

Chapter-wise Test (1008)

Job and Batch Costing

Instructions

- All questions are compulsory.
- Test Duration will be one hour and 10 minutes, starting from 11:00 AM to 12:10 PM
- 5 minutes of reading time will be provided before 11, i.e. question paper will be shared by 10:55 AM.
- Share your scanned answer sheets by 12:15 on the below link
<https://forms.gle/wLRZWiTvMELNpCeC6>

1. In a factory following the Job Costing Method, an abstract from the work-in-progress as on 30th September was prepared as under.

Job No.	Materials (Rs.)	Direct hrs.	Labour (Rs.)	Factory Overheads applied (Rs.)
115	1325	400 hrs.	800	640
118	810	250 hrs.	500	400
120	765	300 hrs.	475	380
	2,900		1,775	1,420

Materials used in October were as follows:

Materials Requisition No.	Job No.	Cost (Rs.)
54	118	300
55	118	425
56	118	515
57	120	665
58	121	910
59	124	720
		3,535

A summary for labour hours deployed during October is as under:

Job No.	Number of Hours

	Shop A	Shop B
115	25	25
118	90	30
120	75	10
121	65	--
124	25	10
	275	75
Indirect Labour: Waiting of material	20	10
Machine breakdown	10	5
Idle time	5	6
Overtime premium	6	5
	316	101

A shop credit slip was issued in October, that material issued under Requisition No. 54 was returned back to stores as being not suitable. A material transfer note issued in October indicated that material issued under Requisition No. 55 for Job 118 was directed to Job 124.

The hourly rate in shop A per labour hour is Rs. 3 per hour while at shop B, it is

Rs. 2 per hour. The factory overhead is applied at the same rate as in September. Job 115, 118 and 120 were completed in October.

You are asked to COMPUTE the factory cost of the completed jobs. It is the practice of the management to put a 10% on the factory cost to cover administration and selling overheads and invoice the job to the customer on a total cost plus 20% basis. DETERMINE the invoice price of these three jobs?

(7 Marks)

2. XYZ Ltd. has obtained an order to supply 48000 bearings per year from a concern. On a steady basis, it is estimated that it costs Rs. 0.20 as inventory holding cost per bearing per month and the set-up cost per run of bearing manufacture is Rs. 384.

You are required to:

- (i) compute the optimum run size and number of runs for bearing manufacture.
- (ii) compute the interval between two consecutive runs.
- (iii) find out the extra costs to be incurred, if company adopts a policy to manufacture 8000 bearings per run as compared to optimum run size.
- (iv) give your opinion regarding run size of bearing

manufacture. Assume 365 days in a year.

(6 Marks)

3. A jobbing factory has undertaken to supply 200 pieces of a component per month for the ensuing six months. Every month a batch order is opened against which materials and labour hours are booked at actual. Overheads are levied at a rate per labour hour. The selling price contracted for is Rs. 80 per piece. From the following data.

COMPUTE the cost and profit per piece of each batch order and overall position of the order for 1,200 pieces.

Month	Batch Output (Pieces)	Material cost	Direct wages	Direct labour
		(Rs.)	(Rs.)	(Hours)
January	210	6,500	1,200	240
February	200	6,400	1,400	280
March	220	6,800	1,500	280
April	180	6,300	1,400	270
May	200	7,000	1,500	300
June	220	7,200	1,600	320

The other details are:

Month	Chargeable expenses	Direct labour
	(Rs.)	Hours
January	1,20,000	4,800
February	1,05,600	4,400
March	1,20,000	5,000
April	1,05,800	4,600
May	1,30,000	5,000
June	1,20,000	4,800

([5 Marks])

4. Arnav Ltd. operates in beverages industry where it manufactures soft- drink in three sizes of Large (3 litres), Medium (1.5 litres) and Small (600 ml) bottles. The products are processed

in batches. The 5,000 litres capacity processing plant consumes electricity of 90 Kilowatts per hour and a batch takes 1 hour 45 minutes to complete. Only symmetric size of products can be processed at a time. The machine set-up takes 15 minutes to get ready for next batch processing. During the set-up power consumption is only 20%.

- (i) The current price of Large, Medium and Small are Rs. 150, Rs. 90 and Rs. 50 respectively.
- (ii) To produce a litre of beverage, 14 litres of raw material-W and 25 ml of Material-C are required which costs Rs. 0.50 and Rs. 1,000 per litre respectively.
- (iii) 20 direct workers are required. The workers are paid Rs. 880 for 8 hours shift of work.
- (iv) The average packing cost per bottle is Rs. 3
- (v) Power cost is Rs. 7 per Kilowatt -hour (Kwh)
- (vi) Other variable cost is Rs. 30,000 per batch.
- (vii) Fixed cost (Administration and marketing) is Rs. 4,90,00,000.
- (viii) The holding cost is Rs. 1 per bottle per annum.

The marketing team has surveyed the following demand (bottle) of the product:

Large	Medium	Small
3,00,000	7,50,000	20,00,000

You are required to CALCULATE profit/ loss per batch and also COMPUTE Economic Batch Quantity (EBQ). **(10 Marks)**

5. SM Motors Ltd. is a manufacturer of auto components. Following are the details of expenses for the year 2019-20:

	(Rs.)
(i) Opening Stock of Material	15,00,000
(ii) Closing Stock of Material	20,00,000
(iii) Purchase of Material	1,80,50,000
(iv) Direct Labour	90,50,000
(v) Factory Overhead	30,80,000
(vi) Administrative Overhead	20,50,400

During the FY 2020-21, the company has received an order from a car manufacturer where it estimates that the cost of material and labour will be Rs. 80,00,000 and Rs. 40,50,000 respectively. The company charges factory overhead as a percentage of direct labour and administrative overheads as a percentage of factory cost based on previous year's cost.

Cost of delivery of the components at customer's premises is estimated at Rs. 4,50,000. You are required to:

- (i) CALCULATE the overhead recovery rates based on actual costs for 2019-20.
- (ii) PREPARE a Job cost sheet for the order received and the price to be quoted if the desired profit is 25% on sales. **(7 Marks)**