

B Com Hons Delhi (Semester IV)
Paper CH: 4.3 Cost Accounting 2014
(For Regular Course)

Duration: 3 Hours

Maximum Marks: 75

Instructions for Candidates

1. Write your Roll No. on the top immediately on receipt of this question paper.
2. Attempt all questions. Marks are indicated against each question.
3. Use of simple calculator is allowed.
4. All questions of each Section (A, B and) should be attempted together.
5. Answers may be written in Hindi or English but the same medium should be followed throughout the paper.

SECTION A

- Q. 1. (a) "Cost accounting has become an essential tool in the hands of management".
Explain. 7
- (b) A Firm purchases 2000 units of a particular item per year at a unit cost of ₹20.
The ordering cost is ₹50 per order and the inventory carrying cost is 25%.
- (i) Determine the optimal order quantity and the minimum total cost including the purchase cost.
- (ii) If a 3% discount is offered by the supplier for purchases in a lot of 1000 or more, should the firm accept the offer? 8

Or

- (a) Differentiate between the following terms:
- (i) Controllable and uncontrollable Cost
- (ii) Fixed cost and variable Cost 7
- (b) The following transactions occur in the purchase and issue of a material:

March 2	Purchased	4,000 units @ ₹4 per unit
March 5	Purchased	5,000 units @ ₹5 per unit
March 6	Issued	2,000 units
March 8	Purchased	6,000 units @ ₹6 per unit
March 10	Issued	4,000 units
March 15	Refund of surplus from a work order	25 units @ ₹3 per unit

March 17	Issued	1,000 units
March 20	Issued	2,000 units
March 24	Returned to vendor	300 units
		(out of purchases of March 8)
March 28	Purchased	4,500 units @ ₹5.50 per unit
March 30	Issued	3,000 units

The store verifier of the factory noted that on Feb 15 he had found a shortage of 5 units and on March 31 another shortage of 12 units.

Required: From the above particulars prepare the store ledger account using FIFO of pricing of material issues. 8

Q. 2. (a) (i) Briefly discuss time rate and piece rate methods of wage payment. Mention deficiencies of piece rate system. 5

(ii) What is Idle Time? How it is treated in cost accounts? 5

(b) Atlas Engineering Limited accepts a variety of jobs which require both manual and machine operations.

The budgeted profit and loss account for the period 2012-13 is as follows:

Sales ₹75,00,000

Costs:

Direct Materials	₹10,00,000	
Direct labour	₹5,00,000	
Prime cost	₹15,00,000	
Production Overheads	₹30,00,000	
Production costs	₹45,00,000	
Administrative, selling and distribution Overheads	₹15,00,000	₹60,00,000
Profits		₹15,00,000

Other budgeted data:

Labour hours for the period	2,500
Machine hours for the period	1,500
No. of Jobs for the period	300

An enquiry has been received recently from a customer and the production department has prepared the following estimates of the prime cost required for the job:

Direct materials	₹2,500
Direct labour	₹2,000
Prime cost	₹4,500
Labour hours required	80
Machine hours required	50

You are required to:

- (i) Calculate overhead absorption rates for absorption of production overheads by five different methods and comment on the suitability of each.
- (ii) Calculate the production overhead cost of the job order based on each of the above rates.

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Or

- (a) (i) Define labour turnover. Briefly discuss the three methods to measure it.
- (ii) Briefly discuss the treatment of bonus and leave with wages in cost accounts.

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- (b) A machine shop center contains three identical machines of equal capacity. Three operators are employed on all machines, payable ₹20 hour each. The factory works for forty eight hours a week which includes 4 hours setup time. The work is jointly done by the operators. The operators are paid fully for the forty eight hours. In addition they are paid bonus of 10% of productive time wages. Costs are reported for this company on basis of thirteen four-weekly period. The company for the purpose of computing machine hour rate includes the direct wages of the operators and also recoups the factory overheads allocated to the machines. The following details of factory overheads applicable to the cost centre are available:

- (i) Depreciation 10% per annum on original cost of machine. Original cost of each machine is ₹52,000.
- (ii) Maintenance and repairs per week is ₹60.
- (iii) Consumable stores per week per machine are ₹75.
- (iv) Power: 20 units per productive hour per machine at the rate of 80 paise per unit.
- (v) Apportionments to the cost centre: Rent per annum. ₹5,400, heat and light per annum ₹9,720 and foreman's salary per annum ₹12,960.

Required:

- (a) Calculate the cost of running one machine for a four-week period.
- (b) Calculate machine hour rate.

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SECTION B

- Q. 3. XY Engineering Works has a Machine Shop in which it manufactures two Auto Parts "X" and "Y" out of the forgings A and B respectively. For the quarter ending December 2012, the following cost data are available:

Consumption of raw materials – A	₹1,50,000
Consumption of raw materials – B	₹2,00,000
Direct Wages – X	₹36,000
Direct Wages – y	₹32,000
Salaries (Factory)	₹85,000
Stores and spares	₹12,000
Repairs and Maintenance	₹15,000
Power	₹16,000

Insurance	
Depreciation	₹8,000
Other factory overheads	₹50,000
Administration overheads	₹68,000
Selling and distribution overheads	₹64,400
	<u>₹75,000</u>
Total cost	<u>₹8,11,400</u>

You are given the following further information:

(i) Production, sales and machine hours utilized for "X" and "Y" were as under:

Product	X	Y
Production (Units)	6,000	4,000
Sales of above units (₹)	4,80,000	5,20,000
Machine hours utilized	550	450

- (ii) Direct wages paid for each product is used for apportioning salaries and other factory overheads.
- (iii) Factory overhead items like stores and spares, repairs and maintenance, power, insurance and depreciation are charged to cost of both the products on the basis of machine hours used.
- (iv) Administration overheads are apportioned on the basis of respective conversion costs (Wages and all factory overhead items) while selling and distribution overheads on the basis of their sales realizations.
- (v) All the production was sold out.

Required: Prepare cost sheet of both the products and work out profits earned on each of them.

Or

A contractor commenced a contract on 1-7-2012. the costing records concerning the said contract reveals the following information as on 31-3-2013:

Particulars	Amount (₹)
Material sent to site	7,74,300
Labour paid	10,79,000
Labour outstanding as on 31-3-2013	1,02,500
Salary to Engineer	20,500 p.m.
Cost of plant sent to site(1-7-2012) Salary to Supervisor (3/4	7,71,000
time devoted to contract)	9,000 p.m.
Administration and other expenses	4,60,600
Prepaid administration expenses	10,000
Material site as on 31-3-2013	75,800

Plant used for the contract has an estimated life of 7 years with residual value at the end of life ₹50,000. Some of the materials costing ₹13,500 was found unsuitable and sold for ₹10,000. Contract price was ₹45,00,000. On 31-3-2013, two third of the contract was completed. The architect issued certificate covering 50% of the contract price and contractor have been paid ₹20,00,000 on account. Depreciation on plant is charged on straight line basis.

Prepare contract account and show how the items relating to this contract will appear in balance sheet. 15

Q. 4. DPR School is a public school having five buses, each plying in different directions for the transportation of its students. There are two shifts for each bus, one shift is for senior students and other is for junior students. The distance travelled by each bus one way is 8 kms. The school works on an average 25 days in a month and remains close for vacations for three months in a year. Bus fee, however, is payable by the students for 10 months in a year. The details of expenses for a year are as under:

Driver's salary	₹12,000 per month per driver
Cleaner's salary	₹8,000 per month
(Salary payable for all 12 months, one cleaner employed for all the five buses)	
Licence fee, taxes etc.	₹17,600 per bus per annum
Insurance	₹20,400 per bus per annum
Repair and maintenance	₹70,000 per bus per annum
Purchase price of the bus	₹21,00,000 each
Life	12 years
Scrap value	₹3,00,000
Diesel cost	₹48 per litre

Each bus gives an average of 4 kms per litre of diesel. The seating capacity of each bus is 50 students. Students picked up and dropped within a range of 4 kms of distance from the school are charged half the fare and 50% of students travelling in each trip are in this category. Ignore interest. Since the charges are to be based on average cost, you are required to :-

- (i) Prepare a Statement showing the expenses of operating a single bus.
- (ii) Work out the average cost per student per month in respect of
 - (a) Students coming from a distance of upto 4 kms from the school.
 - (b) Students coming from a distance of beyond 4 kms from the school.

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Or

The following data relates to process B:

(i) Opening work-in-progress:	4,000 units
Degree of completion:	
Materials 100%	₹24,000

Labour 60%	₹14,400
Overheads 60%	₹7,200
(ii) Received during the month of April 2013 from Process A 40,000 units	₹1,71,000
(iii) Expenses incurred in Process B during the month:	
Materials	₹79,000
Labour	₹1,38,230
Overheads	₹69,120
(iv) Closing work-in-progress:	3,000 units
Degree of completion:	
Material	100%
Labour and Overheads	60%
(v) Units Scrapped	4,000
Degree of Completion:	
Materials	100%
Labour and Overheads	80%
(vi) Normal loss: 5% of Current input.	
(vii) Spoiled goods realized ₹1.50 per unit on sale.	
(viii) Completed units are transferred to warehouse.	

Assume that FIFO method is used for WIP Inventory valuation.

Required:

- Statement of equivalent production
- Statement showing cost per unit for each element
- Statement of apportionment of cost
- Process B account
- Any other account necessary

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SECTION C

Q. 5. (a) Write short notes on any two of the following:

- Waste and scrap
- Departmentalization of overheads
- Integrated accounts

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(b) The following is the summarized version of Trading and profit and loss account of continental Enterprise Ltd. For the year ended December 31, 2012.

Particulars	Amount	Particulars	Amount
To Material	48,000	By sales	1,00,000
To wages	36,000	By cl. stock of finished	20,400
To work expenses	24,000	goods	

(Continue)

To gross profits	18,400	By work in progress	
		Material 3,000	
		wages 1,800	
		work exp. <u>1,200</u>	6,000
	1,26,400		1,26,400
To administration expense	6,000	By gross profits	18,400
To selling overheads	4,000		
To net profits	8,400		
	<u>14,400</u>		<u>14,400</u>

During the year 6000 units were manufactured and 4800 of them were sold. The costing records show that works overheads have to be absorbed @ 50% of direct wages, administration overheads at ₹1.50 per unit produced and selling overheads @ ₹1 per unit sold. Financial and cost account books show different profits.

Required: (i) Calculate profit as per cost accounts books.

(ii) Prepare a statement reconciling two profits disclosed in two set of books, clearly bringing out the reasons for the difference. 8

Or

(a) Write short notes on any two of the following:

- Impact on profit of FIFO and LIFO methods of pricing of material issues under inflationary conditions.
- Escalation clause in contract costing.
- Treatment of research and development cost. 7

(b) Why there is a need to reconcile the profits disclosed in financial and cost account books? Discuss in detail the causes of such differences? 8