SHRIMATI INDIRA GANDHI COLLEGE

DEPARTMENT OF BANK MANAGEMENT

COST ACCOUNTING

(ADVANCED LEARNERS)

SECTION C (10 mark)

1. From the following particulars prepare a statement showing a

(i) Raw material consumed
(ii) Prime cost
(iii) Works cost
(IV) Cost of production
(v) Profit

PARTICULARS	**1.1.02**	**31.02.02**
Raw materials	20000	32000
Work-in progress	26500	14000
Purchased of raw materials		90000
Carriage inwards		2000
Direct wages		40000
Chargeable expenses		15000
Works overhead		22500
Administrative overhead		10000
Selling& distribution overhead		14000
Sales		220000

COST SHEET

PARTICULARS	RS	RS
Opening stock of raw materials	20000	
Add: purchase of raw material	90000	
	110000	
ADD: carriage inward	2000	
	112000	
Less: closing stock of raw material	32000	

	80000	
Raw material consumed		80000
Direct wages		40000
Chargeable expenses		15000

PRIME COST		135000
Works overhead		22500

		157500
Add: opening work-in progress		
26500		

		184000
Less: closing work-in progress		
14000		

WORKS COST		170000
Administrative overhead		
10000		

COST OF PRODUCTION		180000
Selling & distribution overhead		
14000		

COST OF SALES		194000
Profit (b/f)		26000

SALES		220000
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2. In a factory, two types of fans are produced namely, popular and proxy. Ascertain the cost and profit per unit sold from the following particulars.

	Popular	proxy
Material	8200	9450
Labour	4450	4900

Works overhead is 60% of Labour and office overhead is 20% on works cost. The selling expenses per fan sold are re.1. The selling price of popular fan is rs.275 and proxy fan is rs.400

40units of popular and 50 units of proxy are sold. There is no opening or closing stock.

COST SHEET

	Popular		proxy	
	Total	cost per unit	total	cost per.u
Materials	8200	205.00	9450	189.00
Labour	4450	111.25	4900	98.00
PRIME COST	12650	316.25	14350	287.00
Works overhead	2670	66.75	2940	58.80
WORKS COST	15320	383.00	17290	345.80
Office overhead	3064	76.60	3458	69.16
COST OF PRODUC TION	18384	459.60	20748	414.96
Selling overhead	40	1.00	50	1.00
COST OF SALES	18424	460.60	20798	415.96
Loss	**7424**	**185.60**	**798**	**15.96**
SALES	11000	275.00	20000	400.00

3. Distinguish between financial accounting and cost accounting?

Financial accounting	**Cost accounting**
1. Financial accounting reveals the net profit or loss of a business as a whole.	1.cost accounting reveals the cost, profit or loss of each product, job or process
2. The purpose of financial accounting is to show the results of	2. The purpose of cost accounting is to provide information to the

the business.	management for decision making, planning and control.
3. Financial accounting records external transaction, i.e., transaction with outsiders.	3. Cost accounting is concerned with internal transaction.
4. Financial accounting is mainly concerned with the recording of transactions. Control is not giving any importance.	4. Cost accounting includes a detailed system of control for material, Labour and overheads
5. In financial accounting costs are recorded in the aggregate.	5. In cost accounting costs are recorded unit basis also.
6.financial accounting is historic in nature	6. Cost accounting is historic and futuristic in nature.
7. Financial accounting is compulsory.	7. Cost accounting is compulsory only for certain industries.
8. Financial accounting reports operating results usually at the end of the year.	8. Information is reported to the management as and when required.
9. In financial accounting stocks are valued at cost or market price whichever is lower.	9. in cost accounting stocks are valued at cost
10. no distinction is made between fixed and variable costs	10. distinction is made between fixed and variable costs

4. The stock of material as on 1st April 1998 was 200units @ rs.2 each. The following purchase and issues were made. Prepare stores ledger a/c showing how the value of issue would be recorded under (a) FIFO (b) LIFO

1998 Apr. 5 purchases 100 units @ rs.2.20ps each
Apr. 10 purchases 150 units @ rs.2.40ps each
Apr20 purchases 180 units @ rs.2.50ps each
May 2 issues 150 units
Issues 150 units

Issues 100 units
Issues 100 units
Issues 200 units

DATE	RECEIPT			ISSUED			BALANCE		
APR 1							200	2.00	400
2				150	2.00	300	50	2.00	100
5	100	2.20	220				100	2.20	220
7				50	2.0	100			
					2.20	110	50	2.20	110
10	150	2.40	360				150	2.40	360
12				50	2.20	110			
				50	2.40	120	100	2.40	240
20	180	2.50	450				180	2.50	450
28				100	2.40	240			
				100	2.50	250	80	2.50	200

Stock value at end rs.200

LIFO

DATE	**RECEIPT**			**ISSUED**			**BALANCE**		
APR 1							200	2.00	400
2				150	2.00	300	50	2.00	100
5	100	2.20	220				100	2.20	220
7				100	2.20	220			
							50	2.00	100
10	150	2.40	360				150	2.40	360
12				100	2.40	240	50	2.00	100
							50	2.40	120
20	180	2.50	450				180	2.50	450
28				180	2.50	450			
				20	2.40	48	50	2.00	100
							30	2.40	72

FIF

Stock value at end 80 unit @ rs, 172

5. Prepare the stores ledger account

(I) simple average rate (ii) weighted average rate

Date	receipt		issues
	Qty	rs	qty
15 mar	200	2.00	-
18 mar	300	2.40	
25 mar			250
28 mar	250	2.60	
30 mar			200

STORES LEDGER (SIMPLE AVERAGE RATE)

Date	Receipt			Issues			Balance	
	Qty	Rate	Amt	Qty	Rate	Amt	Qty	amt
15.3	200	2.00	400				200	400
18.3	300	2.40	720				500	1120
25.3				250	2.20	550	250	570
28.3	250	2.60	650				500	1220
30.3				200	2.50	500	300	720

Stock value at end 300 units @ rs.720

STORES LEDGER (WEIGHTED AVERAGE RATE)

Date	Receipt			Issues			Balance	
	Qty	Rate	Amt	Qty	Rate	Amt	Qty	amt
15.3	200	2.00	400				200	400
18.3	300	2.40	720				500	1120
25.3				250	2.24	560	250	560
28.3	250	2.60	650				500	1210
30.3				200	2.42	484	300	726

Stock value at end 300 units @ rs.726

6. From the following particulars prepare a stores ledger a/c using the base stock method.

(a) FIFO (B) LIFO

Base stock -200 units

Date	particulars	units	per units
1.1.1990	purchase	500	4.00
10.1	purchase	300	4.20
15.1	issue	600	
20.1	purchase	400	4.40
25.1	issue	300	
27.1	purchase	500	4.20
31.1	issue	200	

STORES LEDGER (BASE STOCK METHOD)

FIFO

DATE	RECEIPT			ISSUE			BALANCE		
	QTY	RATE	AMT	QTY	RATE	AMT	QTY	RATE	AMT
1.1	500	4.00	2000				500	4.00	2000
10.1	300	4.20	1260				300	4.20	1260
15.1				300	4.00	1200	200	4.00	800
20.1	400	4.40	1760				400	4.40	1760
25.0				300	4.40	1320	200	4.00	800
							100	4.40	440
27.1	500	4.20	2100				500.	4.20	2100
31.1				100	4.40	440			
				100	4.20	420	200	4.00	800
							400	4.20	1680

Stock value at end 600 units @ rs. 2480

STORES LEDGER (LIFO)

DATE	RECEIPT			ISSUE			BALANCE		
	QTY	RATE	AMT	QTY	RATE	AMT	QTY	RATE	AMT
1.1	500	4.00	2000				500	4.00	2000
10.1	300	4.20	1260				300	4.20	1260
15.1				100	4.20	420			
				500	4.00	2000	200	4.20	840
20.1	400	4.40	1760				400	4.40	1760
25.1				300	4.40	1320	200	4.20	840
							100	4.40	440
27.1	500	4.20	2100				500.	4.20	2100
31.1				200	4.20	840	200	4.20	840
							100	4.40	440
							300	4.20	1260

Stock value at end 600 unit's rs.2540

7. The following particulars were obtained from the companies' book for half year ended 30 June

PARTICULARS	RS
Basic wages	25200
Dearness allowance	21600
Overtime allowance	3500
PF deposited for the period	5850
Employee's state insurance Contribution for the period	1440
Recovery towards house rent	5100

Provident fund is paid for by the employer and employee in equal share. The ratio of contribution of employer and employee to ESI is 7:5 assuming that all items were evenly spread over 6 month.

Calculate amount of cash required to pay wages and the Labour cost for the employer per month.

STATEMENT SHOWING NET CASH PAID TO EMPLOYEES

PARTICULARS		RS
Basic wages		25200
Dearness allowance		21600
Overtime allowance		3500
GROSS WAGES		50300
(-) deduction		
Employees PF	2925	
Employees ESI	600	
Recovery house rent	5100	8625
NET WAGES		41675

STATEMENT OF LABOUR COST

PARTICULARS	RS
Basic wages	25200
Dearness allowance	21600
Overtime allowance	3500
Employees PF	2925
Employees	840
TOTAL LABOUR COST FOR 6 MONTH	54065

Labour cost per month =54065/6 =RS.9011

8. With the help of the following information ascertain the wages paid to workers ram and sham under Taylor's differentials piece rate system

Standard time allowed 40 units per hour
Normal time rate rs.4 per hour
Differential to be applied:
75% of piece rate when below standard 125% of piece rate when at or above standard. In a day of 8 hours, the workers have produced as follows

Ram=280 units
Sham=400 units. Calculate.

Standard production = 40 units
Normal time rate = rs. 4 per hour

For production of 1 unit = 4/40 = 0.10 paise
Piece rate =0.10 pause

Earnings under Taylor's differential piece rate system:

Low piece rate (below standard)

=0.10 * 75/100
=0.075

High piece rate (above standard)

=0.10 * 125/100
=0.125

Standard production per day =40 * 8
=320units

Ram's earnings
Below standard
=280 *0.075 =RS.21

Sham's earnings
Above standard
=400 * 0.125 =rs.50

9. Calculate the earnings of workers A, B and C under straight piece rate system and Merrick multiple piece rate system from the following particulars

Normal rate per hour is rs.1.80
Standard time per unit 1 minute

Output per day of 8 hours is as follows

A=360 units
B=420 units
C=540 units

Standard piece rate system

1 hour = rs.1.80
1 hour=60 units
Per piece rate= 1.80/60
=0.03

A= 360 * 0.03 = rs.10.80
B= 420 * 0.03 = rs.12.60

C= 540 * 0.03 = rs. 16.20

Standard production per day = 60 * 8 =480 units

Merrick multiple piece rate system

A produces= 360 units
= 360/480*100
=75%

A gets only ordinary piece rate
=360 * 0.03 RS.10.80

B produces= 420 units
=420/480*100
=88%

B gets 110% of ordinary piece rate
=420 * 0.03 * 110/100
= rs. 13.86

C produces= 540 units
= 540/480*100
=113%

C gets 120% of ordinary piece rate
=540 * 0.03 * 120/100
= rs. 19.44

10. Siva industries ltd has four department A, B and C are production department and D is the service department. The actual expenses for a month were as follows.

PARTICULARS	RS

Rent	6000
Repair to plant	3600
Depreciation	2700
Lighting charges	600
Supervision	9000
Insurance of stock	3000
Power	5400
Employees insurance	900

The following information is also available

	A	B	C	D
Area	300	220	180	100
No of workers	48	32	24	16
Total wages	8000	6000	4000	2000
Value of plant	24000	18000	12000	6000
Value of stock	15000	9000	6000	nil

Apportion the cost to 4 departments on the most equitable methods.

OVERHEAD DISTRIBUTION SUMMARY

Expense	Basis of apportionment	Total	A	B	C	D
Rent	Area(15:11:9:5)	6000	2250	1650	1350	750
Repair to plant	Value of plant(4:3:2:1)	3600	1440	1080	720	360
Depreciation	Value of plant(4:3:2:1)	2700	1080	810	540	270
Lighting charges	Floor(15:11:9:5)	600	225	165	135	75
Supervision	No of employer (6:4:3:2)	9000	3600	2400	1800	1200
Value of stock	Value of stock (5:3:2 :-)	3000	1500	900	600	
Power	Value of plant(4:3:2:1)	5400	2160	1620	1080	540
Employee insurance	Total wage(4:3:2:1)	900	360	270	180	90
	`	31200	12615	8895	6405	3285

11. From the data given below calculate machine hour rate

Insurance rs.36
Cotton waste rs.60
Rent of the department (1/5th for the machine) rs.780
Salary of formen1/4th for the machine rs.6000
Lighting (12 men in department and 2 for this machine) rs.288

The cost of the machine is rs.9200 and it has an estimated scrap value of rs.200
The expected life is 10 years (1800 hours per annum)
The cost of repair for the entire life is rs.1125
Power 5 units per hour @ 20 paise per unit

COMPUTATION OF MACHINE HOUR RATE

Standing charges:			rs
Insurance	36		
Cotton waste	60		
Rent	156		
Salary	1500		
Lighting	48		
	----------	1800/1800	1.00

Machine expense:	
Depreciation	0.50
Repairs	0.06
Power	1.00

MACHINE HOUR RATE	2.56
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12. Given below is the trading & profit & loss account of spic ltd for the year ended 31 March

Particulars	rs	particulars	rs
To material	2740000	by sales [60000 units]	6000000
To wages	1510000	By stock finished Goods	160000
To factory expense	830000	By work in progress	
To selling expense	450000	material 64000	
To administer expense	382400	wages 36000	
To preliminary expense	60000	factory 20000	
To net profit	325600	By dividend received	18000
	6298000		6298000

The company manufactured a standard unit
In cost account

(i) factory expenses nave been allocated to production at 20% on prime cost
(ii) administrative expenses at rs.6 per unit produced and
(iii) selling expense at rs.8 per unit sold

Find out costing profit &reconcile the same.

COST SHEET

PARTICULARS	RS
To material	2740000
To wages	1510000
PRIME COST	4250000
(+) factory overhead	850000
	5100000

(-) work in progress

Material 64000

Wages	36000		
Factory	20000		
	---		120000

		Factory cost	4980000
(+) administrative cost			372000

Cost of production			5352000
(-) closing stock of finished goods			172654

			5179355
(+) selling distribution			480000

COST OF SALES			5659355
PROFIT			340645

SALES			600000

RECONCILIATION STATEMENT

Particulars	**rs**	**rs**
Profit as per cost account		340645
ADD:		
Factory expenses	20000	
Selling expenses	30000	
Dividend received	18000	68000

		408645
LESS:		
Administrative expenses	10400	
Preliminary expenses	60000	
Closing stock	18000	
	---	83045

PROFIT AS PER FINANCIAL ACCOUNT		325600
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13. The following particulars relate to the certain contract carried out by the lavanya builders during the year ended 30.6.1998

Work certified	143000	establishment charges	3250
Materials issued	64500	direct expenses	2600
Labour cost	54800	wages accrued due	1800
Plant installed	11300	material closing balance	1400
Value of plant [Closing]	8200	material returned to site	400
Uncertified work	3400		
Cash received	130000		
Contract price	200000		

Prepare a contract account and transfer to the profit and loss account. The portion of the profit which you consider reasonable.

CONTRACT ACCOUNT

PARTICULARS	RS	PARTICULARS	RS
To Materials issued	64500	BY work in progress	
To Labour cost	56600	Work certified	143000
To Plant installed	11300	Uncertified work	3400
To establishment charges	3250	by material closing balance	1400
To Value of plant	8200	by material returned to site	400
To direct expense	2600		
	156400		156400
To profit & loss a/c	11000	by notional profit b/f	18150
To work in progress	7150		
	18150		18150

14. A product passes through three district process to completion. During March 1990 500 units were produced. From the following information prepare process accounts showing the total cost as well as cost per unit.

	Process I	Process II	Process III
Materials	10000	7000	3000
Labour	2500	2000	2500
Direct expenses:			
Fuel	500	1000	500
Carriage	1500	500	1000
Works overhead	2000	2500	2000

Indirect expenses RS.14000 should be apportioned on the basis of wages.

PROCESS I A/C

Particulars	RS	RS	Particulars	RS	RS
To material	10000	20.00	By transfer to process II account.	21500	43.00
To Labour	2500	5.00			
To direct expense					
Fuel	500	1.00			
Carriage	1500	3.00			
To works cost	2000	4.00			
To indirect expenses	5000	10.00			
	21500	43.00		21500	43.00

PROCESS II A/C

Particulars	RS	RS	Particulars	RS	RS
To transfer from process I a/c	21500	43.00			
To material	7000	14.00	By transfer to process III account.	38500	77.00
To Labour	2000	4.00			
To direct expense					
Fuel	1000	2.00			
Carriage	500	1.00			
To works cost	2500	5.00			
To indirect expenses	4000	8.00			
	38500	77.00		38500	77.00

PROCESS III A/C

Particulars	RS	RS	Particulars	RS	RS
To transfer from process II a/c	38500	77.00			
To material	3000	6.00	By finished stock	52500	105.00
To Labour	2500	5.00			
To direct expense					
Fuel	500	1.00			
Carriage	1000	2.00			
To works cost	2000	4.00			
To indirect expenses	5000	10.00			
	52500	105.00		52500	105.00

15. The following particulars are extracted from the books of Krishnan industries.

(i) The estimated material cost of job is rs.5000. direct Labour cost is expected to be rs.1000
(ii) in machine shop the machine will require machining by machine "saki" for 20 hours and by machine "Jimmie" for 6 hours
(iii) Machine hour rates for machine saki and machine Jimmie are rs.10 and rs.15 respectively.
(iv) Considering only machine shop cost, the direct wages in all other shops last year amounted to rs.80000 as against the factory overhead of rs.48000
(v) Last year factory cast of all jobs amounted to rs.250000

As against office expenses rs.37500

Prepare a quotation which guarantees 20% profit on selling price

JOB COST SHEET

Particulars		RS
Direct material		5000
Direct Labour		1000
PRIME COST		6000
(+) factory overhead:		
Machine saki	200	
Machine Jimmie	90	
=48000/80000*100=60%		
Factory overhead (1000*60/1	600	890
WORKS COST		6890

(+) administrative overhead =37500/250000*100=15% Administrative overhead (6890*15/100)	1034

COST OF PRODUCTION	7924
PROFIT	**1981**

SALES	9905

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