

## FUNDAMENTALS OF COST AND MANAGEMENT ACCOUNTING - STAGE-2

**Q.2 (a)** The three phases of cost accounting are: cost determination and measurement; cost planning and control through budgets and standards; and cost analysis for decision making. Marks  
3

**(b)** Four control accounts concerned primarily with cost determination are: materials, factory overhead control, work-in-process and finished goods. 2

	Rs.	
Total manufacturing cost	1,225,625	2
Work-in-process inventory, April 1	86,500	
	1,312,125	
Work-in-process inventory, April 30	97,125	
Cost of goods manufactured	1,215,000	2
Finished goods inventory, April 1	56,500	
	1,271,500	
Finished goods inventory, April 30	47,000	
Cost of goods sold	1,224,500	2

Computation:

MATERIALS			
Inventory April 1	75,000	To production	211,500
Purchases	232,500	Inventory April 30	96,000
	307,500		307,500
WORK-IN-PROCESS			
Inventory	86,500	To finished goods	1,215,000
Materials	211,500	Inventory April 30	97,125
Labour (Dept.A)	238,875		
(Dept.B)	414,750		
Overhead (Dept.A)	153,125		
(Dept.B)	207,375		
	1,312,125		1,312,125
FINISHED GOODS			
Inventory April 1	56,500	Inventory April 30	47,000
From work-in-process	1,215,000	Cost of goods sold	1,224,500
	1,271,500		1,271,500

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<b>Q.3 (a)</b>	(i)	FIFO	(ii)	FIFO	Marks                7
	(iii)	FIFO	(iv)	LIFO	
	(v)	FIFO	(vi)	LIFO	
	(vii)	LIFO	(viii)	LIFO	
	(ix)	LIFO	(x)	FIFO	
	(xi)	LIFO	(xi)	LIFO	
	(xiii)	FIFO	(xiv)	FIFO	

<b>(b)</b>	(i) Order point	$400 + (100 \times 7 \text{ days}) = 1100 \text{ units}$	1
	(ii) Average inventory	$400 + \frac{1000}{2} = 900 \text{ units}$	2
	(iii) Normal maximum inventory	$400 + 1000 = 1400 \text{ units}$	2
	(iv) Absolute maximum inventory	$1400 + 7 \text{ days } (100 - 80) = 1540 \text{ units}$	2
	(v) Cost of placing one order (CO)	$EOQ = \sqrt{\frac{2 \times RU \times CO}{CU \times CC}}$ $1000 = \sqrt{\frac{2 \times 25,000 \times CO}{Re .1}}$ $1000 = \sqrt{Rs.50,000CO}$ $1,000,000 = Rs.50,000 CO$ $CO = Rs.20$	3

Q. 4 (a)	Employee	A	B	C	D	Total
Hours worked	40.00	46.00	40.00	40.00		
Pieces produced	960.00					
						Rs.
Rate (hourly/ piece)	1.50	35.00	29.00	36.00		
Direct labour	1,440.00		1,160.00			2,600.00
Indirect labour		1,610.00		1,440.00		3,050.00
Overtime premium		105.00				105.00
Gross pay	1,440.00	1,715.00	1,160.00	1,440.00		5,755.00
Income tax (10%)	144.00	171.50	116.00	144.00		575.50
FICA tax (6.5%)	93.60	111.50	75.40	93.60		374.10
Health and hospitalization	28.80	34.30	23.20	28.80		115.10
Net pay	1,173.60	1,397.70	945.40	1,173.60		4,690.30
Advance of Rs.100 to balance	100.00					100.00
	1,073.60	1,397.70	945.40	1,173.60		4,590.30
	2	2	2	2	2	2 = 10

## FUNDAMENTALS OF COST AND MANAGEMENT ACCOUNTING - STAGE-2

(b)

Marks

	Production Departments					Service Departments			
	Total	Grinding	Forming	Machining	Finishing	Building Service	Health and Recreation	Repairs and Maintenance	
Actual expenses	300,000	60,000	84,000	24,000	48,000	36,000	30,000	18,000	
Distribution of services department expenses:									
Building service		9,000	4,500	7,500	3,000	(36,000)	6,000	6,000	2
Health and recreation		10,800	7,200	10,800	3,600		(36,000)	3,600	2
Repairs and maintenance		12,000	6,000	7,200	2,400			(27,600)	2
Actual expenses inc. service Deptt. Overhead	300,000	91,800	101,700	49,500	57,000				2
Distribution rates:									1
Building service:		$\frac{36,000}{12000 \text{ sq ft}}$	=	Rs.3.00 per sq. ft.					1
Health and recreation		$\frac{36,000}{100 \text{ employees}}$	=	Rs.360 per employee					1
Repairs and maintenance		$\frac{27,600}{276,000 \text{ investment}}$	=	Re.0.10 per rupee investment					1

Q. 5 (a) (i) Quantity schedule: (Working)

Units received from Department A	20,000
Units transferred to finished goods	15,000
Units still in process	5,000
	20,000

Equivalent production:

	Transferred from Dept. A	Materials	Conversion
Transferred to finished goods	15,000	15,000	15,000
Ending inventory	5,000	5,000	3,000
	20,000	20,000	18,000

$$1 + 2 + 2 = 5$$

(ii) Cost per equivalent unit for conversion costs:

$$\text{Rs. } 18,000 \div 18,000 = \text{Re. } 1.00 \text{ per unit}$$

(b) The Standard Cost Card is as follows:

Standard cost per unit	Rs.	
Direct materials 0.06 Kg at Rs.21 Kg	2.52	1
Direct labour 1.3 hours at Rs.4 hour	10.40	1
= Prime cost	12.92	
+ Variable overheads 1.3 hours at Rs.3.5 hour	9.10	
= Total variable cost	22.02	1

Total cost of 7,000 units:

	Rs.	
Direct materials	17,640	2
Direct labour	72,800	2
Variable overheads	63,700	2
Total Variable cost	154,140	
Fixed cost	56,000	1
Total Cost	210,140	1

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Q. 6 (a)

Marks

	Pipe (Meters)	Unit cost (Rs.)	Amount (Rs.)	
Actual quantity purchased	100,000	15.60 actual	1,560,000	
Actual quantity purchased	<u>100,000</u>	<u>16.00</u> standard	<u>1,600,000</u>	
Materials purchase price variance	100,000	(0.40)	(40,000)	Fav. 2

	Pipe (Meters)	Unit cost (Rs.)	Amount (Rs.)	
Actual quantity used	87,300	16.00 standard	1,396,800	
Standard quantity allowed	<u>86,400</u>	<u>16.00</u> standard	<u>1,382,400</u>	
Materials quantity variance	900	16.00 standard	14,400	unfav. 2

(b)

	Time	Rate (Rs.)	Amount (Rs.)	
Actual hours worked	1,580	69.00 actual	109,020	
Actual hours worked	<u>1,580</u>	<u>67.50</u> standard	<u>106,650</u>	
Labour rate variance	1,580	1.50	2,370	unfav. 2

	Time	Rate (Rs.)	Amount (Rs.)	
Actual hours worked	1,580	67.50 standard	106,650	
Standard hours allowed	<u>1,600</u>	<u>67.50</u> standard	<u>108,000</u>	
Labour efficiency variance	(20)	67.50 standard	(1,350)	fav. 2

(c)

(i)

**DULUX CORPORATION**  
Income statement – Absorption Costing  
For Quarter ended March 31, 2010

	Rs.	Rs.	
Sales		2,200,000	
Cost of goods manufactured:			
Materials	300,000		
Direct labour	300,000		
Factory overhead-variable	600,000		
Factory overhead fixed	<u>480,000</u>		
Cost of goods manufactured:	1,680,000		2
Finished goods inventory (4,000 x Rs.14)	<u>280,000</u>		1
Cost of goods sold		1,400,000	
Gross profit		<u>800,000</u>	1
Marketing and administrative expenses		350,000	
Operating income		<u>450,000</u>	1

(c)  
(ii)

Marks

<b>DULUX CORPORATION</b>		
Income statement – Direct Costing		
For Quarter ended March 31, 2010		
	Rs.	Rs.
Sales		2,200,000
Variable cost of goods manufactured:		
Materials	300,000	
Direct labour	300,000	
Factory overhead-variable	600,000	
Variable cost of goods manufactured	1,200,000	1
Finished goods inventory (4,000 x Rs.10)	200,000	1
Variable cost of goods sold		1,000,000
Contribution margin		1,200,000
Fixed expenses:		
Factory overhead	480,000	
Marketing and administrative expenses	350,000	830,000
Operating income		370,000

**THE END****DISCLAIMER**

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