

Answer to PTP_Intermediate_Syllabus 2008_Dec2014_Set 2

Paper – 8: Cost & Management Accounting

Time Allowed: 3 Hours

Full Marks: 100

Question No 1 is Compulsory. Answers any five Questions from the rest.
Working Notes should form part of the answer.

Question:1

- (a) Match the statement in Column I with appropriate statement in Column II [1x5]

Column I	Column II
(i) Disc Method	(A) Coal Industry
(ii) Output Costing	(B) Control of Inventory
(iii) Capital Expenditure Budgeting	(C) Toy Industry
(iv) FSND Analysis	(D) Time Keeping
(v) Batch Costing	(E) Investment Planning

- (b) State whether the following statements are TRUE or FALSE: [1x5]

- (i) FIFO method of pricing issues of materials is useful during inflationary period.
- (ii) If an expense can be identified with a specific cost unit, it is treated as direct expense.
- (iii) In process costing, a meaningful distinction is made between direct and indirect materials
- (iv) Value analysis promotes innovation and creativity
- (v) A bin card shows the quantity and value of a stores item.

- (c) Fill in the blanks: [1x5]

- (i) The most appropriate cost unit for pricing and costing goods transports is.....
- (ii) Cost of abnormal idle time is charged to.....
- (iii) Aggregate of indirect material, indirect Labour and indirect expenses is known as.....
- (iv) Where the production is as per the requirements of the customers,.....is the method of costing used.
- (v)is the value of benefit sacrificed in favour of an alternative course of action.

- (d) In the following cases, You are required to indicate the correct answer and give workings: [2x5=10]

- (i) The BEP is 15,000 units; Fixed Cost is ₹22,500, variable cost per units ₹45 the P/V ratio will be.....

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- (A) $33\frac{1}{3}\%$
(B) 55%
(C) 15%
(D) None of the above
- (ii) Total cost of 2,000 units is ₹32,000 and for 32,00 units is ₹38,000. Fixed cost will be
(A) ₹32,000
(B) ₹22,000
(C) ₹20,000
(D) ₹6,000
- (iii) A chemical process has a normal yield of 90%. In a period 5,000 kgs of material were introduced and there was an abnormal loss of 150 kgs. The quantity of good production is
(A) 4,850 kgs
(B) 4,500 kgs
(C) 4,650 kgs
(D) 4,350 kgs
- (iv) Standard time is 60 hours and guaranteed time rate is ₹50 per hour. Under Rowan Plan, what is the amount of wages, if job is completed in 48 hours?
(A) ₹2,480
(B) ₹2,680
(C) ₹2,880
(D) None of the above
- (v) If the ordering cost per order is ₹40, carrying cost is 10% of average inventory value, purchase cost is ₹10 per unit and Economic Order Quantity (EOQ) for the product is 800 units; what is the expected annual demand for the product?
(A) 8,000 units
(B) 10,000 units
(C) 20,000 units
(D) None of the above

Answer:1

(a)

- (i) - (D)
(ii) - (A)
(iii) - (E)
(iv) - (B)
(v) - (C)

(b)

- (i) False
Under FIFO, the cost of goods sold is based upon the cost of material bought earliest in the period, while the cost of inventory is based upon the cost of material bought later in the year. This results in inventory being valued close to current replacement cost. During periods of inflation, the use of FIFO will result in the lowest estimate of cost of goods sold, and the highest net income. As a result, income tax liability is

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increased. So, FIFO method of pricing issues of materials is not useful during inflationary period.

(ii) True

The given statement is correct.

(iii) False

The objective of process costing is to find out the cost of each process by identifying the direct costs with the particular process and apportioning the indirect costs, i.e. overheads to each process on some suitable basis.

(iv) True

One of the objectives of value analysis or function analysis is to improve value by reducing the cost function relationship of a product which is achieved by eliminating or combining as many secondary functions as possible.

(v) False

A bin card is a quantitative record of receipts issues and closing balances of each item of stores.

(c)

(i) Tonne-Kilometer

(ii) Costing P & L Account

(iii) Overheads

(iv) Job Costing

(v) Opportunity Cost

(d)

(i) **(D) None of the above**

Contribution per unit = Fixed Cost/ BEP
= 22,500/ 15,000
= ₹1.5

Selling price = Variable cost+ Contribution per unit = (45 + 1.5)= ₹46.50/-

P/V ratio = (Contribution/ Sales) x 100
= (1.5/46.50)x 100
= 3.23%

(ii) **(B) ₹22,000**

Variable cost per unit = (38,000 –32,000)/(3200 –2000)= ₹5 per unit.

Fixed cost = 32,000 –(2,000 x 5) = ₹22,000

(iii) **(D) 4,350 kgs.**

Normal Loss = 10% of input	500 kgs.
Abnormal Loss =	150 kgs.
Total Loss=	650 kgs.

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Goods production=5,000 – 650 =	4,350 kgs.
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(iv) (C) ₹2,880

Total Earning under Rowan Plan: $H \times R + [S - H] / S \times H \times R$

Where, H = Hours Worked,

R = Rate per hour,

S = Standard time

Total Earnings= $(48 \times 50) + (60-48) / 60 \times 48 \times 50 = ₹2,880$

(v) (A) 8,000 units

$$EOQ = \sqrt{\frac{2AO}{C}}$$

Where,

EOQ =Economic Order Quantity

A = Annual demand

O = ordering cost

C = Carrying cost

$$800 = \sqrt{\frac{2 \times A \times 40}{1}}$$

A = 8,000 units

Question:2

- (a) While preparing the estimate of profitability for the coming year, the Sales Manager of a company indicated sale of the single product manufactures at a sale price of ₹60 per unit.

At that price the expected profit will be ₹25,00,000. The variable cost of the product is ₹20 per unit and the total fixed expenses for the year was estimated at ₹15,00,000.

The Sales Manager further indicated that if there is a reduction in price, the quantity of sale will rise in the following manner:

When selling price reduced by	Quantity of sale to increase by
10%	20%
5%	15%
2.5%	8%

As a Cost Accountant, you have been asked to evaluate the effect of alternative sale prices as above and suggest the best alternative to be adopted in the coming year.

[3+3+3+1]

Answer:

Calculation of quantity of sales envisaged in the original proposal

	₹
Expected Profit	25,00,000
Fixed Cost	15,00,000
Contribution	40,00,000
Contribution per unit (₹60 – 20 = ₹40)	40
No. of units to be sold	1,00,000

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Evaluation of the three proposals:

	Selling price reduced by 10% qty. of sale increased by 20%	Selling price reduced by 5% qty. of sale increased by 15%	Selling price reduced by 2.5% qty. of sale increased by 8%
Selling price per unit (₹)	54	57	58.50
Revised Contribution per unit (₹)	34	37	38.50
Revised Quantity (Unit)	1,20,000	1,15,000	1,08,000
Total Contribution (₹)	40,80,000	42,55,000	41,58,000

The best option is to reduce selling price by 5% which will result increase in sales qty. by 15%.

(b) Define the terms Capacity costs and Relevant cost.

[2¹/₂+2¹/₂]

Answer:

Capacity Costs: These costs are normally fixed costs. The cost incurred by a company for providing production, administration and selling and distribution capabilities in order to perform various functions. Capacity cost includes the cost of plant, machinery and building for production, ware houses and vehicles for distribution key personnel for administration. These costs are in the nature long-term costs and are incurred as a result of planning decisions.

Relevant cost: It is a cost which is relevant in various decisions of management. Decision making involves consideration of several alternative courses of action. In this process, whatever costs are relevant are to be taken into consideration. In other words, costs which are going to be affected matter the most and these costs are called relevant costs. Relevant cost is a future cost which is different for different alternatives. It can also be defined as any cost which is affected by the decision on hand.

Question.3

(a) The following information is given to you from the records of P Ltd. for the year 2014:

Budgeted Sales Value in 2014:

April	₹4,00,000
May	₹4,50,000
June	₹5,20,000
July	₹4,20,000
August	₹4,80,000
Contribution to sales ratio	40%
Fixed Cost	₹12,00,000 for the whole year 2014, includes depreciation ₹3,00,000 per annum.

Other Information:

40% of each month's sales is produced in the month prior to the sale and 60% in the month of sale. 50% of the direct materials required for production are purchased in the month prior to their use in production. The remaining 50% is purchased in the month of production. Labour costs are paid in the month in which they are incurred and constitute 30% of the variable costs. 60% of the variable costs are direct material costs. Suppliers of direct materials are paid in the month after purchase. The remaining variable

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costs are variable overhead costs, of which 40% are paid in the month they are incurred and the balance paid in the next month. Fixed costs are incurred at a constant rate per month and paid in the month they are incurred. The expected capital expenditure in June 2014 is ₹1,90,000. The sales receipts budgeted are as follows:

May 2014	₹4,01,700
June 2014	₹4,50,280
July 2014	₹4,25,880

The bank balance on 1.5.2014 is expected to be ₹40,000.

Prepare a month-wise cash budget for P Ltd. for the period May to July 2014. [10]

Answer:

Cash Budget

Particulars	May 2014	June 2014	July 2014
Opening Balance	40,000	92,428	(9,860)
Receipts	4,01,700	4,50,280	4,25,880
Total inflow	4,41,700	5,42,708	4,16,020
Payment to Suppliers	1,61,640	1,72,440	1,66,320
Labour Payments	86,040	86,400	79,920
Variable OH paid	26,592	28,728	27,936
Fixed OH paid	75,000	75,000	75,000
Capital Expenditure		1,90,000	
Total Outflows	3,49,272	5,52,568	3,49,176
Closing Balance	92,428	(9,860)	66,844

Particulars	April	May	June	July	August
Budgeted Sales	4,00,000	4,50,000	5,20,000	4,20,000	4,80,000
60% of Sales – Current	2,40,000	2,70,000	3,12,000	2,52,000	2,88,000
40% Sales prior month	1,80,000	2,08,000	1,68,000	1,92,000	
Sales value of production	4,20,000	4,78,000	4,80,000	4,44,000	
Variable cost of production=60%	2,52,000	2,86,800	2,88,000	2,66,400	
Material required for production 60%	1,51,200	1,72,080	1,72,800	1,59,840	
50% materials purchased prior month	86,040	86,400	79,920		
50% materials purchased this month	75,600	86,040	86,400	79,920	
Material purchases	1,61,640	1,72,440	1,66,320	79,920	
Payment to suppliers		1,61,640	1,72,440	1,66,320	
Labour paid= 30% of V.c	75,600	86,040	86,400	79,920	
Var. OH= 10% of V.C	25,200	28,680	28,800	26,640	
40% of Var. OH paid this month	10,080	11,472	11,520	10,656	
60% Var. OH paid next month		15,120	17,208	17,280	15,984
Total Va. OH paid		26,592	28,728	27,936	
Cash Fixed OH = 9 lacs /12	75,000	75,000	75,000	75,000	75,000

(b) Explain the treatment of profits on incomplete work in contract accounts. [5]

Answer:

Treatment of profits on incomplete work in contract accounts

- In case of contracts which are less than 25% complete, on profits should be taken into consideration and consequently no credit should be taken to Profit and Loss Account.

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- In case of contracts which are more than 25% complete, but less than 50% complete, the following method should be used for computing the profit to be credited to the Profit and Loss Account:-
 $1/3 \times \text{Notional Profit} \times \text{Cash Received} / \text{Work Certified}.$

Notional Profit is the difference between the value of work certified and cost of work certified. It is computed in the following manner.

Notional Profit = Value of work certified – [cost of work to date – cost of work completed but not certified]

- In case of contracts complete between 50% and 90% [more than 50% but less than 90%] the following method is used for computing the profit to be credited to the Profit and Loss Account:-
 $2/3 \times \text{Notional Profit} \times \text{Cash Received} / \text{Work Certified}$
- In case of contracts completed 90% or more than that, it is considered to be almost complete. In such cases, the estimated total profit is first determined by deducting the total costs to date and additional expenditure necessary to complete the contract from the contract price. The portion of profit so arrived is credited to the Profit and Loss Account by using any of the following formula:-
 - Method I – Estimated Profit x Work Certified / Contract Price
 - Method II – Estimated Profit x Work Certified / Contract Price x Cash Received / Work Certified or Estimated profit x Cash Received / Contract Price.

Question.4

- (a) A company manufactures a product currently utilizing 80% capacity with a turnover of 32,000 units at a selling price of ₹25 per unit. The variable cost of the product is ₹17.5 per unit. Fixed cost amounts to ₹1,50,000 up to 80% of level of output and there will be an additional cost of a supervisor amounting to ₹20,000 beyond that level.

Calculate:

(i) Activity level (%) at break-even point

(ii) Number of units to be sold to earn a net income of 10% of sales

(iii) Activity level (%) to earn a profit of ₹1,00,000

[3+4+3]

Answer:

Selling Price = ₹25

Variable Cost = ₹17.5

Contribution = ₹7.5

(i) $\text{BEP (units)} = \text{Fixed Cost} / \text{Contribution per unit} = 1,50,000 / 7.5 = 20,000 \text{ units}$

80% activity = 32000 units.

Hence, 100% level = $32,000 / .8 = 40,000 \text{ units}$

Activity Level at BEP = $20,000 / 40,000 = 50\%$

(ii) Let x be the number of units to get 10% of sales as profit.

$10\% * 25 * x = 7.5x - 1,50,000$

$2.5x = 7.5x - 1,50,000.$

$5x = 1,50,000$

$X = 30,000$, which is <32,000. Hence no additional supervision.

In the next range,

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$$2.5x = 7.5x - 1,70,000$$

$$5x = 1,70,000$$

$$X = 1,70,000/5 = 34,000.$$

At 30,000 units and 34,000 units, there will be 10% of sales as profit.

At 30,000 units, sales = 7,50,000. Profits = 75,000.

At 34,000 units, sales = 8,50,000. Profits = 85,000.

(iii) No. of units to earn a profit of ₹1,00,000

$$7.5x - 1,50,000 = 1,00,000$$

$$X = 2,50,000/7.5 = 33,333 \text{ which exceeds } 32,000 \text{ units.}$$

Hence fixed costs = 1,70,000.

$$X = 2,70,000/7.5 = 36,000 \text{ units.}$$

$$\text{Activity Level} = 36,000/40,000 = 90\%$$

(b) Discuss the accounting treatment for spoilage and defectives in Cost Accounting.

[5]

Answer:

Spoilage is that production which is not technically approved and cannot be rectified. It has a minor value for recovery as scrap. It is generally planned that in a production process a certain percentage of production will be spoiled due to normal reasons. The loss on account of spoilage to the extent planned is borne by good units of production. When the spoilage is more than the planned percentage, it is considered abnormal loss. After considering value realised as scrap, the amount of such abnormal loss is transferred to Costing Profit and Loss account. On the other hand, defective is that production which can be reworked and rectified. In the case of Defective, like spoilage a certain percentage of production can be predetermined as to be likely defective. Loss of production due to defectives to the extent it is already planned is to be borne by good units of production. The loss of production in excess of planned defectives is to be treated as abnormal loss and transferred to Costing Profit and Loss Account.

Question.5

(a) In a manufacturing company, factory overhead was recovered at a pre-determined rate of ₹28 per labour hour. The total factory overhead incurred and the actual labour hours worked for October 2014 were ₹3,61,000 and 11,200 hours. Out of the ₹3,61,000, ₹22,400 became payable due to a one time award of a labour court. Out of the 75,000 units produced during the month, 60,000 were sold. 40% of the unrecovered overheads were due to defective planning and the rest was due to increase in overhead cost. Explain with figures how the under absorbed overhead would be treated in cost accounts. [6]

Answer:

Amount of under – absorbed factory overhead:

Total factory overheads incurred	₹3,61,000
Less: amount paid according to Labour Court award (Assumed to be non- recurring)	₹22,400
Net overhead incurred	₹3,38,600
Less: Overhead recovered for 11,200 hours @ ₹28 ph	₹3,13,600
Under absorbed factory overheads	₹25,000

Treatment

(i) Due to defective planning, 40% of ₹25,000 = ₹10,000 treated as abnormal and should be debited to P/L A/c

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- (ii) Remaining 60% of ₹25,000 = ₹15,000 should be distributed over finished goods stock and cost of sales by using supplementary rate - ₹15,000/75,000 = ₹0.20 per unit.
Charged to finished goods stock 75,000- 60,000 = 15,000 units @ ₹0.20 per unit = ₹3,000
Charged to cost of sales = 60,000 x 0.20 per unit = ₹12,000

(b) During a month, the following information is obtained from the Personnel Department of a manufacturing company:

- (i) Labour force at the beginning of the month was 1,900 and at the end of the month was 2,100.
(ii) 25 people left while 40 were discharged. 280 workers were engaged out of which only 30 were appointed in the vacancy created by the number of workers separated and the rest on account of an expansion scheme.

Calculate the labour turnover rate by the Replacement and Flux methods. [4]

Answer:

- (i) Replacement method = $\frac{\text{No. of Replacement}}{\text{No. of Avg. worker during the period}} \times 100$
= $\frac{30}{2,000} \times 100 = 1.5\%$
(ii) Flux method = $\frac{1}{2}[\text{No. of additions} + \text{No. of Separation}] / \text{No. of Avg. worker during the period}$
= $\frac{1}{2} (280 + 65) / 2,000 \times 100 = 8.625\%$

(c) Discuss the accounting treatment of idle time wages and overtime wages in cost accounts. [2 +3]

Answer:

Accounting treatment of idle time wages in cost accounts:

Normal idle time is treated as a part of the cost of production. Thus, in the case of direct workers, an allowance for normal idle time is built into the labour cost rates. In the case of indirect workers, normal idle time is spread over all the products or jobs through the process of absorption of factory overheads.

Abnormal idle time: It is defined as the idle time which arises on account of abnormal causes; e.g. strikes, lockouts, floods, major breakdown of machinery, fire etc. such an idle time is uncontrollable.

The cost of abnormal idle time due to any reason should be charged to Costing Profit & Loss Account.

Accounting treatment of overtime wages in cost accounts: If overtime is resorted to at the desire of the customer, then the overtime premium may be charged to the job directly.

- If overtime is required to cope with general production programme or for meeting urgent orders, the overtime premium should be treated, as overhead cost of particular department or cost center which works overtime.
- Overtime worked on account of abnormal conditions should be charged to costing Profit & Loss Account.
- If overtime is worked in a department due to the fault of another department the overtime premium should be charged to the latter department.

Question.6

(a) From the following figures, do the reconciliation process to arrive at the net profit or loss as per financial accounts:

Particulars	Figures (₹)
Net loss as per Costing Records	1,72,400

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Works overhead under recovered in Costing	3,120
Administrative overhead recovered in excess in Costing	1,700
Depreciation charged in Financial Records	11,200
Depreciation recovered in Costing	12,500
Interest received not included in Costing	8,000
Obsolescence charged (loss) in Financial Records	5,700
Income Tax provide in Financial Books	40,300
Bank Interest credited in Financial Books	750
Store Adjustment (Credit) in Financial Books	475
Value of Opening stock in Cost A/cs	52,600
Value of Opening stock in Financial A/cs	54,000
Value of Closing stock in Cost A/cs	52,000
Value of Closing stock in Financial A/cs	49,600
Interest charged in Cost A/cs but not in Financial A/cs	6,000
Preliminary expenses written off in Financial A/cs	800
Provision for Doubtful Debts in Financial A/cs	150

[10]

Answer:

Reconciliation Statement

(Figures in ₹)

	Add: (+)	Subtract (-)
Net loss as per Costing Records	1,72,400	
Works overhead under recovered in Costing	3,120	
Administrative overhead recovered in excess		1,700
Depreciation charged in Financial Records	11,200	
Depreciation recovered in Costing		12,500
Interest received not included in costing		8,000
Obsolescence charged (loss) in financial records	5,700	
Income tax provided in financial books	40,300	
Bank Interest credited in Financial books		750
Store Adjustment (credit) in Financial books		475
Value of Opening stock in Cost A/cs		52,600*
Value of Opening stock in Financial A/cs	54,000*	
Value of Closing stock in Cost A/cs	52,000	
Value of Closing stock in Financial A/cs		49,600*
Interest charged in Cost A/cs but not in Financial A/cs		6,000
Preliminary expenses written off in Financial A/cs	800	
Provision for doubtful debts in Financial A/cs	150	
Loss as per Financial Accounts		2,08,045

*These figures may ideally be shown as Undervalued Opening Stock 1,400#
Undervalued Closing Stock 2,400#

(b) List out the features of Standard Cost.

[5]

Answer:

The main features of Standard Cost are stated below:

- Predetermined cost on scientific basis.
- Built up from the assessment scientific basis.
- Built up from the assessment of the value of cost elements.
- Emphasizes what should be the cost
- Serves as effective tools for cost control
- Promotes possible cost reduction

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- Forms basis for establishing bids and contracts and for setting selling prices.
- Facilities 'Management by exception'.
- Used as an aid to budgeting
- Provides incentive and motivation to work with greater efforts and vigilance for achieving standard.

Question.7

- (a) A Primary School has a total of 150 students consisting of 5 sections with 30 students per section. The school plans for outing around the city during the weekend. A private transport operator has come forward to hire the buses for taking the students. Each bus will have a Maximum capacity of 50 (excluding 2 seats reserved for teachers accompanying the students). The school will employ two teachers for each bus, paying them allowances of ₹100 per teacher. The operator will hire out the required number of buses. The following are the other cost estimates:

Breakfast ₹10 per student

Lunch ₹20 per student

Tea ₹6 per student

Entrance fee at zoo ₹4 per student

Rent per bus ₹1,300

Special permit fees ₹100 per bus

Block entrance fees at planetarium ₹500

Prizes to students for games ₹500

No costs are incurred in respect of accompanying teachers (except allowance of ₹100 per teacher).

You are required to prepare a statement showing total cost and also average cost per student for the levels of 30, 60, 90, 120 and 150 students. [3+3+3+1=10]

Answer:

Statement Showing Cost per students at Various Level

Particulars	Amount (₹)				
	30 students	60 students	90 students	120 students	150 students
I. Variable Cost					
Breakfast (₹10 per student)	300	600	900	1,200	1,500
Lunch (₹20 per student)	600	1,200	1,800	2,400	3,000
Tea (₹6 per student)	180	360	540	720	900
Entrance Fee (₹4 per student)	120	240	360	480	600
Total	1,200	2,400	3,600	4,800	6,000

II. Semi-Variable Cost	Amount (₹)				
	30 students	60 students	90 students	120 students	150 students
Rent of bus	1,300	2,600	2,600	3,900	3,900
Permit fees	100	200	200	300	300
Allowance to teachers	200	400	400	600	600
Total	1,600	3,200	3,200	4,800	4,800

III. Fixed Cost	Amount (₹)				
	30 students	60 students	90 students	120 students	150 students
Block entrance fees at planetarium	500	500	500	500	500

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Prizes to student for games	500	500	500	500	500
Total	1,000	1,000	1,000	1,000	1,000
IV. Total Cost (I + II + III)	3,800	6,600	7,800	10,600	11,800
Av. Cost per student	126.67	110.00	86.67	88.33	78.67

Average Cost per student is minimum at 150 student level, i.e. ₹78.67

(b) Job Order Costing method is a Specific Order Costing method.-Explain. [5]

Answer:

Job order costing is defined as the form of specific order costing which applies where work is undertaken on the basis of customer's specific requirement and each order is of comparatively short duration. The work is usually carried out within a factory and moves through processes and operations as a continuously identifiable unit. The term may be applied to work.

The main features of job costing method can be summarized as follows:-

- Product is not meant for a mass market.
- Production is undertaken after obtaining customer's order.
- Each order is different and suited to the requirement of the customer.
- Job can be identified at each stage of production from start to finish.
- Production cycle is usually short but a large order may extend beyond one year.
- Cost information is collected by job order.

Question.8 Write short notes on (any three) of the following: [5x3=15]

- (a) Inter-process Profits:**
- (b) Business performance measurement systems**
- (c) features of Process Costing**
- (d) Cost Ledger (maintained in a Costing Department)**
- (e) Cost Apportionment and Cost Absorption**

Answer:

(a) Inter-process Profits:

The output of one process is transferred to the subsequent process at cost price. However, sometimes the transfer is made at cost plus certain percentage of profit. This is done when each process is treated as a profit centre. In such case, the difference between the debit and credit side of the process account represents profit or loss and is transferred to the P & L Account. The stocks at the end and at the beginning contain an element of unrealized profits, which have to be written back in this method. If the profit element contained in the closing inventory is more than the profit element in the opening inventory, profit will be overstated and vice versa. Profit is realized only on the goods sold, thus to obtain the actual profit the main task would be to calculate the profit element contained in the inventories. In order to compute the profit element, in closing inventory and to obtain the net realized profits for a period, three columns have to be shown in the Ledger for showing the cost, unrealized profit and the transfer price.

(b) Business performance measurement systems:

Business Performance Measurement (BPM) systems have grown in use and popularity over the past twenty years. Firms adopt BPM systems for a variety of reasons, but chiefly to improve control over the firm in ways that traditional accounting systems have not allowed. Several approaches, or frameworks, for building and managing BPM systems have evolved with the balanced scorecard as the dominant framework in use today. Despite the growing use of BPM systems in organizations of all kinds, significant problems cause firms to experience difficulty in implementing BPM systems. The problems range

across a variety of topics : excessive diversity in the field of study, data quality and information system integration problems, lack of linkage to strategy, fundamental differences in how a strategy is formulated and executed in the firm, ill-defined metrics identification processes, high levels of change in BPM systems, analytical skills challenges, knowledge as a social and non-deterministic phenomenon, judgment and decision biases (from prospect theory literature) and organizational defenses that can undermine successful BPM systems use. Why Measure Business Performance?

Business performance measurement has a variety of uses. Companies measure business performance as follows:

- To monitor and control
- To drive improvement
- To maximize the effectiveness of the improvement effort
- To achieve alignment with organizational goals and objectives.
- To reward and to discipline.

(c) Process Costing is one of the methods of Costing, which is used in those industries where the production is in continuous process, i.e., the output of one process becomes the input of the subsequent process and so on. The objective of Process Costing is to find out the cost of each process by identifying the direct costs with the particulars process and apportioning the indirect cost on some suitable basis.

The features of process costing are as follows:

- The production is in continuous flow and is uniform. All units coming out as finished products are uniform with each other in all respects.
- The unit cost is obtained by dividing the total costs for a particular period by the total output. This is the average cost of the product units.
- The product is manufactured in a continuous flow and hence individual units lose their identity.
- Cost per process is ascertained and cost of each process is transferred to the subsequent process until the finished product emerges.
- Sometimes each process may be treated as profit centre and so while transferring the costs from one process to another, a percentage of profit is added in the cost of that process. This is known as inter process profit and needs to be accounted for in the process cost accounts.

(d) Cost Ledger (maintained in a Costing Department)

Cost Ledger maintains the accounts relating to Income and Expenditure. The following accounts are maintained in this ledger.

- Cost Control Accounts-These accounts are maintained to exercise control over the three subsidiary ledgers maintained, such as Stores ledger, work-in-progress ledger, finished goods / stock ledger and also to complete the double entry in cost accounts. The important cost control accounts are as follows:-

(I) Stores Ledger control account, (II) Work-in-progress ledger control account, (III) Finished goods ledger control account and (IV) General Ledger adjustment account.

- Other Accounts-

They include all other impersonal accounts [real as well as nominal] which effect costs, e.g. wages control account, factory overhead accounts, administration overhead account, selling & distribution overhead account, cost of sales account, etc. Depending upon the requirement, the following additional accounts may also be maintained: Overhead suspense account, Capital orders account, Service orders account.

- (e) Cost Apportionment is the process of charging cost in an equitable proportion to the various cost centers or departments. This describes the allotment of proportions of overhead to cost center, it is carried out in respect of those items of cost which cannot be allocated to any specific cost centre. For example, salary of general manager cannot be allocated wholly to the production departments as he attends in general to all departments. Therefore, some logical basis is selected for the appointment of such types of cost over various cost centers departments.

Cost Absorption is the process of absorbing all overhead expenses allocated to or apportioned over particular cost centre by the units produced. For example, the manufacturing cost of lathe centre is absorbed by a rate per lathe hour. The purpose behind the absorption is that expenses should be absorbed in the cost of the output of the given period. For overhead absorption some suitable basis has to be adopted.

The formula used for deciding the rate is as follows:

Overhead Absorption Rate = $\frac{\text{Overhead Expenses}}{\text{Units of the base selected}}$