COST AND FINANCIAL MANAGEMENT

Q1. (a) STEP: 1. Predetermined recovery rate = Rs.60 per hour

Budgeted OH	RS.
Cleaning	270000
Designing costs	450000
Set up costs	300000
Mfg. Operating costs	637500
Shipment costs	81000
Distribution costs	391500
Factory admn. Costs	255000
Total	**2385000**

Budgeted OH
Budget Hrs.

Budgeted Hours
A = 30,000 Hrs. + B 9750 Hrs.

$$= \frac{2385000}{39750}$$

= Rs. 60 per hr

STEP:2. Statement of profit – Absorption costing basis.

	A	B
Units	60,000	15,000
Hrs.	30,000	9750
Sales	37,80,000	20,55,000
Cost : Material 18.75	11,25,000	(45)6,75,000
Wages 10.00	6,00,000	(13)1,95,000
OH @ 60/Hr.	18,00,000	5,85,000
	35,25,000	14,55,000
Profit	**2,55,000**	**6,00,000**

Statement of profit Activity Based cost approach

Revenue	37, 80,000	20, 55,000
Costs: Material	11,25,000	6,75,000
Wages	6,00,000	1,95,000
Cleaning/Ma	1,20,000	1,50,000
Other OH	11,53,953	9,56,047
PROFIT	**7,81,047**	**78,953**

OTHER OH

Particulars	**Rs.**	**Basis**	**Hrs.**		
Designing costs	4,50,000	SQ Ft	30.70	135000	315000
Set up	3,00,000	Set up Hrs.		75000	225000
Mfg. costs	6,37,500	Moulding Hrs.		450000	187500
Shipment costs	81,000	No. of shipment		40500	40500
Dist. cost	391500	Cubic feet	2:1	2,61,000	1,30,500
Fact Adjustment	255000	Direct Hrs.	30:975	192453	57547

SUMMARY:

	A	B
Historical	255000	600000
Activity based	781047	78953

CONCLUSION: A is more profitable than B.

(b).

TA Portfolio 10 TT 200 / 20 = 10 Hrs.
Halsey: 8 x 30 + ½ x 2 x 10 = 250
Rowan: 8 x 30 + 2/10 x 8 x 30 = 288

Q.2. (A)

DM = (12, 00,000 / 10,000) x 14,400 x 0.94 = 16, 24,320
DL = (7, 00,000 / 10,000) x 16,000 = 11, 20,000
Fixed OH 3, 60,000 x 1.20 = 4, 32,000
Variable OH 2, 50,000 x 1.60 = 4, 00,000

Total cost 90 = 35, 76,320
Profit 10 = 3, 97,368
SP 100 = 39, 73,688

Let the current production be 10,000 units the revised production will be 10000 x 1.6 x 0.9 = 14,400

Q.3.

STEP: 1. (Blankett Recovery rate = BOH / B Hrs. = 10, 08,000 / 96,000 = 10.50)

Actual OH (incurred)	6,79,000
Less: Abnormal in nature charged to costing P/L a/c	(45,000)
Paid as per courts order	(10,000)
Expenses of previous year booked/ paid to workers for strike period under an award	(42000)
Obsolete stores return off	(18000)
Maintainable OH	564000
OH Recovered 48000 x 10.50	504000
Under Absorption	60000
Less: defective planning charged to CPL 1/4	(15000)
Under recovery	45000

STEP: 2. Treatment in cost accounts.

	Units	Rs.	Treatment
Goods Sold	18,000	27,000	Charge to CPL
Closing	4,000	6000	Increase the value
Cl. WIP 50% 16000	8,000	12000	Increase the value
	30000	45000	

Q.5

CONTRACT A/C

To Balance B/f			
WC	9,40,000	By Returns	25,000
Work uncertified	11,200	By Returns - stock	15,000
Mat. At site	8,000	By Cost of work	32,000
To Material issued	4,00,000	By Closing stock	20,000
To Material purchase	1,50,000	By Cost of Work certified	21,44,200
To Wages paid 6, 00,000 ADD: 3,000 Less: (5,000)	5,98,000		
To Architect fees	51,000		
To Plant hire charges	50,000		
To Ind. Expenses	10,000		
To OH allocated	18,000		
To Fines / Penalties	-----		
	22,36,200		
To Cost of Work C	21,44,200	By Value of WC	30,00,000
To P/L 4, 56,427			
To P/L suspense 3, 99,373	8,55,800		
	30,00,000		30,00,000

2/3 x 8, 55,800 x 80/100 = 4, 56,427

No profit reserve on opening WIP because it is just started. Fines/ penalties are financial in nature not to be considered.

Q 4.

SLC A/C

TO BAL B/D	63,000	BY WIP A/C	3, 36,000
TO GLA	3, 36,000	BY FACTORY OVERHEADS	42,000
TO WIP	1, 68,000	BY ABNORMAL LOSS (DEFICIENCIES)	12,600
		BY BALANCEC/D	1, 76,400
	5, 67,000		5, 67,000

WAGES CONTROL A/C

TO GLA	1, 47,000	BY WIP A/C	1, 26,000
		BY FACTORY OH	21,000
	1, 47,000		1, 47,000

FACTORY OVERHEADS A/C

TO SLC A/C	42,000	BY WIP A/C	5, 04,000
TO GLA A/C	5, 25,000		
TO WAGES CONTROL	21000		
		BY BALANCE C/D	84000
	5, 88,000		5, 88,000

GENERAL LEDGER ADJUSTMENT A/C

TO SALES	9, 24,000	BY OPENING BALANCE	1, 89,000
TO CLOSING BALANCE	3, 44,400	BY SLC A/C	3, 36,000
		BY WAGES CONTROL	1, 47,000
		BY FACTORY OH	5, 25,000
		BY PROFIT (CPL)	71,400
	12, 68,400		12, 68,400

COSTING P&L A/C

TO FG A/C	8, 40,000	BY SALES A/C	9, 24,000
TO GROSS PROFIT	84,000		
	9, 24,000		9, 24,000
TO ABNORMAL LOSS	12,600	BY GROSS PROFIT B/D	84,000
TO NET PROFIT	71,400		
	84,000		84,000

WIP A/C

TO BALANCE B/D	1,26,000	BY SLC A/C	1,68,000
TO SLC A/C	3,36,000	BY FG A/C	8,40,000

TO WAGES CONTROL	1,26,000		
TO FACTORY OH	5,04,000		
		BY BALANCE C/D	84,000
	10,92,000		10,92,000

FG A/C

TO WIP A/C	8,40,000	BY CPL	8,40,000
	8,40,000		8,40,000

PARTICULARS	DR.	CR.
SLC	1, 76,400	
FACTORY OH	84,000	
WIP A/C	84,000	
GLA		3, 44,400
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	3, 44,400	3, 44,400
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P&L A/C

TO MATERIALS (1,68,000+42000)	2,10,000	BY SALES	9,24,000
TO WAGES	1,47,000		
TO OH'S	5,25,000		
TO ABNORMAL LOSS	12,600	BY INCOME FROM INVESTMENT	21000
TO LOSS ON SALE OF FIXED ASSET	42000		
TO NET PROFIT	8400		
TOTAL	**9,45,000**		**9,45,000**

Reconciliation Statement

Profit as per CPL	**71,400**
ADD: Income from investment	21000
Less: Loss on sale of assets	(42000)
Less: Factory OH	(21000)
Less: Wages	(21000)
Profit as per P &L a/c	**8400**

Q.7

	A	**10%**		**20%**	
0	(5,00,000) x	1.000=	(5,00,000)	(5,00,000)	
1	85,000 X	0.91 =	77,350	0.83 =	70,550
2	2,00,000 X	0.83 =	1,66,000	0.69 =	1,38,000
3	2,40,000 X	0.75 =	1,80,000	0.58 =	1,39,200
4	2,20,000 X	0.68 =	1,49,600	0.48 =	1,05,600
5	70,000 X	0.62 =	43,400	0.41 =	28,700
		PV VALUE	6,16,350		4,82,050
		NPV	**1,16,350**		**(17950)**

	B	**10%**		**20%**	
0	(5,00,000) X	1.000 =	(5,00,000)		(5,00,000)
1	4,80,000 X	0.91 =	4,36,800	0.83 =	3,98,400
2	1,00,000 X	0.83 =	83,000	0.69 =	69,000
3	70,000 X	0.75 =	52,500	0.58 =	40,600
4	30,000 X	0.65 =	19,500	0.48 =	14,400
5	20,000 X	0.62 =	12,400	0.41 =	8,200
		PV VALUE	6,04,200		5,30,600

		NPV	**1,04,200**		**30,600**

SUMMARY

	IRR	NPV
A= 20-(17950/134300) X 10	18.66	116350
B= 20+ (30600/73600) X 10	24.16	104200
DECISION	**B**	**A**

Q.9 CALCULATION OF EDS AND DFL

	PLANT I	II	III	IV
EBIT	4,00,000	4,00,000	4,00,000	4,00,000
I 1	-	-	-	-
I 2	-	24,000	27,000	-
EBT	4,00,000	3,76,000	3,73,000	4,00,000
T 40%	1,60,000	1,50,400	1,49,200	1,60,000
EAT	2,40,000	2,25,600	2,23,800	2,40,000
Pd	-	-	-	18,000
EARNINGS	2,40,000	2,25,600	2,23,800	2,22,000
NO OF SHARES	1,60,000	1,40,000	1,30,000	1,30,000
EPS 240/160	1.50	1.611	1.72	1.71
DFL	**1**	**1.063**	**1.07**	**1**

Q.8

STEP I

MATERIALS		300
WAGES		60
FACTORY		120
COST OF PRODUCTION		480
OFFICE (ADVT)	120	
SELLING	150	270
TOTAL COST		750
SALES		900

STEP II STATEMENT SHOWING ESTIMATION OF WORKING CAPITAL

CURRENT ASSETS

RM	2 ½ X 300X 1/12 =	62.50
WIP	1 X 300X 1/12 = 1 X 180 X 1/24	32.50
FG	½ X 480 X1/12 =	20.00
DRS	1½ X 900 X 1/12 =	112.50
		227.50

CURRENT LIABILITIES

S. Crs for goods.	3/12 x 300	= 75.00
wages	1/12 x 60	= 5.00
Overheads	1/24 x 390	= 16.25
		96.25

Working capital= 227.50-96.25= 131.25

STEP III

MPBF

Current Assets	227.50
(Core Current Assets)	(30.00)
	197.50
(-) Current liabilities	(96.25)
	101.25
75% x 101.25	75.94