



Prifysgol Cymru
Y Drindod Dewi Sant
University of Wales
Trinity Saint David

LOCATION: SWANSEA

LLEOLIAD: ABERTAWE

LEVEL 5

LEFEL 5

EXAMINATION PERIOD
AUG 2020

CYFNOD ARHOLIADAU
2020

MODULE CODE:
M5X01176

MANAGEMENT, INNOVATION & SUSTAINABILITY

TIME: 2 HOURS

ALL CANDIDATES TO ANSWER THREE QUESTIONS FROM FOUR

Equipment or materials required – Calculators may be used
Adnoddau neu ddefnyddiau sydd eu hangen - Dim

Question 1

KCYE Manufacturing has decided to invest in new milling machines. The company has evaluated three options and initial capital investment in each project is £350,000 and the anticipated cash flows for each project are: -

Year	Project 1 £	Project 2 £	Project 3 £
0	(325,000)	(325,000)	(325,000)
1	120,000	75,000	140,000
2	140,000	100,000	100,000
3	180,000	120,000	160,000
4	130,000	140,000	160,000

- a) Calculate the payback for each project in years and months.

(9 marks)

- b) Calculate the net present value for each project using a discount factor of 12%.

Discount factors at 12%

Year	Discount factor
0	1.00
1	0.8929
2	0.7972
3	0.7113
4	0.6355

(9 marks)

- c) Comment on your findings and state which project you would choose.

(7 marks)

Question 2

- a) Explain concisely **five** reasons why advertising is used by companies to promote their products or services.
(6 marks)
- b) A well planned advertisement should aim to achieve a number of different goals. Use the AIDA model to discuss four goals that an advertisement should aim to achieve.
(8 marks)
- c) Pricing is a very important aspect of marketing and should not be taken for granted. Describe three typical aims of pricing.
(6 marks)
- d) Pear Computing Ltd have developed a new range of USB memory sticks that are waterproof. Demand for the memory sticks has been very good and the company wants to maximise its profits. Evaluate two pricing methods that the company could use.
(5 marks)

Question 3

HMT engineering produce restraining harnesses for performance vehicles for the aftermarket. HMT has fixed overheads of £1,600,000 per annum. Direct costs, variable cost and variable overheads taken together average £16 per harness. HMT have the capacity to manufacture up to 60,000 units per annum. The finished harness sells for £56.

- a) Calculate the break even point.
(5marks)
- b) Draw and label a break even chart
(7marks)
- c) What is the margin of safety at 45,000 units
(4marks)
- d) What is the value of profit at 90% capacity
(5marks)
- e) Define fixed and variable costs and provide examples
(4marks)

Question 4



Arcimoto are developers of ultra-efficient electric vehicles and have recently launched a single seat electrically powered vehicle delivery vehicle. The vehicle is small and light. Arcimoto could sell or lease vehicles to a variety of users, both private and commercial. Interest is currently strong, especially to green minded individuals, local government and fleet operators. The management at Arcimoto wish to analyse their current and potential future market position.

There are currently limited places where compressed hydrogen is available.

- a) Describe the Porters Five Forces – Analysis of competitive position.

(5 marks)

- b) Apply the model to the Arcimoto Deliverator vehicle.

(10 marks)

- c) Select four issues effecting the competitive position and suggest and describe possible changes that could improve the competitive position of the Arcimoto Deliverator vehicle.

(10 marks)