CA INTERMEDIATE M'19

SUBJECT- COSTING

Test Code – PIN 5070

(Date :)

(Marks - 100)

QUESTION NO.1 is compulsory and attempt any four out of remaining five questions.

QUESTION NO.1 **(5 MARKS X 4 = 20 MARKS)**

A. PQR Ltd., manufactures a special product, which requires 'ZED'. The following particulars were collected for the year 2005-06:

(i)	Monthly demand of Zed	:	7,500 units
(ii)	Cost of placing an order	:	Rs. 500
(iii)	Re-order period	:	5 to 8 weeks
(iv)	Cost per unit	:	Rs. 60
(v)	Carrying cost % p.a.	:	10%
(vi)	Normal usage	:	500 units per week
(vii)	Minimum usage	:	250 units per week
(viii)	Maximum usage	:	750 units per week

Required:

(i) Re-order quantity.

(ii) Re-order level.

(iii) Minimum stock level.

(iv) Maximum stock level.

(v) Average stock level.

B. **<u>Calculate efficiency and activity ratio</u>** from the following data:

Capacity ratio = 75%

Budgeted output = 6,000 units

Actual output = 5,000 units

Standard Time per unit = 4 hours

C. A construction company undertook a contract at an estimated price of Rs. 108 lakhs, which includes a budgeted profit of Rs. 18 lakhs. The relevant data for the year ended 31.03.20X8 are as under :

	(Rs. '000)
Material issued to site	5,000
Plant hired	3,800
Site office costs	270
Materials returned from site	100
Direct expenses	500
Work certified	10,000
Work not certified	230
Progress payment received	7,200

A special plant was purchased specifically for this contract at Rs. 8,00,000 and after use on this contract till the end of 31.02.20X8, it was valued at Rs. 5,00,000. This cost of materials at site at the end of the year was estimated at Rs. 18,00,000. Direct wages accrued as on 31.03.20X8 was Rs. 1,10,000.

Required

PREPARE the Contract Account for the year ended 31st March, 20X8.

D. GK Ltd. showed net loss of Rs. 2,43,300 as per their financial accounts for the year ended 31st March, 2018. However, cost accounts disclosed net loss of Rs. 2,48,300 for the same period. On scrutinizing both the set of books of accounts, the following information were revealed :

		Rs.
(i)	Works overheads over recovered 30,400	30,000
(ii)	Selling overheads under recovered	20,300
(iii)	Administrative overheads under recovered	27,700
(iv)	Depreciation over charged in cost accounts	35,100
(v)	Bad debts w/off in financial accounts	15,000
(vi)	Preliminary Exp. w/off in financial accounts	5,000
(vii)	Interest credited during the year in financial accounts	7,500

Prepare a reconciliation statement reconciling losses shown by financial and cost accounts by taking costing net loss as base.

QUESTION NO.2 **(10 MARKS X 2 = 20 MARKS)**

A. Following information relate to a manufacturing concern for the year ended 31st March, 2018 :

	Rs.
Raw Material (opening)	2,28,000
Raw Material (closing)	3,05,000
Purchases of Raw Material	42,25,000
Freight Inwards	1,00,000
Direct wages paid	12,56,000
Direct wages – outstanding at the end of the year	1,50,000
Factory Overheads	20% of prime cost
Work – in – progress (opening)	1,92,500
Work – in – Progress (closing)	1,40,700
Administrative Overheads (related to production)	1,73,000
Distribution Expenses	Rs. 16 per unit
Finished Stock (opening) – 1217 Units	6,08,500
Sale of scrap of material	8,000

The firm produced 14,000 units of output during the year. The stock of finished goods at the end of the year is valued at cost of production. The firm sold 14153 units at a price of Rs. 618 per unit during the year.

Prepare cost sheet of the firm.

B. The following figures are related to LM Limited for the year ending 31st March, 2012 :

Sales - 24,000 units @ Rs. 200 per unit;

P/V Ratio 25% and Break-even Point 50% of sales.

You are required to calculate:

(i) Fixed cost for the year

(ii) Profit earned for the year

(iii) Units to be sold to earn a target net profit of Rs. 11,00,000 for a year.

(iv) Number of units to be sold to earn a net income of 25% on cost.

(v) Selling price per unit if Break-even Point is to be brought down by 4,000 units.

QUESTION NO.3 **(10 MARKS X 2 = 20 MARKS)**

A. The data given relates to 'Vasanth Talkies', a mini theatre, for the year ending 31st March, 1976:

	Salaries :			
1	Manager	Rs.800 p.m.	Carbon	Rs.7,235
10	Gate-Keepers	200 p.m. each	Misc. expenditure	5,425
2	Operators	400 p.m. each	Advertisement	34,710
4	Clerks	250 p.m. each	Administration expenses	18,000
	Electricity and oil	11,655	Hire of Print	1,40,700

The premises are valued at Rs. 6,00,000 and the estimated life is 15 years. Projector and other equipment cost Rs. 3,20,000 on which 10% depreciation is to be charged.

Daily 3 shows are run throughout the year. The total capacity is 625 seats which is divided into three classes as follows :

Janata circle	250 seats
Sanman circle	250 seats
Lord's circle	125 seats

Ascertain cost per man-show assuming that :

(a) 20% of the seats remain vacant, and

(b) Weightage to be given to the three classes in the ratio 1 : 2 : 3.

Determine the rates for each class if the management expects 30% return on gross proceeds. Ignore entertainment taxes.

B. Arnav Ltd. manufactures a product Q, the standard cost of which is as follows:

	Standard Cost per unit (Rs.)
Direct Material	600
Direct labour - Skilled @ Rs.80 per hour	120
- Unskilled @ Rs.60 per hour	90
Variable overheads	75
Fixed overheads	30
	915

During the month just ended 4,000 units of Q were produced. The actual labour cost was as follows.

	Rate per hour (Rs.)	Cost (Rs.)
Skilled	87.50	5,77,500
Unskilled	55.00	2,97,000

10% of the labour time was lost due to idle time. The standard idle time was 7.5% of labour time. Arnav Ltd. has budgeted to produce 4,200 units of Q. Arnav Ltd. absorbs its overheads on direct labour hour (effective hours) basis. Actual fixed and variable overheads incurred were Rs.1,55,000 and Rs.2,85,000 respectively.

Calculate:

(i) Labour rate variance (ii) Labour efficiency variance (iii) Labour mix variance (iv) Labour yield variance (v) Labour idle time variance (vi) Variable overhead expenditure variance and (vii) Variable overhead efficiency variance.

QUESTION NO.4 **(10 MARKS X 2 = 20 MARKS)**

A. A B C D Co. Ltd. produces and sells four products A, B, C and D. These products are similar and usually produced in production runs of 10 units and sold in a batch of 5 units. The production details of these products are as follows:

Product	A	B	C	D
Production (Units)	100	110	120	150
Cost per unit:				
Direct material (Rs.)	30	40	35	45
Direct labour (Rs.)	25	30	30	40
Machine hour (per unit)	5	4	3	4

The production overheads during the period are as follows:

	Rs.	Rs.
Factory works expenses	22,500	
Stores receiving costs	8,100	
Machine set up costs	12,200	
Cost relating to quality control	4,600	
Material handling and dispatch	9,600	57,000

The cost drivers for these overheads are detailed below:

Cost	Cost drivers
Factory works expenses	Machine hours
Stores receiving costs	Requisitions raised
Machine set up costs	No. of production runs
Cost relating to quality control	No. of production runs
Material handling and dispatch	No. of orders executed

The number of requisitions raised on the stores was 25 for each product and number of orders executed was 96, each order was in a batch of 05 units.

Required:

(i) Total cost of each product assuming the absorption of overhead on machine hour basis;

(ii) Total cost of each product assuming the absorption of overhead by using activity base costing; and

(iii) Show the differences between (i) and (ii) and comment.

B. Following information is available regarding process A for the month of February 20X1.

Production Record	**(Units)**
Units in process as procured on 31st Jan., 20X1	4,000
All material used, 25% complete for labour and overhead	
New units started in process	<u>16,000</u>
Total units processed	<u>20,000</u>
Production report shows the following results :	
Units completed	14,000
Units in Process on 28th February, 20X1	
All material used, 33-1/3% complete for labour and overhead	6,000
Loss in Production	Nil
Cost Record	
Work-in-process as on Jan, 31, 20X1	
Material	Rs. 1,200
Labour	200
Overhead	200
Cost for February 20X1	
Material	5,120
Labour	3,000
Overhead	<u>3,000</u>
Total cost to be accounted for	**<u>12,720</u>**

<u>Presuming that FIFO method of inventory costing is used, prepare:</u>

(i) Statement of equivalent production.

(ii) Statement showing cost for each element.

(iii) Statement of apportionment of cost.

(iv) Process cost account for process A

QUESTION NO.5

A. A Light Motor Vehicle manufacturer has prepared sales budget for the next few months, and the following draft figures are available:

Month	No. of vehicles
October	4,000
November	3,500
December	4,500
January	6,000
February	6,500

To manufacture a vehicle a standard cost of Rs. 2,85,700 is incurred and sold through dealers at an uniform selling price of Rs. 3,95,600 to customers. Dealers are paid 12.5% commission on selling price on sale of a vehicle.

Apart from other materials four units of Part-X are required to manufacture a vehicle. It is a policy of the company to hold stocks of Part-X at the end of the each month to cover 40% of next month's production. 4,800 units of Part-X are in stock as on 1st October.

There are 950 nos. of completed vehicles are in stock as on 1st October and it is policy to have stocks at the end of each month to cover 20% of the next month's sales.

You are required to **(10 MARKS)**

(i) Prepare Production budget (in nos.) for the month of October, November, December and January.

(ii) Prepare a Purchase budget for Part-X (in units) for the months of October, November and December.

(iii) Calculate the budgeted gross profit for the quarter October to December.

B. In an Oil Mill four products emerge from a refining process. The total cost of input during the quarter ending March 20X8 is Rs. 1,48,000. The output, sales and additional processing costs are as under :

Products	Output in Litres	Additional processing cost after split off (Rs.)	Sales Value (Rs.)
ACH	8,000	43,000	1,72,500
BCH	4,000	9,000	15,000
CSH	2,000	-	6,000
DSH	4,000	1,500	45,000

In case these products were disposed – off at the split off point that is before further processing, the selling price per litre would have been :

ACH (Rs.)	BCH (Rs.)	CSH (Rs.)	DSH (Rs.)
15.00	6.00	3.00	7.50

PRODUCE a statement of profitability based on :

(i) If the products are sold after further processing is carried out in the mill.

(ii) If they are sold at the split off point.

(5 MARKS)

C. A Company has been asked to quote for a job. The company aims to make a net profit of 30% on sales. The estimated cost for the job is as follows : **(5 MARKS)**

Direct materials 10 kg @ Rs. 10 per kg

Direct labour 20 hours @ Rs. 5 per hour

Variable production overheads are recovered at the rate of Rs. 2 per labour hour.

Fixed production overheads for the company are budgeted to be Rs. 1,00,000 each year and are recovered on the basis of labour hours.

There are 10,000 budgeted labour hours each year. Other costs in relation to selling, distribution and administration are recovered at the rate of Rs. 50 per job.

DETERMINE quote for the job by the Company.

QUESTION NO.6 **(5 MARKS X 4 = 20 MARKS)**

A. DISCUSS the essential features of a good cost accounting system.

B. Why is 'Zero Base Budgeting'(ZBB) considered superior to 'Traditional Budgeting' ? Explain.

C. Explain 'Just In Time'(JIT) approach of inventory management.

D. Explain 'Job Costing' and 'Batch Costing'.