University of East London

Pioneering Futures Since 1898

SECTION A:

(to be completed by the student)

Please complete Section A in Block Capitals making sure that you include your Student Number and Module Code.	
Student(s) Number:	
Programme:(e.g. Business Management)	
Module Title: (e.g. Accounting)	
Module Code:	
Assessment date:	

I confirm that no part of this assignment has been copied from material belonging to any other person e.g. from a book, handout, or another student. I am aware that it is a breach of UEL regulations to copy the work of another and that attempting to do so renders me liable to disciplinary proceedings.

SECTION B:*(to be completed by the tutor marking assessment)*

Independent Negotiated Learning Assessment Criteria

Assessment Points	Criteria	Max mark %	Feedback	Mark Achieved %
Question 1	1a	15		
	1b	15		
	1c	10		
	1d	10		
Question 2	2a.	25		
	2b	25		
	Total mark	**100**		

Good practice demonstrated:	
Aspect to consider for improvement:	
Tutor's Name:	
Date Received:	

Alternative Assessment Template

This document provides a template for use to submit your alternative assessment.

- All elements of the tasks should be submitted via Turnitin as a SINGLE DOCUMENT.
- Turnitin is the SOLE MEANS OF SUBMISSION for the alternative assessment and no physical submission or submission by email will be accepted.

TASK 1

a) Calculate target cost and actual cost per patron and state Lagoon will achieve target operating income of 35% at £35 before any changes.

Particulars	**Amount**
Number of patrons	55000
Ticket cost	£35
Weekly revenue (Number of patrons*ticket cost)	£1925000
Target profit Margin (Weekly revenue* 35%)	£673750
Target weekly cost (Weekly revenue- target margin)	£1251250
Desired cost per patron (£1251250/55000)	£22.575

Activity Description	**Cost Driver**	**Cost per Unit**	**Total costs**
Ticket Sales and verification	55000	£3.35	£184250
Operating Attractions	11340	£90	£1020600
Litter patrol	1750 hours	£20	£35000
Total Weekly costs			£1239850
Cost per patron (£1239850/55000)			£22.4
Operating Profit (£1925000-£1239850)			£685150

Lagoon does meet the target operating income of 35% as the weekly revenue is higher than the total weekly costs of running an amusement park.

The target of the lagoon to achieve 35% of revenues at £35 per ticket sold has accomplished as mention above.

Particulars	**Amount**
Weekly revenue	£1925000
Target income @35%	£673750
Operating profit	£685150
Surplus	£11400

b) Determine operating profit after changes and state will lagoon meet its target operating income in pounds in above part a or not.

Particulars	**Amount**
Number of patrons	55000
Ticket cost	£33
Weekly revenue (Number of patrons*ticket cost)	£1815000
Target profit Margin (Weekly revenue* 35%)	£635250
Target weekly cost (Weekly revenue- target margin)	£1179750
Desired cost per patron (£1179750/55000)	£21.45

Activity Description	**Cost Driver**	**Cost per Unit**	**Total costs**
Ticket Sales and verification	55000	£3.00	£165000
Operating Attractions	10340	£90	£930600
Litter patrol	1400 hours	£20	£28000
Total Weekly costs			£1123600
Cost per patron (£1123600/55000)			£20.42

Operating Profit (£1815000-£1123600)			£691400

After the ticket price reduced from £35 to £33, the still lagoon achieves its target of 35% of revenue as the operating profit is higher than the desired target income.

Target income accounts for £635250 and the operating profit that arises after changes are £691400.

c) Discuss the challenges encounter in meeting target costs at the lagoon and state the way to overcome the same

Management of Lagoon encountered some of the challenges in achieving the target cost are mentioned as below:

Competition seems a direct challenge for Lagoon amusement park to shift the interest of patrons towards its park but still, they managed to attract 55000 patrons every week.

To overcome the challenge of managing the number of visitors every week, lagoon reduces the ticket price of the amusement park from £35 to £33.

The increasing cost of park maintenance and other ancillary elements inflated the ticket price of the amusement park.

To deal with this issue, the lagoon reduces the indirect cost of selling and verifying tickets by 0.35, cut down 1000 attraction runs, and decreasing patrol hours by 20% to stabilize the profit and achieved the target income of 35%.

d) State lagoon achieve its requirement in part a or not and if not then how many lagoons need to decrease value engineering costs to meet the target.

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Operating Profit (£1815000-£1123600)			£691400
Tax on energy (£3*10340)			(£31020)
Operating profit after Tax			£660380

After the imposition of a carbon tax on energy consumption, the operating profit after tax amounts to £660380 that satisfies the requirement of Lagoon to achieve the 35% of the weekly revenue.

TASK 2

a) Calculate the number of units to produce by Wechsler for A130, B324, and C587

Particulars	**A130**	**B324**	**C587**
Selling Price	£252	£168	£210
Variable costs			

Direct Materials	£72	£45	£27
Labour and other costs	£84	£81	£120
Total Variable costs	£156	£126	£147
Contribution (Sales-Variable costs)	£96	£42	£63
Direct material per unit of Pounds	8lb	5lb	3lb
Contribution margin per unit (Contribution/DM per unit of Pounds)	£12 (£96/8)	£8.40 (£42/5)	£21 (£63/3)

Wechsler needs to produce a minimum of 200 units of each product. It is essential to determine the minimum requirements.

Particulars	**A130**	**B324**	**C587**	**Total**
Minimum production units	200	200	200	
Quantity of brac per unit	8	5	3	
Pound need to produce the minimum units	1600lb	1000lb	600lb	3200lb

Maximum 5000 pounds held available every month with Wechsler, now 1800 pounds is left from 5000 by deducting the minimum units of pounds(5000-3200). C587 has the highest contribution margin of £21 per lb however 1800 lb is utilized in producing C587.

Per unit of C587 requires 3 pounds of brac that means 600 units of C587 require a total of 1800 pounds of brac in the manufacturing of the product.

Following a combination of units yields the highest contribution margin considering the 5000-pound constraint of Brac is:

Particulars	Units
A130	200 (minimum)
B324	200 (minimum)
C587	800 (200 units minimum and 600 units additional)

Wechsler needs to produce the minimum units of 200 for A130 and B324 products and 800 units for C587. Reason of additional 600 units determined above as out of 5000 pounds after deducting the Direct material required for the product, remaining 1800 pounds utilized for C587 as the contribution margin of C587 is highest per pound.

b) Determine the maximum amount Wechsler would intend to pay for 1200 pounds of Brac

Particulars (C587)	**Amount**
Selling price	£210
Labor and other costs	£120
Contribution Margin	£90
DM quantity of Brac	3
DM cost per pound that Wechsler willing to pay	£30

Wechsler has a shortage of materials over the demand in the market. Wechsler is willing to pay £21 per pound for C587 product for an additional 1200 pounds.

Wechsler would willing to pay £30 (£9 as cost per product and £21 as contribution margin) for another 1200 pounds. Per product of C587 requires 3 pounds that implies producing 400 extra units (1200 pounds/3).

The maximum amount payable by Wechsler gets different in case of demand arises for products other than C587.

After C587, the highest contribution margin generates by A130 that states that Wechsler would willing to pay £12 per pound. Maximum pay for an additional pound accounts to £21(£9+£12).

Lastly, if demand arises for a third product namely B324, then Wechsler would willing to pay £8.40 per pound the maximum amount per pound would be £17.40(£8.40+£9).