Business decisions and strategy

Level: Pearson Edexcel Level 3 Advanced GCE

Subject: Business (9BS0)

Exam Board: Edexcel A level Business students for all boards

Topic: Business decisions and strategy

Type: Mark Scheme

To be used by all students preparing for PearsonEdexcel Level 3 Advanced GCE Business (9BS0)

Mark Scheme

Q1.

Question Number	Answer	Mark
	Knowledge 1, Application 2, Analysis 1	
	Knowledge: 1 mark for one reason why businesses that sell VisionSpring glasses may prefer to stay small: • Flexibility in responding to customer needs • Reduced risk of business failure **Application: up to 2 marks for two uses of context e.g** • Shops selling glasses are located in rural areas • Small business owners visit villages to conduct eye tests. **Analysis: 1 mark for** • Local businesses may have greater knowledge of their customers' needs. • Therefore the small business owners can respond quickly to their customer needs by supplying glasses immediately if needed.	**(4)**

Question Number	Indicative content	Mark
	Knowledge 2, Application 2, Analysis 4, Evaluation 4 • Risk profile is lower. • The business controls organic growth itself. • Cash flow and liquidity is not put under strain. • Organisation of the business is easier. • Avoids diseconomies of scale. *Potential counterbalance* • Does not benefit from knowledge of other business gained through inorganic growth. • Not capitalising on market opportunities abroad where demand is potentially income elastic. • Economic growth means crisp market is getting larger. • Not growing as fast as other manufacturers. • Prevents the ability to exploit significant economies of scale.	**(12)**

Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	1–2	Isolated elements of knowledge and understanding – recall based. Weak or no relevant application to business examples. Generic assertions may be presented.
Level 2	3–4	Elements of knowledge and understanding, which are applied to the business example. Chains of reasoning are presented, but may be assertions or incomplete. A generic or superficial assessment is presented.
Level 3	5–8	Accurate and thorough knowledge and understanding, supported throughout by relevant and effective use of the business behaviour/context. Analytical perspectives are presented, with developed chains of reasoning, showing cause(s) and/or effect(s). An attempt at an assessment is presented, using quantitative and/or qualitative information, though unlikely to show the significance of competing arguments.
Level 4	9–12	Accurate and thorough knowledge and understanding, supported throughout by relevant and effective use of the business behaviour/context. A coherent and logical chain of reasoning, showing cause(s) and/or effect(s). Assessment is balanced, wide ranging and well contextualised, using quantitative and/or qualitative information, and shows an awareness of competing arguments/factors leading to a supported judgement.

Q3.

Question Number	Indicative content	Mark
	Knowledge 2, Application 2, Analysis 4, Evaluation 4 • Lack of economies of scale. • Fewer resources to compete with market leader (Walkers). • Less brand recognition. • Inability to compete on price. • More vulnerable to failure. *Potential counterbalance* • Economies of scale are not crucial in a niche market. • Walkers operates in a different market segment. • Strong branding may allow a premium to be charged. • Adapt to changes/opportunities in the market. • Unlikely to suffer diseconomies of scale.	**(12)**

Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	1–2	Isolated elements of knowledge and understanding – recall based. Weak or no relevant application to business examples. Generic assertions may be presented.
Level 2	3–4	Elements of knowledge and understanding, which are applied to the business example. Chains of reasoning are presented, but may be assertions or incomplete. A generic or superficial assessment is presented.
Level 3	5–8	Accurate and thorough knowledge and understanding, supported throughout by relevant and effective use of the business behaviour/context. Analytical perspectives are presented, with developed chains of reasoning, showing cause(s) and/or effect(s). An attempt at an assessment is presented, using quantitative and/or qualitative information, though unlikely to show the significance of competing arguments.
Level 4	9–12	Accurate and thorough knowledge and understanding, supported throughout by relevant and effective use of the business behaviour/context. A coherent and logical chain of reasoning, showing cause(s) and/or effect(s). Assessment is balanced, wide-ranging and well contextualised, using quantitative and/or qualitative information, and shows an awareness of competing arguments/factors leading to a supported judgement.

Q4.

Question Number	Indicative content	Mark
	Knowledge 2, Application 2, Analysis 2, Evaluation 2 • Costs of advertising will be high. • Profit margin will be low. • Some smaller manufacturers will struggle to compete. • Full value of the brand may not be realised. *Potential counterbalance* • It depends on the price elasticity of demand. • It may benefit larger manufacturers such as Walkers. • It could restrict the likelihood of new firms joining the market.	**(8)**

Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	1–2	Isolated elements of knowledge and understanding – recall based. Weak or no relevant application to business examples. Generic assertions may be presented.
Level 2	3–5	Accurate knowledge and understanding. Applied accurately to the business and its context. Chains of reasoning are presented, showing cause(s) and/or effect(s) but may be assertions or incomplete. An attempt at an assessment is presented that is unbalanced, and unlikely to show the significance of competing arguments.
Level 3	6–8	Accurate and thorough knowledge and understanding, supported throughout by relevant and effective use of the business behaviour/context. Logical chains of reasoning, showing cause(s) and/or effect(s). Assessment is balanced, well contextualised, using quantitative and/or qualitative information, and shows an awareness of competing arguments/factors leading to a supported judgement.

Q5.

Question Number	Indicative content	Mark
	Knowledge 2, Application 2, Analysis 4, Evaluation 4	
	• Research and development is the scientific investigation necessary to discover new products or manufacturing processes • Research and development (R&D) expenditure on textile products totalled £20.0 million in 2012, 0.1% of the £12.2 billion spent on manufacturing R&D • R&D expenditure on textile products has fallen 37.2% between 1994 and 2012. This compares with a 19.9% increase in R&D expenditure on manufacturing products as a whole over the same period • In the context of textiles this could result in less innovation in manufacturing processes, consequently older production methods may be less efficient and produce poorer quality. This could be due to machinery being slower, suffering from more breakdowns and requiring increased maintenance • Textile manufacture is predominantly labour intensive, a lack of R&D spending could mean less investment in more efficient capital intensive means of production. This may result in higher unit costs and uncompetitive prices due to lower productivity	

Potential counterbalance

- Productivity is also affected by other factors such as lack of investment in training, low morale of the workforce (jobs in the textile sector have fallen), old machinery, poor management, lack of marketing and product development

- Textile manufacture is mainly labour intensive, lack of training and low morale may result in a fall in productivity and quality due to fact that workers are unskilled.

Potential judgement

- R&D may be the most important factor for the decline in productivity because it may result in a lack of innovation and investment in more efficient production methods

- R&D may not be the most important factor due to the fact that textile production is labour intensive. This could mean that low productivity is due to lack of training and/or low morale

(12)

Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	1–2	Isolated elements of knowledge and understanding – recall based. Weak or no relevant application to business examples. Generic assertions may be presented.
Level 2	3–4	Elements of knowledge and understanding, which are applied to the business example. Chains of reasoning are presented, but may be assertions or incomplete. A generic or superficial assessment is presented.
Level 3	5–8	Accurate and thorough knowledge and understanding, supported throughout by relevant and effective use of the business behaviour/context. Analytical perspectives are presented, with developed chains of reasoning, showing cause(s) and/or effect(s). An attempt at an assessment is presented, using quantitative and/or qualitative information, though unlikely to show the significance of competing arguments.
Level 4	9–12	Accurate and thorough knowledge and understanding, supported throughout by relevant and effective use of the business behaviour/context. A coherent and logical chain of reasoning, showing cause(s) and/or effect(s). Assessment is balanced, wide ranging and well contextualised, using quantitative and/or qualitative information, and shows an awareness of competing arguments/factors leading to a supported judgement

Q6.

Question Number	Indicative content	Mark
	Knowledge 2, Application 2, Analysis 4, Evaluation 4 **Marks for application and analysis – include up to 4 marks for quantitative skills** Quantitative skills assessed: **QS 2:** Calculate, use and understand percentages and percentages changes **QS 8:** use and interpret quantitative and non-quantitative information in order to make a decision **QS 9:** interpret, apply and analyse information in written, graphical and numerical forms **Indicative content (quantitative skills)** • Identifies that fuel and cars are complimentary goods/in joint demand. The PED for petrol is price inelastic. • Prices of petrol have fallen from £1.42 a litre (2014) to £1.34 (2015) which means that the cost of motoring has fallen which may lead to an increase in the demand for cars and therefore an increase in car production • Car manufacturing grew in the UK by 1.2%, with 8% growth in the home market between 2013 and 2014. Between 2014 and 2018, output is forecast to increase from 1.53 million to over 2.10 million cars a year (Extract C) • Toyota cars, such as the Range Rover Eclipse, are renowned 'fuel guzzlers', so if fuel prices fall then the demand for these cars should increase. This may boost car manufacturers profits and so lead to further investment which should increase car production further • Investment often involves improved efficiencies (use of robots, computer aided manufacturing, logistics) which could mean lower prices, enabling UK cars to be relatively cheaper to produce in the long run in than in, for example, Germany	

Potential counterbalance

- Prices of petrol have only fallen by 10% which may not have a significant effect on the sales of fuel and car demand
- Some of the overseas markets are more significant than others, notably China (11.5%) which are likely to be a significant source of demand anyway, given a growing number of high net worth individuals/expanding number middle class consumers/expanding number of urban consumers as people migrate from the rural areas

Possible judgement

- Exchange rates may be more significant, especially given the share of exports (78.2%). If the £ actually depreciates from the current (July 2015) seven year high (£1=€1.42), then car sales could increase in Europe, so production of UK cars should increase, regardless of fuel prices.

(12)

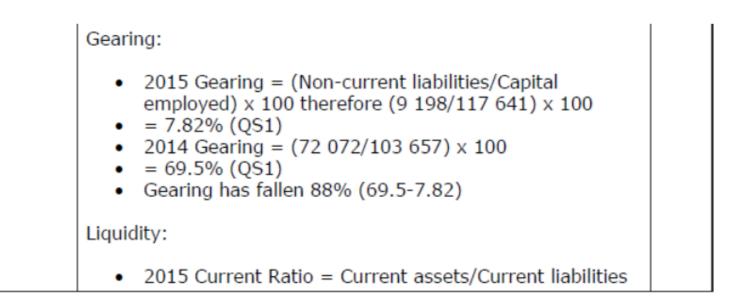**NB: to access levels 3 and 4, students will need to demonstrate quantitative skills to support their judgements**

Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	1–2	Isolated elements of knowledge and understanding – recall based. Weak or no relevant application to business examples. Generic assertions may be presented.
Level 2	3–4	Elements of knowledge and understanding, which is applied to the business example. Chains of reasoning are presented, but may be assertions or incomplete. A generic or superficial assessment is presented.
Level 3	5–8	Accurate and thorough knowledge and understanding, supported throughout by relevant and effective use of the business behaviour/context. Analytical perspectives are presented, with developed chains of reasoning, showing cause(s) and/or effect(s). An attempt at an assessment is presented, using quantitative and/or qualitative information, though unlikely to show the significance of competing arguments.
Level 4	9–12	Accurate and thorough knowledge and understanding, supported throughout by relevant and effective use of the business behaviour/context. A coherent and logical chain of reasoning, showing cause(s) and/or effect(s). Assessment is balanced, wide ranging and well contextualised, using quantitative and/or qualitative information, and shows an awareness of competing arguments/factors leading to a supported judgement.

Q7.

Question Number	Indicative content	Mark
	Knowledge 4, Application 4, Analysis 6, Evaluation 6 Marks for application and analysis – include up to 8 marks for quantitative skills Quantitative skills assessed: **QS1**: calculate, use and understand ratios, averages and fractions **QS2**: calculate, use and understand percentages and percentages changes **QS8**: use and interpret quantitative and non-quantitative information in order to make decisions **QS9**: interpret, apply and analyse information in written, graphical and numerical forms **Indicative content** (quantitative skills) Profitability: Expect to see two types of ratio from: • 2015 GPM = (Gross profit/sales turnover x 100) therefore (60 011/61 084 x 100) = 98.2% • 2014 GPM = (Gross profit/sales turnover x 100) therefore (44 440/45 480 x 100) = 97.7% • *% change = 0.5% improvement (QS2)* • 2015 OPM = (Operating profit/sales turnover x 100) therefore (2 701/61 084 x 100) = **minus** 4.42% • 2014 OPM = (Operating profit/sales turnover x 100) therefore (2 335/45 480 x 100) = 5.13% • 2015 ROCE = (Operating profit/Capital Employed x 100) Therefore (-2 701/117 641) x 100 = **minus** 2.3% (QS1) • 2014 ROCE = (2 335/103 657) x 100 = 2.25% (QS1)	

Gearing:

- 2015 Gearing = (Non-current liabilities/Capital employed) x 100 therefore (9 198/117 641) x 100
- = 7.82% (QS1)
- 2014 Gearing = (72 072/103 657) x 100
- = 69.5% (QS1)
- Gearing has fallen 88% (69.5-7.82)

Liquidity:

- 2015 Current Ratio = Current assets/Current liabilities

- Therefore 8 636/25 546= 0.34:1 (QS1)
- 2014 Current Ratio = 9 933/24 656 = 0.40:1 (QS1)
- % change = 0.06 decline (QS2)

Rate of return on capital employed (ROCE) has seen a dramatic decline (QS9)

The market size is growing due to the growth in budget, low cost gyms in the UK (QS9)

Gearing is 7.82%, which could be viewed as very low, compared to 2014 when it was very high at 69.5% - QS8)

Liquidity has worsened to 0.40:1, which is extremely low.

The Gym

- This would have been a merger, not a takeover, which may have had both positive and negative repercussions
- Pure Gym has set a target to have 300 UK gyms by 2020 and this inorganic growth strategy would be more likely to match this ambition as the sites are similar and wouldn't require new builds
- Two discount operators coming together might have meant similar stock of fitness equipment and locker room supplies which would allow greater purchasing economies of scale and in turn higher profitability
- The Gym Group sites in the same area could be sold off to eliminate the direct competition and provide funds for staff training or any future redevelopment of Pure Gyms
- Revenue could be increased by increasing prices as the direct competition would no longer exist. This could be used to support further expansion in Italy, Spain, South America or Africa.
- Expansion through purchase of The Gym Group sites could lead to lower average total costs as administration and marketing costs could be integrated and shared over more sites. Administrative expenses for The Gym Group were 104.5% of the value of gross profits in 2015 (94.7% in 2014)

LA Fitness

- Although LA Fitness allegedly cost between £60m and £80m, the 43 sites are likely to be premium sites as they were part of an upmarket chain. Some of these could be sold to provide revenues for more of the smaller new build Pure Gyms as part of its expansion plans across the country.
- Converting LA Fitness sites to Pure Gym sites might enable Pure Gym to appeal to different market segments by offering former LA Fitness members cheaper memberships and so increase its customer base naturally, without the need for expensive marketing campaigns

(20)

- Rebranding LA Fitness sites to Pure Gyms may enable the business to offer a premium, upmarket gym to compete directly with Virgin Active and David Lloyd to take advantage of those people on higher incomes.

Possible recommendations

- The accounting ratios for profitability and liquidity are not healthy – well below industry averages. Therefore it would not be advisable to takeover The Gym Group as this could worsen Pure Gym's cash-flow and finance investment opportunities to risk survival in a very competitive market
- Gearing has fallen which may be a good thing as it would suggest that expansion could cost less to finance as lenders might see the loan as less of a risk
- The low cost gym sector may experience an increase in demand as the demand from people wanting basic facilities increases as real incomes fall. In which case by taking over LA Fitness, Pure Gym would not really tap into a lucrative market by offering alternative up market sites designed for those with high real disposable incomes

NB: to access levels 3 and 4, students will need to demonstrate quantitative skills to support their judgements

Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	1–4	Isolated elements of knowledge and understanding. Weak or no relevant application of business examples. An argument may be attempted, but will be generic and fail to connect cause(s) and/or consequence(s)/effect(s).
Level 2	5–8	Elements of knowledge and understanding, which are applied to the business example. Arguments and chains of reasoning are presented, but connections between cause(s) and/or consequence(s)/effect(s) are incomplete. Attempts to address the question. A comparison or judgement may be attempted, but it will not successfully show an awareness of the key features of business behaviour or business situation.
Level 3	9–14	Accurate and thorough knowledge and understanding, supported throughout by relevant and effective use of the business behaviour/context. Uses developed chains of reasoning, so that cause(s) and/or consequence(s)/effect(s) are complete, showing an understanding of the question. Arguments are well developed. Quantitative or qualitative information is introduced in an attempt to support judgements, a partial awareness of the validity and/or significance of competing arguments and may lead to a conclusion.
Level 4	15–20	Accurate and thorough knowledge and understanding, supported throughout by use of relevant and effective use of the business behaviour/context. Uses well developed and logical, coherent chains of reasoning, showing a range of cause(s) and/or effect(s). Arguments are fully developed. Quantitative and/or qualitative information is/are used well to support judgements. A full awareness of the validity and significance of competing arguments/factors, leading to balanced comparisons, judgements and an effective conclusion that proposes a solution and/or recommendations.

Question Number	Indicative content	Mark
	Knowledge 4, Application 4, Analysis 6, Evaluation 6	
	• Environmental issues might include: over-fishing; pollution of waterways from fishing boats or fish-farming techniques; disruption to local ecosystems due to the changing balances of different species. • Ethical issues might include: cruelty from fishing and fish farming; damage to other species (dolphins and whales); (mis)treatment of staff in developing countries. • Programmes such as the 'responsible fishing scheme'. • Sustainably fished products may be more attractive to customers. • Following an environmental/ethical stance may allow a premium pricing strategy. *Possible counterbalance* • Price might be a more important factor for consumers in their purchases. • Preference for traditional species such as cod may be more important. • Depends on the degree to which other fish businesses embrace these issues. • Young's Seafood Limited may have little control on the way suppliers operate. • Legal regulation is increasing in the fishing industry, e.g. MSC 'blue label' scheme.	**(20)**

Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	1–4	Isolated elements of knowledge and understanding. Weak or no relevant application of business examples. An argument may be attempted, but will be generic and fail to connect cause(s) and/or consequence(s)/effect(s).
Level 2	5–8	Elements of knowledge and understanding, which are applied to the business example. Arguments and chains of reasoning are presented, but connections between cause(s) and/or consequence(s)/ effect(s) are incomplete. Attempts to address the question. A comparison or judgement may be attempted, but it will not successfully show an awareness of the key features of business behaviour or business situation.
Level 3	9–14	Accurate and thorough knowledge and understanding, supported throughout by relevant and effective use of the business behaviour/context. Uses developed chains of reasoning, so that cause(s) and/or consequence(s)/effect(s) are complete, showing an understanding of the question. Arguments are well developed. Quantitative or qualitative information is introduced in an attempt to support judgements, a partial awareness of the validity and/or significance of competing arguments and may lead to a conclusion.
Level 4	15–20	Accurate and thorough knowledge and understanding, supported throughout by use of relevant and effective use of the business behaviour/context. Uses well-developed and logical, coherent chains of reasoning, showing a range of cause(s) and/or effect(s). Arguments are fully developed. Quantitative and/or qualitative information is/are used well to support judgements. A full awareness of the validity and significance of competing arguments/factors, leading to balanced comparisons, judgements and an effective conclusion that proposes a solution and/or recommendations.

Q9.

Question Number	Indicative content	Mark
	Knowledge 2, Application 2, Analysis 4, Evaluation 4 • Takeovers occur when a business buys a controlling interest in the share ownership of another business. • Takeovers often give a competitive advantage. • A competitor may have technology that has been patented. • Takeover of Nokia increases Microsoft's market share by nearly 20%. • Microsoft saw an opportunity in Nokia to buy a phone manufacturer. • May be vertical integration as Nokia manufacture phones. • Economies of scale can also result from takeovers. Possible counterbalance • Takeovers are often unsuccessful in achieving their stated aims. • Microsoft might not have the knowledge and understanding of the mobile handset sector. • Nokia's technology and intellectual property may be quickly out of date. • Clash of cultures. • Duplication of roles and resources.	**(12)**

Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	1–2	Isolated elements of knowledge and understanding – recall based. Weak or no relevant application to business examples. Generic assertions may be presented.
Level 2	3–4	Elements of knowledge and understanding, which are applied to the business example. Chains of reasoning are presented, but may be assertions or incomplete. A generic or superficial assessment is presented.
Level 3	5–8	Accurate and thorough knowledge and understanding, supported throughout by relevant and effective use of the business behaviour/context. Analytical perspectives are presented, with developed chains of reasoning, showing cause(s) and/or effect(s). An attempt at an assessment is presented, using quantitative and/or qualitative information, though unlikely to show the significance of competing arguments.
Level 4	9–12	Accurate and thorough knowledge and understanding, Supported throughout by relevant and effective use of the business behaviour/context. A coherent and logical chain of reasoning, showing cause(s) and/or effect(s). Assessment is balanced, wide ranging and well contextualised, using quantitative and/or qualitative information, and shows an awareness of competing arguments/factors leading to a supported judgement.

Q10.

Question Number	Answer	Mark
	Knowledge 1, Application 3	
	Quantitative skills assessed:	
	QS 3: construct and interpret a range of standard graphical forms	
	QS 8: use and interpret quantitative and non-quantitative information in order to make decisions	
	Knowledge: 1 mark for implicit understanding of decision trees	
	Application: 3 marks for	
	Inserting values for investing in new machinery and increasing the training budget:	
	$(0.7 \times 20) + (0.3 \times 5)$ and $(0.8 \times 8) + (0.2 \times 3)$	
	Calculating expected values for investing in new machinery and increasing the training budget:	
	$(0.7 \times 20) + (0.3 \times 5) - 10 = 5.5m$	
	$(0.8 \times 8) + (0.2 \times 3) - 5 = 2m$	**(4)**

Q11.

Question Number	Indicative content	Mark
	Knowledge 4, Application 4, Analysis 6, Evaluation 6 **Marks for application and analysis – include up to** **8 marks for quantitative skills** Quantitative skills assessed: **QS1**: calculate, use and understand ratios, averages and fractions **QS2**: calculate, use and understand percentages and percentage changes **QS8**: use and interpret quantitative and non-quantitative information in order to make decisions **QS9**: interpret, apply and analyse information in written, graphical and numerical forms **Indicative content (quantitative skills)** Profitability: • 2013 ROCE = (Operating profit/Capital Employed x 100) therefore (530 692/4 879 138) x 100 = 10.9% (QS1) • 2012 ROCE = (61910/4 617 043) x 100 = 1.3% (QS1) • % change = 738% improvement (QS2) Gearing: • 2013 Gearing = (Non-current liabilities/Capital employed) x 100 therefore (2 205 824/4 879 138) x 100 = 45.2% (QS1) • 2012 Gearing = (2 205 824/4 617 043) x 100 = 47.8% (QS1) • % change = 5.4% improvement (QS2)	

Question Number	Indicative content	Mark
	Liquidity: • 2013 Current Ratio = Current assets/Current liabilities therefore 3 572 020/35 547 = 100.4 (QS1) • 2012 Current Ratio = 3 578 542/304 164 = 11.7 (QS1) • % change = 778% improvement (QS2) • Rate of return on capital employed (ROCE) has seen a dramatic improvement (QS9) • The market size is growing due to economic growth in UK and abroad. (QS9) • Gearing is nearing 50%, which could be viewed as too high. (QS8)	

Question Number	Indicative content	Mark
	Indicative content • Expansion will allow greater economies of scale. • Revenue can be increased only by lowering prices. • Expansion could lead to a lower average total cost (ATC). • Opportunities for export growth exist. • Burts has secured supermarket contracts and need to expand to meet demand. *Potential counterbalance:* • Any further expansion should be funded by share capital which will reduce the ROCE and the gearing ratio. • Funding expansion through share capital could be less risky than loan capital. • Trend towards healthier eating could reduce demand. • Statement of financial may not be truly representative of Burts position. • Financial forecasts may be required to assess Burts' ability to expand. • May depend upon the objectives of the company – expansion may require a stock market flotation and directors may not want to relinquish control • May depend on how Burts' perceive the strength of competition that they will face in new markets	**(20)**

Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	1–4	Isolated elements of knowledge and understanding. Weak or no relevant application of business examples. An argument may be attempted, but will be generic and fail to connect cause(s) and/or consequence(s)/effect(s).
Level 2	5–8	Elements of knowledge and understanding, which are applied to the business example. Arguments and chains of reasoning are presented, but connections between cause(s) and/or consequence(s)/effect(s) are incomplete. Attempts to address the question. A comparison or judgement may be attempted, but it will not successfully show an awareness of the key features of business behaviour or business situation.
Level 3	9–14	Accurate and thorough knowledge and understanding, supported throughout by relevant and effective use of the business behaviour/context. Uses developed chains of reasoning, so that cause(s) and/or consequence(s)/effect(s) are complete, showing an understanding of the question. Arguments are well developed. Quantitative and qualitative information are introduced in an attempt to support judgements, a partial awareness of the validity and/or significance of competing arguments and may lead to a conclusion.
Level 4	15–20	Accurate and thorough knowledge and understanding, supported throughout by use of relevant and effective use of the business behaviour/context. Uses well-developed and logical, coherent chains of reasoning, showing a range of cause(s) and/or effect(s). Arguments are fully developed. Quantitative and qualitative information are used well to support judgements. A full awareness of the validity and significance of competing arguments/factors, leading to balanced comparisons, judgements and an effective conclusion that proposes a solution and/or recommendations.

Question Number	Answer	Mark

	Knowledge 1, Application 3
	
	Quantitative skills assessed:
	QS3: construct and interpret a range of standard graphical forms
	QS8: use and interpret quantitative and non-quantitative information in order to make decisions
	
	Knowledge: 1 mark for identifying how total float is calculated, e.g. LFT – EST – Duration
	
	Application: up to 3 marks for calculating the total float of activity E
	• Use and interpret diagram to calculate EST for activity C (node 4)
	   EST of activity C + duration of activity C =15
	
	• Use and interpret diagram to calculate LFT for activity H (node 6)
	   LFT of activity H – duration of activity H = 54
	
	• Identify duration of Activity E = 12
	
	• Total float 54 -15 -12 = 27
	
	NB: if answer given is 27 award 4 marks.
		(4)

Q13.

Question Number	Answer	Mark
	Knowledge 1, Application 3 Quantitative skills assessed: **QS3:** construct and interpret a range of standard graphical forms **QS8:** use and interpret quantitative and non-quantitative information in order to make decisions **Knowledge: 1 mark for** an understanding of net gain expected value – initial cost (this can be implied) **Application: up to 3 marks for:** • Marketing campaign: (0.6 x £3 million) = £1.8 million (0.4 x -£50,000) = - £20,000 • Expected value: £1.8 million - £20,000 = £1.78 million • Net gain: £1.78 million - £360,000 = £1.42 million **NB:** Award 4 marks if candidate only states £1.42 m/1.42 million Award only 3 marks if candidate only states £1.4 m/1.4 million	**(4)**