

---

**BUSINESS**

**9609/31**

Paper 3 Case Study

**May/June 2018**

MARK SCHEME

Maximum Mark: 100

---

**Published**

This mark scheme is published as an aid to teachers and candidates, to indicate the requirements of the examination. It shows the basis on which Examiners were instructed to award marks. It does not indicate the details of the discussions that took place at an Examiners' meeting before marking began, which would have considered the acceptability of alternative answers.

Mark schemes should be read in conjunction with the question paper and the Principal Examiner Report for Teachers.

Cambridge International will not enter into discussions about these mark schemes.

Cambridge International is publishing the mark schemes for the May/June 2018 series for most Cambridge IGCSE™, Cambridge International A and AS Level and Cambridge Pre-U components, and some Cambridge O Level components.

---

IGCSE™ is a registered trademark.

This document consists of **14** printed pages.

### Generic Marking Principles

These general marking principles must be applied by all examiners when marking candidate answers. They should be applied alongside the specific content of the mark scheme or generic level descriptors for a question. Each question paper and mark scheme will also comply with these marking principles.

#### GENERIC MARKING PRINCIPLE 1:

Marks must be awarded in line with:

- the specific content of the mark scheme or the generic level descriptors for the question
- the specific skills defined in the mark scheme or in the generic level descriptors for the question
- the standard of response required by a candidate as exemplified by the standardisation scripts.

#### GENERIC MARKING PRINCIPLE 2:

Marks awarded are always **whole marks** (not half marks, or other fractions).

#### GENERIC MARKING PRINCIPLE 3:

Marks must be awarded **positively**:

- marks are awarded for correct/valid answers, as defined in the mark scheme. However, credit is given for valid answers which go beyond the scope of the syllabus and mark scheme, referring to your Team Leader as appropriate
- marks are awarded when candidates clearly demonstrate what they know and can do
- marks are not deducted for errors
- marks are not deducted for omissions
- answers should only be judged on the quality of spelling, punctuation and grammar when these features are specifically assessed by the question as indicated by the mark scheme. The meaning, however, should be unambiguous.

#### GENERIC MARKING PRINCIPLE 4:

Rules must be applied consistently e.g. in situations where candidates have not followed instructions or in the application of generic level descriptors.

#### GENERIC MARKING PRINCIPLE 5:

Marks should be awarded using the full range of marks defined in the mark scheme for the question (however; the use of the full mark range may be limited according to the quality of the candidate responses seen).

#### GENERIC MARKING PRINCIPLE 6:

Marks awarded are based solely on the requirements as defined in the mark scheme. Marks should not be awarded with grade thresholds or grade descriptors in mind.

Question	Answer			Marks
1	<b>Analyse the advantages and disadvantages of PGP's privatisation for any <u>one</u> stakeholder group.</b>			10
<b>Level</b>	<b>AO1</b> 3 marks	<b>AO2</b> 2 marks	<b>AO3</b> 5 marks	
2	3 marks Knowledge shown of privatisation and advantage(s)/disadvantage(s)	2 marks Two points applied to the case	4–5 marks Good use of theory or reasoned argument to explain how advantage(s) and disadvantage(s) resulted from privatisation	
1	1–2 marks Some knowledge of privatisation and/or stakeholders and/or advantage(s) or disadvantage(s) shown	1 mark One point applied to the case	1–3 marks Some use of theory or reasoned argument e.g. how advantage(s) or disadvantage(s) resulted from privatisation	
0	0 marks No relevant content			
<b>Examiner note:</b>				
If no understanding of privatisation evident then limit to L1K if understanding of stakeholders shown.				
If only advantages or disadvantages then limit to L1AN.				
<b>Knowledge:</b>				
<ul style="list-style-type: none"> <li>• Sale of state owned assets/business to private sector owners.</li> <li>• Customers – lower prices with private sector competition</li> <li>• Danger of private monopoly.</li> <li>• Workers – wages might be reduced to save costs; jobs might be lost but managers might be more highly rewarded.</li> <li>• Customers – prices are less competitive (103 not 98) but more innovative products.</li> <li>• Workers' wages have increased but by much less than managers</li> <li>• Fewer jobs available – less job security?</li> <li>• Other stakeholders are possible.</li> </ul>				
<b>Application:</b>				
Use of changes from case that are relevant to stakeholder under consideration				
<ul style="list-style-type: none"> <li>• Reduction in size of total employees by 17 000</li> <li>• Increase in average pay of employees by \$4000 (does this take into account inflation?)</li> <li>• Increase in average pay of managers by 73%</li> <li>• Increase in operating profit by 349%</li> <li>• Reduction in number of suppliers</li> <li>• Faster payment time to suppliers</li> </ul>				

Question	Answer	Marks
1	<ul style="list-style-type: none"> <li>• More products developed</li> <li>• Relative increase in fuel price compared to industry average (fuel prices may have fallen over the whole period)</li> </ul> <p><b>Analysis:</b></p> <ul style="list-style-type: none"> <li>• Customers: Private ownership might mean that PGP has taken over other companies to gain market power (PGP has grown externally) and this allows higher prices to be charged but more invested in innovative products to gain higher private sector profits in future.</li> <li>• Workers: cost cutting/profit motive in this industry has encouraged PGP to reduce workforce despite doubling revenue. Reduces job security. Wages have risen – but do not know if this is in ‘real’ terms and certainly much less, proportionately, than managers’ salaries – who are now able to set their own remuneration.</li> <li>• Danger of private monopoly and thus higher prices.</li> <li>• Other stakeholders are possible</li> </ul>	

Question	Answer				Marks
2(a)	<b>Refer to Table 2. Calculate the difference between the annual cost of outsourcing the transport of fuel in country X with the existing annual cost of transport.</b>				<b>8</b>
	Element	Answer	Mark	Notes	
	Cost saving	$89 - 78 =$ \$11m	8	Correct	
	Cost saving	$85 - 78 =$ \$7m	8	Alternative correct	
	Cost saving	$89 - 82 =$ \$7m	8	Allocated overheads included for both outsourcing and existing	
	Cost saving	\$6m or \$2m	7	Ignores depreciation. Relevant calculation must be shown.	
	Outsourcing cost	\$78m	2		
	Outsourcing cost	$78 + 4 =$ \$82m	2		
	Outsourcing cost	$600\text{m} \times 0.13$	1		
	Existing cost	$29 + 60 =$ \$89m	5	All relevant costs included.	
	Existing cost	$25 + 60 =$ \$85m	5	Allocated overheads not relevant to cost saving.	
	Existing cost	\$84m or \$80m	4	Ignores depreciation	
	Total annual fixed cost	$20 + 4 + 5 =$ \$29m	2		
	Total annual fixed costs	$20 + 5 =$ \$25m	2		
	Total annual fixed costs	\$24m	1	Ignores depreciation	
	Existing variable cost	\$60m	2		
	Existing variable cost	$600\text{m} \times 0.1$	1		

Question	Answer				Marks																				
2(b)	<p><b>Using your result to 2(a) and other relevant information, recommend to PGP's directors whether the transport of fuel should be outsourced in country X. Justify your recommendation.</b></p> <table border="1" data-bbox="316 383 1313 1055"> <thead> <tr> <th data-bbox="316 383 432 465">Level</th> <th data-bbox="432 383 636 465">A01 2 marks</th> <th data-bbox="636 383 810 465">A02 2 marks</th> <th data-bbox="810 383 1070 465">A03 4 marks</th> <th data-bbox="1070 383 1313 465">A04 4 marks</th> </tr> </thead> <tbody> <tr> <td data-bbox="316 465 432 719">2</td> <td data-bbox="432 465 636 719">2 marks Good knowledge of costs/other factors shown</td> <td data-bbox="636 465 810 719">2 marks Good application to case</td> <td data-bbox="810 465 1070 719">3–4 marks Good use of theory or reasoned argument to explain points made</td> <td data-bbox="1070 465 1313 719">3–4 marks Good evaluation and judgement shown in answer and conclusion</td> </tr> <tr> <td data-bbox="316 719 432 972">1</td> <td data-bbox="432 719 636 972">1 mark Some knowledge of costs/other factors shown</td> <td data-bbox="636 719 810 972">1 mark Some application to case</td> <td data-bbox="810 719 1070 972">1–2 marks Some use of theory or reasoned argument to explain points made</td> <td data-bbox="1070 719 1313 972">1–2 marks Some evaluation and judgement shown in answer or conclusion</td> </tr> <tr> <td data-bbox="316 972 432 1055">0</td> <td colspan="4" data-bbox="432 972 1313 1055">0 marks No relevant content</td> </tr> </tbody> </table>				Level	A01 2 marks	A02 2 marks	A03 4 marks	A04 4 marks	2	2 marks Good knowledge of costs/other factors shown	2 marks Good application to case	3–4 marks Good use of theory or reasoned argument to explain points made	3–4 marks Good evaluation and judgement shown in answer and conclusion	1	1 mark Some knowledge of costs/other factors shown	1 mark Some application to case	1–2 marks Some use of theory or reasoned argument to explain points made	1–2 marks Some evaluation and judgement shown in answer or conclusion	0	0 marks No relevant content				12
Level	A01 2 marks	A02 2 marks	A03 4 marks	A04 4 marks																					
2	2 marks Good knowledge of costs/other factors shown	2 marks Good application to case	3–4 marks Good use of theory or reasoned argument to explain points made	3–4 marks Good evaluation and judgement shown in answer and conclusion																					
1	1 mark Some knowledge of costs/other factors shown	1 mark Some application to case	1–2 marks Some use of theory or reasoned argument to explain points made	1–2 marks Some evaluation and judgement shown in answer or conclusion																					
0	0 marks No relevant content																								
<p><b>Examiner note:</b> L1 AN &amp; EVAL if only consider answer to 2(a) or other information</p>																									
<p><b>Knowledge:</b></p>																									
<ul style="list-style-type: none"> <li>Understanding variable/fixed cost savings; allocated overheads; depreciation; one-off gains from disposal of assets; risk of unreliable transport with outsourced business.</li> </ul>																									
<p><b>Application:</b></p>																									
<ul style="list-style-type: none"> <li>Use of result to a) and other data/information.</li> <li>PED for fuel is price elastic</li> <li>Raise \$5m from sale of trucks and \$8m from sale of distribution centre</li> </ul>																									
<p><b>Analysis:</b></p>																									
<ul style="list-style-type: none"> <li>Cost savings fits in well with the trend in the industry; private sector business more worried about profits than potential job losses; if country X outsourcing of transport increases profit than this strategy can be used in other countries that PGP operates in.</li> <li>Reduces admin costs – may fit in with plan to delayer</li> <li>Disposal of assets raises finance for other projects e.g. option A/B</li> <li>'Outsourcer' might increase cost once depot/trucks are sold</li> <li>Less control over assets/deliveries, etc.</li> <li>Will allocated overheads really be saved? Disposal of site/trucks just a one-off benefit.</li> </ul>																									

Question	Answer	Marks
2(b)	<p><b>Evaluation:</b></p> <ul style="list-style-type: none"> <li>• Cost difference is not that great – is it better to pay a little more for control over own transport assets?</li> <li>• How reliable are the asset valuations?</li> <li>• How reliable is the transport company? It's a potentially dangerous product – is it better to control the transport of it?</li> </ul>	

Question	Answer	Marks																				
3	<p><b>Discuss the likely advantages and disadvantages to PGP of the proposed delayering of its organisational structure.</b></p> <table border="1"> <thead> <tr> <th>Level</th> <th>A01 2 marks</th> <th>A02 2 marks</th> <th>A03 6 marks</th> <th>A04 6 marks</th> </tr> </thead> <tbody> <tr> <td>2</td> <td>2 marks Good knowledge of delayering/organisational structures shown</td> <td>2 marks Good application to the case</td> <td>4–6 marks Good use of theory or reasoned argument to explain advantages <b>and</b> disadvantages of delayering on PGP</td> <td>4–6 marks Good evaluation and judgement shown about impact of delayering</td> </tr> <tr> <td>1</td> <td>1 mark Some knowledge of delayering or organisational structures</td> <td>1 mark Some application to case</td> <td>1–3 marks Some use of theory or reasoned argument to explain ad(s) <b>or</b> disad(s) of delayering on PGP</td> <td>1–3 marks Some evaluation and judgement shown about impact of delayering</td> </tr> <tr> <td>0</td> <td colspan="4">0 marks No relevant content</td> </tr> </tbody> </table> <p>Answers could include:</p> <p><b>Knowledge:</b></p> <ul style="list-style-type: none"> <li>• Removing levels of hierarchy; cuts management numbers, increases span of control; reduces chain of command.</li> </ul> <p><b>Application:</b></p> <ul style="list-style-type: none"> <li>• Structure not really changed since privatisation; profit motive requires cost cutting and more flexible structure; more outsourcing will allow further delayering.</li> <li>• Workers being paid a lot more now – should be prepared to take more responsibility.</li> </ul> <p><b>Analysis:</b></p> <ul style="list-style-type: none"> <li>• Opportunities for delegation and increased accountability</li> <li>• Improved communication as a result of shorter chain and scope for job enrichment.</li> </ul>	Level	A01 2 marks	A02 2 marks	A03 6 marks	A04 6 marks	2	2 marks Good knowledge of delayering/organisational structures shown	2 marks Good application to the case	4–6 marks Good use of theory or reasoned argument to explain advantages <b>and</b> disadvantages of delayering on PGP	4–6 marks Good evaluation and judgement shown about impact of delayering	1	1 mark Some knowledge of delayering or organisational structures	1 mark Some application to case	1–3 marks Some use of theory or reasoned argument to explain ad(s) <b>or</b> disad(s) of delayering on PGP	1–3 marks Some evaluation and judgement shown about impact of delayering	0	0 marks No relevant content				16
Level	A01 2 marks	A02 2 marks	A03 6 marks	A04 6 marks																		
2	2 marks Good knowledge of delayering/organisational structures shown	2 marks Good application to the case	4–6 marks Good use of theory or reasoned argument to explain advantages <b>and</b> disadvantages of delayering on PGP	4–6 marks Good evaluation and judgement shown about impact of delayering																		
1	1 mark Some knowledge of delayering or organisational structures	1 mark Some application to case	1–3 marks Some use of theory or reasoned argument to explain ad(s) <b>or</b> disad(s) of delayering on PGP	1–3 marks Some evaluation and judgement shown about impact of delayering																		
0	0 marks No relevant content																					

Question	Answer	Marks
3	<ul style="list-style-type: none"> <li>Motivational effects of these changes – compared with the uncertainty and loss of security that they might cause.</li> <li>PGP – greater need for flexibility in changing times e.g. oil price down and increased use of renewables. PGP needs to cut costs to improve ratio results/performance.</li> </ul> <p><b>Evaluation:</b></p> <ul style="list-style-type: none"> <li>Will removing two levels be enough?</li> <li>How will the changes be managed and communicated?</li> <li>Will different numbers of levels be appropriate in different departments?</li> <li>Need to reconsider whole organisation structure?</li> <li>How will proposed expansion into A/B options impact on organisation structure?</li> <li>Is delayering a sufficiently significant change to the structure?</li> </ul>	

Question	Answer	Marks
4(a)(i)	<p><b>Refer to Table 3.</b></p> <p><b>Calculate for PGP:</b></p> <p><b>price earnings ratio</b></p> <p>Share price/earnings per share (1 mark)</p> <p>\$20/\$1.5 (2 marks)</p> <p>= 13.3 (3 marks)</p> <p>OFR</p>	3
4(a)(ii)	<p><b>dividend yield.</b></p> <p>Dividend per share/share price × 100 (1 mark)</p> <p>60cents/\$20 (2 marks)</p> <p>= 3% (3 marks)</p> <p>OFR</p>	3



Question	Answer				Marks																				
4(b)	<p><b>Discuss <u>two</u> ways in which PGP could improve its accounting ratio results in future.</b></p> <table border="1" data-bbox="316 344 1315 1019"> <thead> <tr> <th data-bbox="316 344 424 427">Level</th> <th data-bbox="429 344 635 427">A01 2 marks</th> <th data-bbox="639 344 804 427">A02 2 marks</th> <th data-bbox="809 344 1098 427">A03 4 marks</th> <th data-bbox="1102 344 1315 427">A04 4 marks</th> </tr> </thead> <tbody> <tr> <td data-bbox="316 434 424 680">2</td> <td data-bbox="429 434 635 680">2 marks Two relevant points</td> <td data-bbox="639 434 804 680">2 marks Ways well applied to PGP</td> <td data-bbox="809 434 1098 680">3–4 marks Good use of theory or reasoned argument to explain impact ways to improve ratio results</td> <td data-bbox="1102 434 1315 680">3–4 marks Good judgement and evaluation of ways</td> </tr> <tr> <td data-bbox="316 687 424 934">1</td> <td data-bbox="429 687 635 934">1 mark Knowledge of accounting ratios or way to improve</td> <td data-bbox="639 687 804 934">1 mark Some application of way(s) to PGP</td> <td data-bbox="809 687 1098 934">1–2 marks Some use of theory or reasoned argument to explain impact of way(s)</td> <td data-bbox="1102 687 1315 934">1–2 marks Some evaluation and judgement of at least one way</td> </tr> <tr> <td data-bbox="316 940 424 1019">0</td> <td colspan="4" data-bbox="429 940 1315 1019">0 marks No relevant content</td> </tr> </tbody> </table>				Level	A01 2 marks	A02 2 marks	A03 4 marks	A04 4 marks	2	2 marks Two relevant points	2 marks Ways well applied to PGP	3–4 marks Good use of theory or reasoned argument to explain impact ways to improve ratio results	3–4 marks Good judgement and evaluation of ways	1	1 mark Knowledge of accounting ratios or way to improve	1 mark Some application of way(s) to PGP	1–2 marks Some use of theory or reasoned argument to explain impact of way(s)	1–2 marks Some evaluation and judgement of at least one way	0	0 marks No relevant content				12
Level	A01 2 marks	A02 2 marks	A03 4 marks	A04 4 marks																					
2	2 marks Two relevant points	2 marks Ways well applied to PGP	3–4 marks Good use of theory or reasoned argument to explain impact ways to improve ratio results	3–4 marks Good judgement and evaluation of ways																					
1	1 mark Knowledge of accounting ratios or way to improve	1 mark Some application of way(s) to PGP	1–2 marks Some use of theory or reasoned argument to explain impact of way(s)	1–2 marks Some evaluation and judgement of at least one way																					
0	0 marks No relevant content																								
L1 AN & EVAL if only one way suggested																									
<b>Knowledge:</b>																									
<ul style="list-style-type: none"> <li>• RoCE – increase profit without increase CE</li> <li>• Dividend yield – increase dividends paid</li> <li>• Increase price</li> <li>• Cut capital employed e.g. sell assets and repay some debt</li> </ul>																									
<b>Application:</b>																									
<ul style="list-style-type: none"> <li>• Cutting management overheads through delayering might increase profit</li> <li>• Higher prices (relatively) already being charged</li> <li>• Transport outsourcing should raise cash from sale of assets.</li> </ul>																									
<b>Analysis and Evaluation:</b>																									
<ul style="list-style-type: none"> <li>• Raise prices – might increase profit margins, if prices rise more than costs, and RoCE – BUT demand is price elastic for products which are not easy to brand. Might work for specialist oils?</li> <li>• Sale of assets/cut loans – will also cut gearing – BUT impact on operations of assets sales? Might refer back to closing transport depot. Non-current liabilities needed for PGP expansion programme and is the gearing ratio that high anyway?</li> <li>• Increase dividends to improve dividend yield and share price (raising the PE ratio). <b>BUT</b> will this reduce retained earnings and will this restrict the future expansion plans and the dividends and share price in the future?</li> </ul>																									
ARA																									

Question	Answer				Marks
5	<b>Evaluate the usefulness of the moving average method to forecast sales of oil and gas products to PGP.</b>				16
<b>Level</b>	<b>A01 2 marks</b>	<b>A02 2 marks</b>	<b>A03 6 marks</b>	<b>A04 6 marks</b>	
2	2 marks Good knowledge of sales forecasting/ moving average shown	2 marks Good application to case	4–6 marks Good theory or use of reasoned argument to explain benefits/limitations of moving average method	4–6 marks Good evaluation and judgement on the usefulness of the MA method in this case	
1	1 mark Some knowledge of sales forecasting/ moving average shown	1 mark Some application to case	1–3 marks Some use of theory or reasoned argument to explain benefits/ limitations of moving average method	1–3 marks Some evaluation and judgement on the usefulness of the MA method in this case.	
0	0 marks No relevant content				
<p><b>Knowledge</b></p> <ul style="list-style-type: none"> <li>• Moving average based on past sales data</li> <li>• Calculates an 8 period (usually) moving total and divides by 8; calculates seasonal and average seasonal variation; extrapolates trend and allows short term forecasts to be made; cyclical variations can be identified over periods longer than 1 year.</li> </ul> <p><b>Application:</b></p> <ul style="list-style-type: none"> <li>• Some oil and gas products subject to seasonal variations in demand, e.g. heating oil.</li> <li>• Some products subject to cyclical demand driven by world economic booms/slump, e.g. fuel for cars/trucks and generating electricity.</li> </ul> <p><b>Analysis:</b></p> <ul style="list-style-type: none"> <li>• Sales forecasts help in planning e.g. production/refinery capacity; workforce planning; inventory levels etc.</li> <li>• Accurate sales forecasting can help cut costs e.g. of unexpected</li> </ul> <p><b>Evaluation:</b></p> <ul style="list-style-type: none"> <li>• Basing all forecasts on past data may mean that structural changes in demand are not taken account of e.g. rapidly changing trend towards renewable energy.</li> <li>• Weather patterns in future may not be the same as those in the past – so relying on moving average method may be unwise.</li> </ul>					

Question	Answer	Marks
5	<ul style="list-style-type: none"><li>• Should be used – but with caution and with use of other methods too e.g. market research to assess demand for new products such as lubricants for jet engines.</li><li>• Use as much past data as possible but most recent is most relevant.</li><li>• Adjust for trends that did not appear in past data.</li></ul>	

Question	Answer			Marks
<b>Questions 6 and 7 use this marking grid:</b>				
Level	A01 2 marks	A02 2 marks	A03 6 marks	A04 6 marks
<b>3</b>				7–10 marks Good judgement shown throughout with well supported conclusion/ recommendation, focused on the business in the case
<b>2</b>	3 marks Good understanding shown	3 marks Good application to the case	3–4 marks Good use of reasoned argument or use of theory to explain points made	4–6 marks Some judgement shown in the main body of the answer <b>and</b> an attempt to support conclusion/ recommendation, focused on the business in the case OR effective and well supported conclusion/ recommendation, focused on the business in the case
<b>1</b>	1–2 marks Some understanding shown	1–2 marks Some application to the case	1–2 marks Limited use of reasoned argument or use of theory to support points made	1–3 marks Limited attempt to show judgement either within the answer OR a weakly supported conclusion/ recommendation with some focus on the business in the case
<b>0</b>	No creditable content			

Question	Answer	Marks
6	<p><b>Evaluate the usefulness of any <u>two</u> techniques of strategic analysis to PGP's Board of Directors.</b></p> <p>Answers could include:</p> <p><b>Knowledge:</b></p> <ul style="list-style-type: none"> <li>• SWOT/PEST/Boston Matrix/Porter/core competencies/may refer to mission/vision statements.</li> </ul> <p><b>Application:</b> (for example)</p> <ul style="list-style-type: none"> <li>• <b>S</b> – rapid growth; profitable; increasing productivity; vertically integrated business</li> <li>• <b>W</b> – too dependent on fossil fuels; performance compared to industry average; tall/rigid hierarchical structure</li> <li>• <b>O</b> – renewable energy; new oil field; further outsourcing</li> <li>• <b>T</b> – competition; trend towards renewables; climate change</li> <li>• <b>P</b> – change of government – re-nationalisation?</li> <li>• <b>E</b> – global downturn hitting demand</li> <li>• <b>S</b> – population growth increasing demand</li> <li>• <b>T</b> – new technology in renewables</li> <li>• Other techniques could be applied.</li> </ul> <p><b>Analysis:</b></p> <ul style="list-style-type: none"> <li>• Helps a business establish 'where it is now and where it wants to be'</li> <li>• Analyses internal conditions of the business and external environment</li> <li>• Helps to establish the strategies that might be adopted in future to meet corporate aims.</li> </ul> <p><b>Evaluation:</b></p> <ul style="list-style-type: none"> <li>• Needs keeping up to date – has it been in this case?</li> <li>• What strategic analysis was undertaken before Option A and B were selected as alternative strategies?</li> <li>• Some techniques can be subjective e.g. Operations Director might be opposed to renewable energy or climate change might be contested.</li> <li>• Some strategic analysis essential as new projects in this industry are very expensive and very long term – difficult to reverse once decided on.</li> </ul>	20

Question	Answer	Marks
7	<p><b>Discuss whether the techniques referred to in Appendix 1 are sufficient to allow the directors to make the strategic choice between Option A and Option B.</b></p> <p><b>Knowledge:</b></p> <ul style="list-style-type: none"> <li>• Decision trees – consider payoffs and probabilities</li> <li>• Investment appraisal – using forecast cash flows</li> <li>• Ansoff – classifies strategies</li> </ul> <p><b>Application:</b> (other examples possible)</p> <ul style="list-style-type: none"> <li>• Oil companies often subject to pressure group activity</li> <li>• Capital cost – R&amp;D more costly but also many renewable energy projects do not reach a profitable conclusion.</li> </ul> <p><b>Analysis:</b></p> <ul style="list-style-type: none"> <li>• Some focus on risk – an important consideration for long term projects such as these especially for Option B as renewable energy is ‘new’ for PGP.</li> <li>• Decision trees help to quantify the decision and encourage consideration of all outcomes – important for a profit seeking PLC</li> <li>• Ansoff identifies the nature of the expansion – and considers the risk element too so a risk averse business might opt for market penetration</li> <li>• Discounted payback is important as it considers the time value of money (long term projects) and PGP has a higher gearing than industry average so paying back loan capital as early as possible could be important.</li> </ul> <p><b>Evaluation:</b></p> <ul style="list-style-type: none"> <li>• Uncertainty over the techniques used, e.g. how were the probabilities and expected outcomes estimated in the decision tree?</li> <li>• Risk is not being quantified only identified; is ‘renewable energy’ really diversification?</li> <li>• Not enough detail; more information about PGP’s finances would be useful, e.g. can the investment be financed internally?</li> <li>• Overall judgement based on preceding analysis and a consideration of the other techniques and information that need to be considered before this type of major strategic decision is made.</li> </ul>	20