directly related to the organisations customers, focusing on customer satisfaction. To answer the question How do our customers see us?
- 3. Business Process Objectives and measures that determine how well the business is running and whether the products or services conform to what is required by the customers, in other words, what should we be best at?
- 4. Organisational Capacity Objectives and measures concerning how well our people perform, their skills, training, company culture, leadership and knowledge base. This area also includes infrastructure and technology. Organisational Capacity tends to be the area where most investment takes place. It answers the question: How can we improve and create value? The real value of the Perspective approach is that it provides a framework to describe a business strategy. It focuses on objectives and measures that both inform us about progress and allow us to influence activities to achieve the strategy.

The aim of the Balanced Scorecard is to direct, help manage and change in support of the longer-term strategy in order to manage performance. The scorecard reflects what the company and the strategies are all about. It acts as a catalyst for bringing in the 'change' element within the organization.

This tool is a comprehensive framework which considers the following perspectives and tries to get answers to the following questions –

- 1. Financial Perspective How do we look at shareholders?
- 2. Customer Perspective How should we appear to our customers?
- 3. Internal Business Processes Perspective What must we excel at?
- 4. Learning and Growth Perspective Can we continue to improve and create value?

The framework tries to bring a balance and linkage between the –

- a) Financial and the Non-Financial indicators,
- (b) Tangible and the Intangible measures,
- (c) Internal and the External aspects and

(d) Leading and the Lagging indicators

CASE STUDY

Q.8

Auto Parts	
Material	270
Labour expenses	135
Variable expenses	90
Total variable cost when component is produced	495
Suppliers price	540
Excess of purchase price over variable cost	45

(a) Fixed expenses have to be incurred whether the component is made or purchased. Thus, company should make the component itself because, if purchased from outside, it will have to pay Rs.45 per unit more and on 90,000 units@45 will cost Rs.40,50,000.

(b) cost of implications of proposal to divert available production facilities for a new product	
SP of unit	485
Less Variable Cost: Material	200
Labour	135
Expenses	90
Contribution per unit	60
Loss, if present component is purchased	45

If company diverts the resources for the production of a new product, it will benefit by Rs.15 (60-45) On 90,000 units it will save Rs.15 ie., Rs.13,50,000.

Thus, it is advisable to divert the production facilities to new product and the component should be bought from outside. This will result in additional profit of Rs.13,50,000.