QUES: 1

This scenario relates to four requirements.

Zeddemore Co is a listed company in the house construction industry. Over the past five years results have been disappointing and as a result the share price has fallen from a high of \$3.50 per share five years ago to only \$1.05 per share today. This deterioration in the performance and share price has been accompanied by an increase in financial gearing to a high level.

Zeddemore Co's capital structure is as follows:

	\$m
Equity:	
Share capital (\$0.50 per share nominal value)	40
Retained earnings	35
Long-term liabilities:	
6.5% irredeemable loan notes (\$100 per loan note nominal value)	250
7% bank loan	20

Zeddemore Co's loan notes are quoted at \$65 per loan note and both the loan notes and the bank loan are secured. Zeddemore Co's equity beta is 2.3.

New venture

To improve performance, Zeddemore Co is considering the construction of commercial properties such as office blocks and industrial complexes. This is a new activity for Zeddemore Co and it is expected that the risks involved will be different from its current activity. The financial director has proposed that a project-specific discount rate should be used to appraise the new venture, but the commercial director does not believe this is necessary.

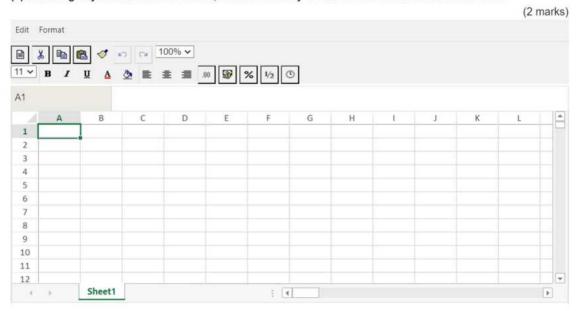
Winston Commercial Properties Co (WCP) undertakes commercial construction projects similar to those being considered by Zeddemore Co. WCP has an equity beta of 1.25. WCP has \$100m of ordinary shares in issue, currently quoted at \$2.60 per \$1 nominal value ordinary share. The company also has \$110m of loan notes in issue, currently quoted at \$96 per \$100 nominal value.

Both companies pay tax at 20%, the risk-free rate is 4% and the expected return on the market portfolio is 10%.

(a)(i) Using the Capital Asset Pricing Model, calculate Zeddemore Co's current cost of equity and a project-specific cost of equity suitable for the new venture.

(6 marks)

(ii) Referring to your calculations above, comment briefly on the view of the commercial director.



(b) Discuss THREE problems Zeddemore Co may be facing as a result of its current high level of gearing.

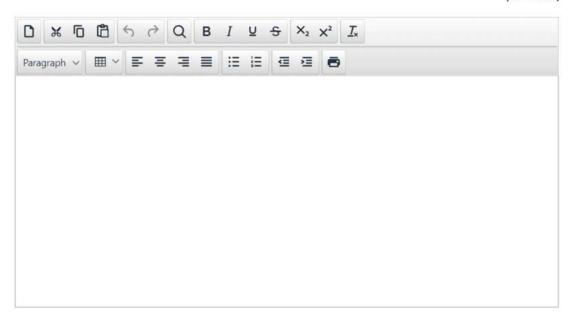
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(c) In respect of both equity and debt, discuss the risk-return relationship and how it affects Zeddemore Co's financing costs.

(6 marks)

(20 marks)



QUES: 2

This scenario relates to three requirements.

Cabreras Co is a construction company. It uses a large earth moving vehicle called the Beast to prepare foundations for buildings. It needs to decide whether the cheapest replacement interval for the Beast is three or four years.

The following details are available:

Cabreras Co purchases the Beast from a manufacturer for \$800,000, payable one year after delivery. Its resale value will fall by 40% of the purchase price at the end of its first year of operation. The resale value will then reduce by 25% of its previous year's resale value for each further year of operation.

Yearly maintenance costs are \$20,000 at the end of its first year of operations, rising by 5% per year. Maintenance must be provided in the year of sale.

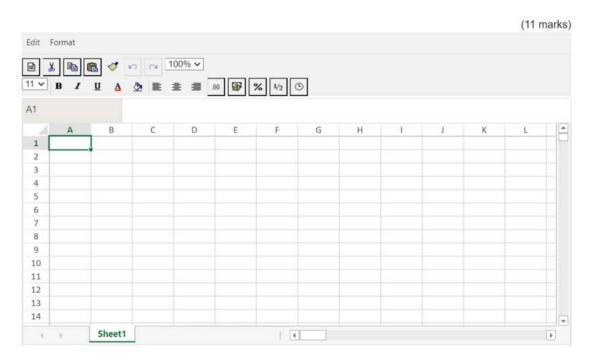
Yearly fuel costs are \$28,000 in the first year rising by \$5,000 for each extra year it is operated.

If the Beast is operated beyond three years it is subject to a government safety and carbon emissions test. The test would be paid for and would take place at the beginning of the fourth year of operation. Correction of any faults discovered by this test is mandatory. There is an 80% chance that the test and remedial work will cost Cabreras Co \$50,000, and a 20% chance it will cost \$120,000.

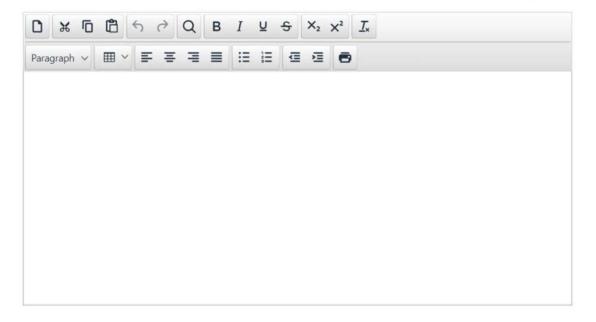
Cabreras Co's cost of capital is 8%.

Ignore taxation.

(a) Calculate the equivalent annual cost of the three-year and four-year replacement intervals for the Beast and advise Cabreras Co which replacement interval to adopt.



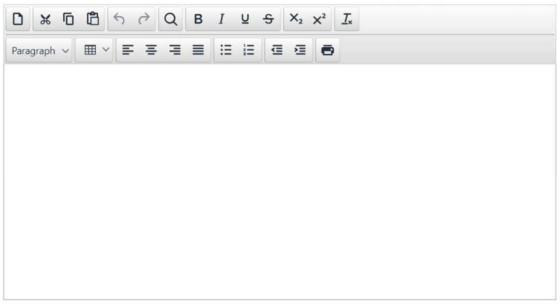
(b) Discuss why replacement interval decisions should be based upon equivalent annual cost (EAC). (4 marks)



(c) Discuss why discounted cash flow methods of investment appraisal are considered superior to non-discounted cash flow methods.

(5 marks)

(20 marks)



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