

# JAIPURIA INSTITUTE OF MANAGEMENT, NOIDA PGDM (G, M, SM) SECOND TRIMESTER (Batch 2020-22) END TERM EXAMINATIONS, FEBRUARY 2021 Set-I

Course Name	Management Accounting	Course Code	G/S/M/FIN201
Max. Time	2 hours	Max. Marks	40

Roll number	

- 1. Attempt all questions. Your answer should begin after the marked area separated by line.
- 2. NOTE that Q2 and Q3 have a choice each. Attempt 'EITHER' or 'OR'.
- 3. Solve each question using the Excel functionality only, wherever applicable.
- 4. You can use books and notes. Use of headphones/earphones/cell phones are NOT allowed during the examination.
- 5. Any two or more answer scrips with similar/verbatim answers will be cancelled and can be subjected to stricter punishments.
- 6. Examinees' videos must be "on" during exam.
- 7. For uploading of Excel no extra time will be given.

No. of questions	4
Maximum marks	40
Marks obtained	

#### Q1.a. (5 marks)

	2019	2020
Sales	2000000	2400000
Profit	220000	350000

- a Compute BEP sales;
- b Calculate Sales to earn Rs.300000 profit.

## Q1.b.(5 marks)

Kolkata Bakery manufactures two types of bread, which it sells as wholesale products to various specialty retail bakeries. Each loaf of bread requires a three-step process. The first step is mixing. The mixing department combines all of the necessary ingredients to create the dough and processes it through high-speed mixers. The dough is then left to rise before baking. The second step is baking, which is an entirely automated process. The baking department molds the dough into its final shape and bakes each loaf of bread in a high-temperature oven. The final step is finishing, which is an entirely manual process. The finishing department coats each loaf of bread with a special glaze, allows the bread to cool, and then carefully packages each loaf in a specialty carton for sale in retail bakeries.

# Required:

Costs involved in the process are listed next. For each cost, indicate whether it is a direct variable, direct fixed, indirect variable, or indirect fixed cost, assuming "units of production of each kind of bread" is the cost object. No need to explain any reason.

## Yeast

Packing material
Depreciation on ovens
Rent on factory building
Factory fire insurance
Finishing deptt hourly wages
Mixing deptt manager salary
Night watchman in factory
Machine maintenance
Fuel of delivery vans

Cherry Boss Inc. manufactures and markets shoe polish in three shades- A, B and C. Except the colour, product characteristics and the inputs are identical. Owing to some constraints on some of the inputs, the company is facing problems.

		Α	В	С	Total
Selling Price	Per unit	24	32	50	
	_				
Material	Rs.3 / kg	9	12	18	
Labour	Rs.20 / hr	5	8	16	
Total VC	Per unit	14	20	34	
Fixed cost	Total				300000
Qty produced and sold	units	8000	10000	14000	
Describeral (for all and all					

Required (treat each case independently)

- a If the warehousing capacity is limited, compute the preference rank;
- b If the sales (amount) is limiting factor, calculate the preference rank;
- c If the material quantity is in short suppy, compute the preference rank;
- d If the labour hours are key factor, calculate the preference rank.

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# Purchase of raw material

The following information has been obtained from the records of Zeron Ltd. for the period from December 01, 2020 to December 31, 2020.

	Dec. 01, 2020	Dec. 31, 2020
Cost of raw materials	60000	50000
Work-in-progress cost	12000	15000
Cost of finished goods stock	90000	110000
Purchase of raw material		480000
Wages paid		240000
Factory overheads		100000
Administration overheads		50000
Selling and distribution overheads		25000
Sales		1000000

Prepare a cost sheet showing the following:

- a Raw material consumed
- b Prime cost
- c Factory cost
- d Cost of goods sold
- e Profit

Bikanee Cement is a small cement plant, primarily catering to the captive consumption of cement of some big auto manufacturers. Bikanee has provided sales and profit / loss data for past 12 months. With the help of regression analysis, you are required to:

- a. calculate fixed costs;
- b. calculate break even sales;
- c. calculate sales to earn 10% profit on sales.

Month	Sales	Profit/-Loss
January	324322	10123
February	361287	14997
March	379952	25832
April	402103	27093
May	422445	40513
June	472636	49826
July	463097	48083
August	439901	41126
September	r 319325	9872
October	246723	-5056
November	252788	-9178
December	229439	-12723

Electric Limited (EL) makes four components - M, N, O, and P for which cost in the forthcoming year is expressed as follows:

	M	N	0	Р	Total
Production in units	1000	2000	4000	3000	
Unit variable costs:					
Direct materials	4	5	2	4	
Direct labour	8	9	4	6	
Variable production overheads	2	3	1	2	
Total fixed overheads (annual) ~					
Incurred as a direct consequence	of makin	ıg			
M	1000				
N		5000			
0			6000		
Р				8000	

Other fixed overheads (common or joint)

30000

A subcontractor, Proxy OEM Ltd. has offered to supply M, N, O, and P for Rs.12, Rs.21, Rs.10, and Rs.14 respectively. Advise EL on the necessary course of action. Analyse the proposal quantitatively.

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Tinda Lock Pvt Ltd. manufactures two types of car locks - Ciaz and City and applies overheads on the basis of direct-labour hours. The budgeted overheads and direct-labour hours for the month of December, 2020 are Rs.12,42,500 and 20,000 hours respectively. The information about the company's products is as follows:

		Ciaz lock	City lock
Budgeted production volume	Units	2500	3150
Direct material cost	Rs. / unit	300	450
Direct labour cost -			
Ciaz: 3 hours @ 150 per hour	Rs. / unit	450	
City: 4 hours @ 150 per hour	Rs. / unit		600

Tinda's total overheads are Rs.12,42,500 and can be identified with following three activities:

	Rs.	Driver
Order processing	210000	number of orders processed
Machine processing	875000	machine hours worked
Product inspection	157500	inspection hours

The data relevant to these activities is given in the following table:

	0	rder	Machine	hour	Inspection	1
	pr	ocessed	worked		hours	
Ciaz lock		350		23000		4000
City lock		250		27000	1	11000
	Total	600		50000	1	15000

a Assuming the overheads are applied based on direct labour hours, calculate the recovery rate and compute the per unit cost of both the locks (traditional costing);

b Compute the per unit cost of both the locks on the basis of activity based costing;

c Analyse under costing and over costing, if any.