

EXAM: SYBMS- SEM IV REGUALR
SUB: STRATEGIC COST MANAGEMENT
EXAM DATE: 4TH MAY 2019
Q.P.CODE: 66170

Q.1.A	1- TRUE	6-TURE		1 MARK EACH
	2-FALSE	7-FALSE		
	3- TRUE	8-FALSE		
	4- FALSE	9-T		
	5-TRUE	10-F		

Q.1.A	1-E	6-C		1 MARK EACH
	2-F	7-D		
	3-A	8-G		
	4-J	9-B		
	5-I	10-H		

Q.2 A **(3 MARKS)**

CONVENTIONAL METHOD

particulars	X	Y	Z
MATERIALS	20	12	25
LABOR	6*0.5= 3	9	6
PROD OH	28*1.5= 42	28	84
TOTAL PROD CPU	65	49	115

MACHINE HOUR OH
X- 750*1.5*28= 31500
Y-1250*1*28= 35000
Z-7000*3*28= 588000

(4 MARKS)

PARTICULARS	SET UP COST	MACHINE COST	MACHINE HANDLING COST	INSPECTION EXP
COST	(654000*35%) 229075	130900(20%)	98175(15%)	196350 (30%)
COST DRIVER	NO.OF SET UP	MACHINE HOUR	NO. OF MOVEMENT	NO.OF INSPECTION
COST DRIVER RATE	229075/670 =341.9	130900/23375= 5.6	98175/120= 818.125	196350/1000= 196.35

CUP under ABC COSTING **(8 MARKS)**

OHS	X	Y	Z
SETUP COST	75*341.9=	115*341.9=	480*341.9=

		25643	39319	164112	
	MACHINE	750*1.5*5.6= 6300	1250*1*5.6= 7000	7000*3*5.6= 117600	
	MACHINE HANDLING	12*818.125= 9818	21*818.125= 17181	87*818.125= 71177	
	INSPENCTIN	150*196.35= 29453	180*196.35= 35343	670*196.35= 131555	
	TOTAL	71214	98843	484444	
	CPU	94.95	79.07	69.21	

Q.2.B

DIVISION MANGO JUICE PURCHASE FROM MANGO PULP

(2 MARKS FOR EACH CASE)

PARTICULARS	MANGO PULP	MANGO JUICE	TOTAL FOR COMPANY
SALE OUTSIDE		800000	800000
SALES TO DIV MANGO JUICE	440000		440000
TOTAL SALES	440000	800000	1240000
LESS: TRANSFER FROM DIV		440000	440000
LESS : VC	380000	300000	680000
LESS : FC	40000	20000	60000
PROFIT	20000	40000	60000

ii)

A) IF MANGO JUICE PURCHASE FROM OPEN MARKET

PARTICULARS	MANGO JUICE
SALES TO OUTSIDE	800000
LESS: VC	300000
LESS: PURCHASE OF COMPONANT	400000
LESS: FC	20000
PROFIT OF DIV MANGO JUICE	80000
LESS:FC OF DIV PULP	(40000)
PROFIT OF THE COMPANY	40000

DIV MANGO JUICE SHOULD PURCHASE FROM DIVISION MANGO PULP SINCE THE PROFIT OF THE COAMPNY IS MAXIMUM

B)

PARTICULARS	MANGO JUICE
SALES TO OUTSIDE	800000
LESS: VC	300000
LESS: PURCHASE OF COMPONANT	400000

LESS: FC	20000
PROFIT OF DIV MANGO JUICE	80000
SAVINGS IN COST FOR DIV PULP	30000
LESS:FC OF DIV PULP	(40000)
PROFIT OF THE COMPANY	70000

DIV MANGO JUICE SHOULD PURCHASE FROM OUTSIDE MARKET

C)

PARTICULARS	MANGO JUICE
SALES TO OUTSIDE	800000
LESS: VC	300000
LESS: PURCHASE OF COMPONENT	370000
LESS: FC	20000
PROFIT OF DIV MANGO JUICE	110000
LESS:FC OF DIV PULP	(40000)
PROFIT OF THE COMPANY	70000

DIV MANGO JUICE SHOULD PURCHASE FROM OUTSIDE MARKET

D) TP IF DIV. MANGO JUICE DECIDES TO BUY FROM DIV MANGO PULP SHOULD BE VC OF DIV. MANGO PULP RS. 190 PER UNIT

Q.2C FACTORS AFFECTING TP-

- | | |
|--|--|
| <ul style="list-style-type: none"> • NATURE OF INDUSTRY • ORG. STRUCTURE • CULTRE PREVAIL • ROLE OF CORPORATE OFFICE • BUYERS OR SELLERS MARKET | <ul style="list-style-type: none"> • CAPACITY UTILISATION • TYPE OF INTEGRATAION THE COMPANY HAS • EXTENT OF NEGOTIATION • TYPE OF MFG PROCESS |
|--|--|

Q.3 A

particulars	CPU	TOTAL FOR 10000 UNITS
SALES	100	1000000
LESS: VC	50	500000
CONTRIBUTION	50	500000
LESS:FC		
SALARY		2,40,000
OFFICE COST		1,60,000

(3 MARKS FOR EACH CASE)

ADV COST		80,000
PROFIT		20000

A) P/V RATION-(CONT/SALES)*100- (500000/1000000)*100= 50%

B) 1) BEP (UNITS)- FC/ CONT CPU- 480000/50- 9600 UNITS

2) BEP (RS.)- FC/P/V= 480000/50%= 960000

3) MOS(RS)= ACUTAL – BEP= 1000000-960000=40000

4) MOS (UNITS)= ACUTAL – BEP= 10000-9600= 400

C) IF 12000 UNITS SOLD

PARTICULARS	RS.
SALES	1200000
LESS:VC	600000
CONTRIBUTIONS	600000
LESS:FC	480000
PROFIT	120000

D) PRICE INCREASE TO 10% AND SALARY 60000

Particulars	CPU	TOTAL FOR 10000 UNITS
SALES	110	1100000
LESS: VC	50	500000
CONTRIBUTION	60	600000
LESS:FC		
SALARY		300000
OFFICE COST		160000
ADV COST		80000
PROFIT		60000

(PV RATIO=600000/1100000=54.54%)

BEP (UNITS)- FC/ CONT CPU- 540000/60- 9000 UNITS

2) BEP (RS.)- FC/P/V= 540000/54.545454%=990000

E)

FOR YEAR 2016

VARIABLE COST= 50

(+) COMMISSION 5

TOTAL VC= 55

SALES (100)- VC(55) = CONTRIBUTION =45

$$PV \text{ RATIO} = C * 100 / SALES = 45 * 100 / 100 = 45\%$$

$$SALES \text{ REQUIRED TO EARN DESIRED PROFIT} - FC + DP / PV \text{ RATIO}$$

$$(480000 + 160000) / 45\% = 14,22,222.22$$

Q.3B

STATEMENT OF CONTRIBUTION

LEVEL SALES	50%	60%	70%	80%	90%	100%
SP CUP	2	1.8	1.6	1.5	1.25	1.2
VC	1	1	1	1	1	1
CONTRIBUTION	1	0.8	0.6	0.5	0.25	0.2
TOTAL CONTRIBUTION	25000	24000	20000	20000	11250	10000

CONTRIBUTION IS MAX AT 50%

STATEMENT OF PROFITABILITY

PARTICULARS	50%	60%	70%	80%	90%	100%
TOTAL CONTRIBUTION	25000	24000	20000	20000	11250	10000
LESS:FC	20000	20000	20000	22000	23000	24000
PROFIT/LOSS	5000	4000	1000	(2000)	(11750)	(14000)

MAX PROFIT AT 50%

(4 MARKS)

(4 MARKS)

Q.3 C

A **learning curve** is a graphical representation of how an increase in learning (measured on the vertical axis) comes from greater experience (the horizontal axis); or how the more someone (or something) performs a task, the better they get at it. In 1936 T. P Wright described the effect of learning on production costs in the aircraft industry

Average is smooth



Q.4.A

1. Sales Value Variance- $(AQ \cdot AR) - (SQ \cdot SR)$

SOUP	$(440 \cdot 36) - (600 \cdot 30) = 2160$ A
OIL	1600 F
CREAM	20320 F

2. Sales Volume Variance- $(AQ - RSQ) \cdot SQ$

SOUP	$(440 - 600) \cdot 30 = 4800$ A
OIL	1600 F
CREAM	25600 F

3. Sales Price Variance- $(AQ - SQ) \cdot AR$

SOUP	$(36 - 30) \cdot 440 = 2640$ F
OIL	0
CREAM	5280

4. Sales Mix Variance- $(AQ - RSQ) \cdot SR$

SOUP	$(440 - 660) \cdot 30 = 6600$ A
OIL	0
CREAM	17600

5. Sales Quantity Variance- $(RSQ - SQ) \cdot SR$

SOUP	$(660 - 600) \cdot 30 = 1800$ F
OIL	1600 F
CREAM	8000 F

REVISED SELLING QUANTITY
 $(\text{SALES QTY} \cdot \text{TOTAL QTY OF AQ}) / \text{TOTAL SDT QTY}$

SOUP	$(600 \cdot 2200) / 2000 = 660$
OIL	440
CREAM	1100

(3 MARKS EACH)

Q.4 B	<table border="1"> <thead> <tr> <th data-bbox="201 197 568 310">Particulars</th> <th data-bbox="568 197 789 310">Budget</th> <th data-bbox="789 197 928 310">Actual</th> <th data-bbox="928 197 1089 310">VARAINCE</th> </tr> </thead> <tbody> <tr> <td data-bbox="201 310 568 348">Sales</td> <td data-bbox="568 310 789 348">200</td> <td data-bbox="789 310 928 348">185</td> <td data-bbox="928 310 1089 348">15A</td> </tr> <tr> <td data-bbox="201 348 568 422">LESS: Material and other variable cost</td> <td data-bbox="568 348 789 422">120</td> <td data-bbox="789 348 928 422">109</td> <td data-bbox="928 348 1089 422">11F</td> </tr> <tr> <td data-bbox="201 422 568 459">Fixed cost</td> <td data-bbox="568 422 789 459">30</td> <td data-bbox="789 422 928 459">30</td> <td data-bbox="928 422 1089 459">0</td> </tr> <tr> <td data-bbox="201 459 568 497">Sales promotion</td> <td data-bbox="568 459 789 497">10</td> <td data-bbox="789 459 928 497">7</td> <td data-bbox="928 459 1089 497">3F</td> </tr> <tr> <td data-bbox="201 497 568 535">Operating profit</td> <td data-bbox="568 497 789 535">40</td> <td data-bbox="789 497 928 535">39</td> <td data-bbox="928 497 1089 535">1A</td> </tr> <tr> <td data-bbox="201 535 568 573">Net working capital</td> <td data-bbox="568 535 789 573">100</td> <td data-bbox="789 535 928 573">103</td> <td data-bbox="928 535 1089 573">3F</td> </tr> <tr> <td data-bbox="201 573 568 611">Fixed assets</td> <td data-bbox="568 573 789 611">40</td> <td data-bbox="789 573 928 611">37</td> <td data-bbox="928 573 1089 611">3A</td> </tr> <tr> <td data-bbox="201 611 568 651"></td> <td data-bbox="568 611 789 651"></td> <td data-bbox="789 611 928 651"></td> <td data-bbox="928 611 1089 651"></td> </tr> <tr> <td data-bbox="201 651 568 764">PROFITABILITY RATIO=(PROFIT/SALES)*100</td> <td data-bbox="568 651 789 764">40*100/200=20%</td> <td data-bbox="789 651 928 764">21%</td> <td data-bbox="928 651 1089 764"></td> </tr> <tr> <td data-bbox="201 764 568 877">RETURN ON INVESTMENT</td> <td data-bbox="568 764 789 877">28.75%</td> <td data-bbox="789 764 928 877">27.85%</td> <td data-bbox="928 764 1089 877"></td> </tr> <tr> <td data-bbox="201 877 568 947">PROFIT/TOTAL ASSET)*100</td> <td data-bbox="568 877 789 947"></td> <td data-bbox="789 877 928 947"></td> <td data-bbox="928 877 1089 947"></td> </tr> </tbody> </table>	Particulars	Budget	Actual	VARAINCE	Sales	200	185	15A	LESS: Material and other variable cost	120	109	11F	Fixed cost	30	30	0	Sales promotion	10	7	3F	Operating profit	40	39	1A	Net working capital	100	103	3F	Fixed assets	40	37	3A					PROFITABILITY RATIO=(PROFIT/SALES)*100	40*100/200=20%	21%		RETURN ON INVESTMENT	28.75%	27.85%		PROFIT/TOTAL ASSET)*100				
Particulars	Budget	Actual	VARAINCE																																															
Sales	200	185	15A																																															
LESS: Material and other variable cost	120	109	11F																																															
Fixed cost	30	30	0																																															
Sales promotion	10	7	3F																																															
Operating profit	40	39	1A																																															
Net working capital	100	103	3F																																															
Fixed assets	40	37	3A																																															
PROFITABILITY RATIO=(PROFIT/SALES)*100	40*100/200=20%	21%																																																
RETURN ON INVESTMENT	28.75%	27.85%																																																
PROFIT/TOTAL ASSET)*100																																																		
Q.5 A	DMAIC Approach-DEFINE-MEASURE- ANALYSE- IMPROVE- CONTROL Write steps																																																	
Q.5 B	Product Life cycle costing- acquisition cost- operating cost- disposal cost— categories of product life cycle cost.- stages of product life cycle- introduction- growth- maturity- saturation- decline																																																	
Q.5 1	Benchmarking- Benchmarking is a process of measuring the performance of a company’s products, services, or processes against those of another business considered to be the best in the industry, aka “best in class.- TYPES-(Competitive, internal, functional, generic)BENEFITS-STEPS																																																	
Q.5 2	Objectives of cost Audit MEANING- Cost Audit represents the verification of cost accounts and check on the adherence to cost accounting plan. Cost Audit ascertain the accuracy of cost accounting records to ensure that they are in conformity with Cost Accounting principles, plans, procedures and objective Prospective Objective- Constructive Objectives Making of accurate periodical financial statements Help in determining prices of finished products Determination accurate cost of jobs Help in planning, operations and stock control Distribution of overhead costs in a rational manner																																																	

Q.5 3	<p>Total Quality Management- meaning- A core definition of total quality management (TQM) describes a management approach to long-term success through customer satisfaction. In a TQM effort, all members of an organization participate in improving processes, products, services, and the culture in which they work.- features- process</p>			
Q.5 4	<p>Advantages and Disadvantages Standard Costing</p> <table border="1" data-bbox="159 422 1240 772"> <tr> <td data-bbox="159 422 699 772"> <p>Advantages</p> <ul style="list-style-type: none"> • Valuable guidance to mgt • Helps to promote labor efficiency • Helps in valuation of closing inventory • Design incentive system for employees • Timely and effective control </td> <td data-bbox="699 422 1240 772"> <p>Disadvantages</p> <ul style="list-style-type: none"> • Controversial materiality limits for variances. • Nonreporting of certain variances. • Low morale for some workers. </td> </tr> </table>	<p>Advantages</p> <ul style="list-style-type: none"> • Valuable guidance to mgt • Helps to promote labor efficiency • Helps in valuation of closing inventory • Design incentive system for employees • Timely and effective control 	<p>Disadvantages</p> <ul style="list-style-type: none"> • Controversial materiality limits for variances. • Nonreporting of certain variances. • Low morale for some workers. 	
<p>Advantages</p> <ul style="list-style-type: none"> • Valuable guidance to mgt • Helps to promote labor efficiency • Helps in valuation of closing inventory • Design incentive system for employees • Timely and effective control 	<p>Disadvantages</p> <ul style="list-style-type: none"> • Controversial materiality limits for variances. • Nonreporting of certain variances. • Low morale for some workers. 			
Q.5 5	<p>Transfer Pricing Methods- market price-cost price- dual price- two step price-prorating overall contribution- negotiated prices</p>			