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# **MARKSCHEME**

**November 2002**

**BUSINESS AND MANAGEMENT**

**Higher Level**

**Paper 2**

1. (a) Use the *Cadbury-Schweppes* Company Report Summary to calculate the following. Ensure that you show your workings:

(i) Gross Profit for 1997.

Gross Profit = sales – cost of sales: \$ 4220 – \$ 2037= \$ 2183 (\$000s)

(ii) Expenses for 1997.

Expenses = Gross Profit – Operating Profit:  
\$ 2183 – \$ 608=\$ 1575 (\$000s)

(iii) Gross profit margin for 1997.

[3 marks]

$$\text{Gross Profit margin} = \frac{\text{Gross Profit}}{\text{turnover} \times 100} = \frac{2183}{4220 \times 100} = 51.7 \%$$

Allocate [1 mark] for a correct answer and clear calculations up to [3 marks]. Do not double penalise for mistakes carried forward.

(b) Using the ratios given in Figure 1 analyse *Cadbury-Schweppes*' performance and liquidity position.

[6 marks]

For a company that is primarily a manufacturing operation, its liquidity ratios – current assets and acid test are quite impressive. An acid test of 0.8 or even less should not be a concern as there is a fast turnover of finished goods – although the number of days it takes to sell the stock have increased. Profit, probably from the sale of businesses, has supported the fall in sales. Consequently, retained profit is considerably higher. Despite a fall in asset turnover and Return on Net Assets, the company increased its profit margin. Still, some attempt should be made to improve efficiency. EPS, dividend cover, and interest cover – all improve considerably and are rather impressive. However, DPS increased marginally. Shareholders might be unsatisfied but are unlikely to sell their shares. Gearing has improved.

Any other relevant point.

Overall, *Cadbury-Schweppes* is in a good financial position. The liquidity ratios as well as shareholders ratios can make up currently for some of the weaknesses mentioned above.

*However, for full analysis “industry norm” has to be referred to as well as looking at Cadbury-Schweppes’ performance over a longer period of time.*

**[5 to 6 marks]**

For a meaningful analysis of at least two relevant ratios from the various categories. The candidate explains the meaning and the significance of the various ratios and analyses the performance of *Cadbury-Schweppes*.

**[3 to 4 marks]**

For a relevant analysis of some ratios. The candidate explains the meaning and the significance of various ratios but might not refer to all types requested in the question. Limited analysis is provided.

**[1 to 2 marks]**

For a very superficial description of some ratios.

- (c) (i) **Define gearing.** **[1 mark]**

Gearing – the measurement of the proportion of capital employed that is provided by long term loan lending. If loans represent more than 50 % of capital employed, the company can be classified as highly geared.

Allocate **[1 mark]** for a correct definition.

- (ii) **What are the advantages for *Cadbury-Schweppes* of a lower gearing ratio?** **[3 marks]**

*Cadbury-Schweppes* is a low-geared company as less than 50 % of its capital comes from the shareholders.

Gearing has improved which indicates that *Cadbury-Schweppes* has reduced borrowing and is financially prudent in the way it funds its long-term growth. Therefore, *Cadbury-Schweppes* has an easily manageable interest-cover and potential access to finance, as creditors prefer lending to low-geared companies. *Cadbury-Schweppes* may decide not to pay dividends during a period of financial difficulties while interest rate has to be paid.

**[3 marks]**

For a clear explanation of at least two factors.

**[1 to 2 marks]**

For an explanation of one factor or for a list with out explanation **[1 mark]**.

**(d) Evaluate the growth strategies adopted by *Cadbury-Schweppes*. [7 marks]**

*Cadbury-Schweppes*' overall growth can be attributed to:

- good marketing research - forecasting;
- related diversification;
- appropriate combination of organic and inorganic growth;
- reduced risk by operating in both markets (beverage and confectionery);
- the use of the cash cows to finance growth and product development;
- successful acquisition;
- appropriate response to the short product life-cycle – using product development and market development strategic options on the Ansoff Matrix;
- *any other relevant point*.

All the above have resulted in a sound financial performance.

It is expected that candidates will evaluate the significance of the above factors.

**[7 marks]**

For an account and evaluation of at least five relevant reasons for *Cadbury-Schweppes*' growth using concepts in a clear and logical manner.

**[5 to 6 marks]**

For an account and evaluation of at least three relevant reasons for *Cadbury-Schweppes*' growth using concepts in a clear and logical manner.

**[3 to 4 marks]**

For an account of less than three reasons with limited use of concepts. No evaluation.

**[1 to 2 marks]**

For a descriptive, short answer.

2. (a) (i) **What is meant by the term “an ethical and socially responsible company”?** **[2 marks]**

Ethics - moral principles that underpin decision-making.  
Ethical business explicitly recognises the importance of “social responsibility” - the idea that managers have broader responsibilities than just making a profit.  
An ethical firm that considers society as a whole and also considers the community within which it is based can be classified as socially responsible.

**[2 marks]**

For a full definition and explanation that explains the word “ethical” and “social responsibility”.

**[1 mark]**

For a rather vague definition which does not necessarily relate to the two concepts.

- (ii) **Explain *three* external factors that might have encouraged *Boots The Chemists* to adopt their ethical policies.** **[3 marks]**

Possible drivers may include:

- pressure from government / regulation – type of products, licence, methods of production, employment practice;
- pressure from the local community, trade unions, environmentalists, consumers - for example, against animal testing, employment practice, prices, type of products.
- ethical investors;
- competitors;
- suppliers;
- employees;
- *any other relevant driver / stakeholder.*

**[3 marks]**

For an explanation of three drivers in the external environment and an explanation of the specific issue(s) of each relevant driver / group.

**[2 marks]**

For an explanation of two drivers in the external environment and an explanation of the specific issue(s) of each relevant driver / group.

**[1 mark]**

For an explanation of one driver in the external environment and an explanation of the specific issue(s) of the relevant driver / group. For a list without explanation.

- (b) In a memorandum (memo) format, [1 mark]

Allocate [1 mark] for a correct memorandum format,

- (i) Suggest and explain *three* ways in which *Boots The Chemists* can responsibly manage the physical environment. [3 marks]

Possible recommended ways:

- change its production techniques – optimizing the use of energy by using energy-efficient equipment, ensuring efficient use of material, encouraging reuse and recycling, different methods of waste disposal;
- replanting, cleaning the polluted environment;
- use of solar/wind energy;
- investment in R&D;
- incorporating the principle of sustainable development;
- selection of non-polluting suppliers;
- *any other relevant recommendations that directly relate to the physical environment.*

[3 marks]

For three coherent suggestions. Each method is fully explained.

[2 marks]

For less than three coherent suggestions. Each method is fully explained.

[1 mark]

One suggestion and explanation or a list of suggestions.

- (ii) Assess *two* costs and *two* benefits to *Boots The Chemists* that result from your suggestions in (b)(i). [4 marks]

Possible costs may include:

- increased costs of production due to investment in new technology, renewable material;
- costs of training of employees;
- bankruptcy and closure;
- *any other relevant costs.*

Possible benefits may include:

- improved efficiency and reduced costs of production;
- less government regulation / intervention;
- increased profit and sales;
- improved image;
- competitive advantage;
- *any other relevant benefits.*

**[4 marks]**

For an assessment of two potential costs and two potential benefits. The assessment relates to question (b)(i).

**[2 to 3 marks]**

For an assessment of less than two potential costs and less than two potential benefits. The assessment relates to question (b)(i).

**[1 mark]**

For a short list of some costs and/or benefits which does not necessarily relate to question (b)(i).

- (c) **Boots the Chemists insists that their Far East suppliers offer competitive terms and conditions of employment. Evaluate payment and incentive systems to encourage and reward higher productivity and recommend the most suitable system, or systems, to put into practice in the Far East.**

**[7 marks]**

We know from the text that Boots The Chemists insists that conditions of employment for Far East workers need to meet above average pay scales and competitive working conditions, There is a range of payment and incentive schemes that would motivate employees and are linked to productivity, e.g.

- performance related pay
- time based payments
- piecework
- profit sharing
- share ownership
- fringe benefits
- group or individual production bonuses

All of these could improve motivation and therefore production, whilst satisfying *Boots'* requirements. PRP demands individual appraisal and may not be suitable for a production line, where individual performance may be affected by the performance of others. Piecework may put an overemphasis on output quantity rather than quality and may produce a “sweatshop” atmosphere. Overtime payments may well encourage extra, longer hours, but this does not necessarily improve productivity. The workforce, being in a low wage economy, may already be working long hours and so terms of employment may become unacceptable.

Newer schemes like profit sharing and share ownership schemes would enhance the employees' sense of belonging and ownership, but may not fit in with the prevailing national culture, nor fit the legal structure of possibly small firms. For instance, these manufacturers may be partnerships without shares.

A range of individual and team bonuses may be appropriate, backed up by additional fringe benefits. For a small firm offering low prices to their MEDC customers, however, it is essential that incentives do in fact raise productivity and therefore pay for themselves.

It is possible for candidates to recommend a variety of suitable packages, but the choice(s) should be justified.

***[6 to 7 marks]***

Suitable payment and incentive schemes are evaluated against the need to provide competitive terms and conditions and schemes are recommended which clearly link reward to performance and are appropriate for Far East manufacturers.

***[3 to 5 marks]***

Suitable payment and incentive schemes are discussed and there is some attempt to link these to the needs of the Far East manufacturers. A recommendation, although possibly limited in nature, is required to achieve ***[5 marks]***.

***[1 to 2 marks]***

There are descriptions or a description of an incentive or payment scheme. The answer is primarily descriptive and possibly simplistic.



3. (a) (i) **What is a multinational company (MNC)?** [1 mark]

Definition: an organisation that operates production or services facilities outside the country in which it is based [1 mark].

(ii) **Suggest two reasons why L’Oreal chose to enter the Chinese market.** [2 marks]

Possible relevant reasons:

- the size of the Chinese market;
- government policies – privatization, financial incentives;
- economics: market liberalisation;
- cultural reasons;
- cheaper costs;
- lack of competition;
- market opportunity;
- any other relevant factors.

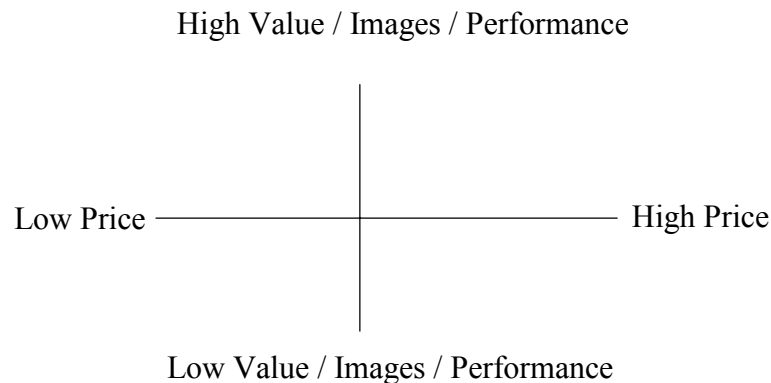
[2 marks]

For identification and clear suggestions of two relevant reasons.

[1 mark]

For identification of one reason.

(b) **Prepare a product position map for L’Oreal in China and identify a potential market opportunity.** [5 marks]



Positioning map – the location of a product relative to others in the same market place:

Any two relevant attributes can be chosen e.g. price / quality, price / image / performance.

Identification of potential market opportunities:

Possible to develop more of a mass market, lower price / medium price, medium image/ performance / value.

Or possibly low price / low quality under a different name so as not to dilute the current brand image.

**[5 marks]**

For an accurate positioning map and substantiated identification of potential market opportunities in the Chinese market.

**[3 to 4 marks]**

For a largely accurate positioning map and relevant identification of potential market opportunities in the Chinese market.

**[1 to 2 marks]**

For an inaccurate positioning map, or no map at all. Limited or no identification of market opportunities.

**(c) Use relevant marketing concepts / theories to discuss and analyse the reasons for L’Oreal’s success in the Chinese market.**

**[8 marks]**

Some possible reasons for L’Oreal success:

- L’Oreal used “market development strategy” as well as “product development strategy” / Ansoff Matrix;
- L’Oreal took advantage of opportunities in the Chinese external environment
- discussion of the Product Life Cycle and the extension from up-market brand into mass-market brands in China;
- L’Oreal created a synergy between one of its internal strengths – global brands – and opportunities in the Chinese external environment;
- investment into R&D;
- constant communication with customers resulted in a responsive, customer focused, flexible, innovative firm;
- a well known global brand extension into a new market as well as adaptation to the market particular needs;
- ability to “divide and rule” – the use of “branding” and “segmentation”;
- some evidence (inference) of adaptation of the marketing mix especially product, distribution and price according to segments and brands;
- evidence of L’Oreal’s success and evaluation of the major factor(s) discussed which was (were) likely to be the main contributor(s) to the company success;
- *any other relevant reasons.*

**[7 to 8 marks]**

Relevant evidence of success, and correct identification of a strategy(s). Meaningful analysis and discussion which has made extensive use of the subject concepts and theories. Clear application of theories and concepts to the case study.

**[5 to 6 marks]**

Some relevant evidence of success. Some analysis / discussion which has made use of subject theories / concepts. Minor mistakes and omissions may have been made. Largely appropriate application of theories and concepts to the case study.

**[3 to 4 marks]**

Reasonable discussion which may be descriptive at times. Some mistakes may have been made and/or significant omissions. Application to the case study may not always be appropriate.

**[1 to 2 marks]**

Descriptive answer with limited use of marketing terminology.

- (d) Explain *two* costs and *two* benefits for Chinese citizens of a MNC operating in their country.**

**[4 marks]**

Possible benefits:

- increased competition – choice, quality, cater for customers needs / tastes;
- increase in employment;
- transfer of technology / improved infrastructure;
- *any other relevant benefits.*

Possible costs:

- increased competition – effects on local producers / unemployment;
- socially irresponsible firms;
- effects on culture, tradition, way of life;
- profits going overseas;
- *any other relevant cost.*

**[4 marks]**

For an explanation of two possible costs and two possible benefits.

**[2 to 3 marks]**

For identification of two possible costs / benefits and the provision of a limited explanation.

Up to **[2 marks]** for a correct identification without some explanation.

**[1 mark]**

For a limited list.

For identification of less than two possible costs/benefits without explanation.

4. (a) Use Maslow's hierarchy of needs to discuss why employees of *Top-taste* fear change. Consider the effects of such fear on motivation. [6 marks]

With the application of Maslow's Hierarchy of Needs, the reasons why employees in *Top-taste* fear change include:

- physical needs – unemployment, loss of earnings, home, rest period;
- security needs – lack of necessary skills, loss of job;
- belonging needs – moved away from one's family group / friends;
- esteem needs – loss of position, power, responsibility – especially for middle managers, feeling incompetent with the new technology;
- self-actualisation – reduced promotion opportunities, inability to cope with the new technological challenge, managers from the other company may eventually replace top jobholders.

The above can result in low morale and a lack of motivation. This consequently affects productivity, costs and possibly sales and profit.

[6 marks]

Explanation of the various needs in an appropriate order, correct application of relevant information to Maslow's Hierarchy and some discussion of the effect on motivation and consideration of the fears of employees.

[4 to 5 marks]

Explanation of the various needs, correct application of relevant information to Maslow's Hierarchy and a limited discussion of the effect on motivation and consider the fears of employees.

[2 to 3 marks]

Description of the various needs and some minimal attempts to apply information and to discuss employees' fear.

[1 mark]

Vague, extremely superficial answer that makes some minimal attempt to list Maslow's Hierarchy of Needs.

- (b) Describe *three* possible types of employee's resistance to these changes and assess their effects on *Top-taste*. [5 marks]

Some possible types of employee resistance to change:

- inefficient work: low level of effort, time / material wasting, go-slow, overtime ban, work to rule, high level of absenteeism;
- complaints, demonstration, mass occupation of premises by employees, strikes, voluntary resignation;
- *any other relevant example.*

Possible effect on *Top-taste*:

- loss of production due to industrial action can result in loss of sales, profit, bad relationship with consumers, bad publicity and possible loss of reputation and future orders;
- long term effect on motivation and employee retention and recruitment;
- cost of recruitment due to high staff turnover;
- fixed costs still have to be paid even if production is altered;
- *any other relevant effect.*

**[5 marks]**

For a discussion of three possible types of resistance and for a clear assessment of their specific effects on the organization.

**[3 to 4 marks]**

For a simple description of three possible types of resistance without an assessment of their effects or a description of fewer than three types of resistance with some assessment.

**[1 to 2 marks]**

For a superficial response with no assessment of the effects on the organization.

**(c) In a report format addressed to the Senior Management Team: [2 marks]**

**[2 marks]**

For a report format, which includes: to, from, date, title, introduction, analysis, conclusions and recommendations. One element may be missing without marks being deducted.

**[1 mark]**

For a report format where more than one element may be missing.

**suggest and evaluate ways in which *Top-taste* could have managed organizational change more effectively. [7 marks]**

Possible suggestions:

- avoid one sided top-down approach;
- try to predict and plan for change as far ahead as possible;
- be proactive rather than reactive;
- inform people in a variety of ways as soon as possible;
- encourage queries and challenges from employees;
- encourage consultation and participation in various ways: working groups, open meetings, group meetings, discussion groups *etc.*;
- provide clarity, reassurance and support as much as possible regarding the possible negative effects of the change - such as redundancies, demotion *etc.*;
- emphasise the positive effects of the proposed change;
- provide training when possible;
- *any other relevant suggestion.*

The above suggestions should:

- reduce fear of the unknown
- create a participative culture of trust and a sense of direction and new challenges for the employees.

The above suggestions can also be looked upon as addressing the lower as well as the higher levels of needs.

The factors above should result in improved motivation, efficiency and profit.

***[6 to 7 marks]***

For relevant suggestions (at least four) introduced and evaluated in a coherent manner.

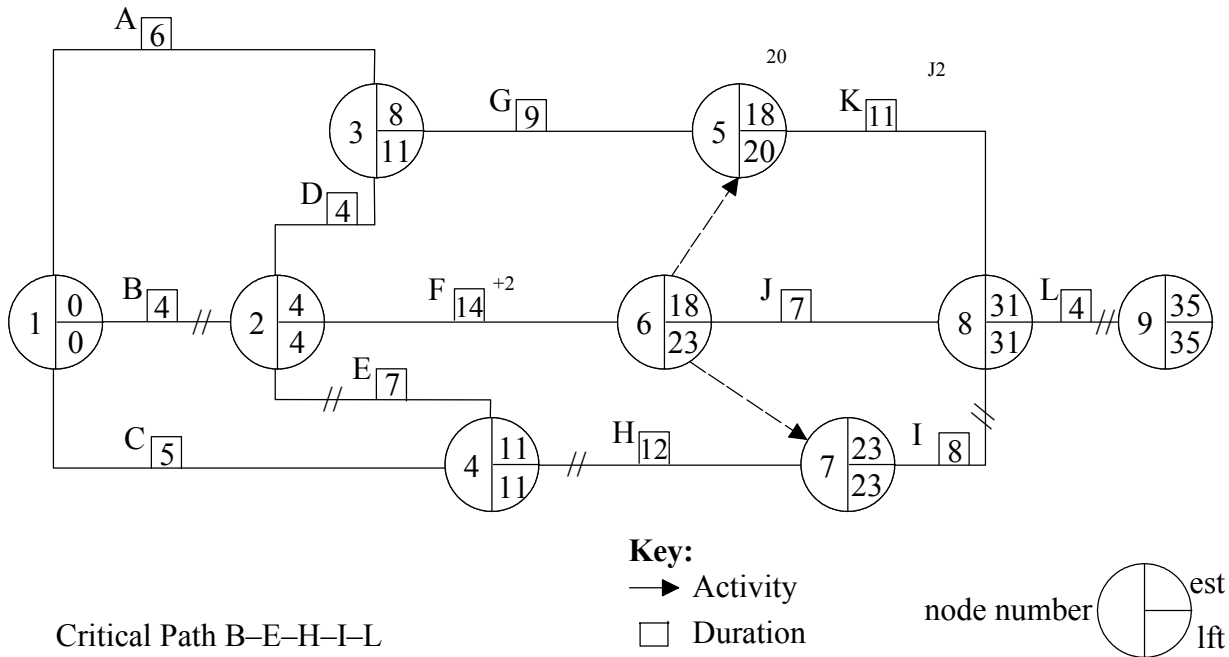
***[3 to 5 marks]***

For at least three relevant suggestions. Evaluation is not always correct.

***[1 to 2 marks]***

For limited suggestions without evaluation.

5. (a) Draw the network and calculate both the earliest starting time and the latest finishing time. Identify the critical path on the network. [8 marks]



**[8 marks]**

For a completely accurate, clearly presented critical path diagram showing all EST, LFT; the critical path is labelled and keyed.

**[5 to 7 marks]**

For a diagram with one or two errors which is well presented, labelled and keyed

**[3 to 4 marks]**

For a diagram, which contains a few mistakes and/or may not be fully labelled or keyed.

**[1 to 2 marks]**

For a poor, largely inaccurate presentation.

- (b) Due to staffing problems it becomes clear to the production manager that the following delays are going to occur with the latest batch:

activity F	2 days
activity K	2 days

The production manager is considering moving labour from activity C to both F and K, which will reduce the delay to both F and K to one day, but will delay C by five days.

Showing all calculations explain whether this strategy is appropriate. *[4 marks]*

Floats		
	TF	FF
A	5	2
B	0	0
C	6	6
D	3	0
E	0	0
F	5	0
G	3	1
H	0	0
I	0	0
J	6	6
K	2	2
L	0	0

Delay activity C by five days will not affect duration or any other activity - both floats are 6.

If F and K are delayed by two days, duration increases by 2. Critical path remains the same.

If labour is moved from C to F and K, duration will be reduced from 37 to **35** – back to the **original** time.

*[4 marks]*

For accurate calculations of TF, FF and correct application to the critical path

*[2 to 3 marks]*

For largely accurate calculations and a reasonable attempt to apply them to the critical path. Explanation regarding the strategy is provided.

*[1 mark]*

For vague, largely inaccurate calculations. The candidate does not explain whether this strategy is appropriate.



- (c) **With reference to other methods of production identify *two* advantages and *two* disadvantages of batch production.** **[4 marks]**

Possible advantages of batch production:

- less need for costly skilled employees as employees can concentrate on one task rather than the whole task in job production;
- larger quantity can be produced than in job production but flexibility still exists;
- less variety of machinery is needed compared with job production.

Possible disadvantages of batch production:

- careful planning and co-ordination are needed and there could be problems with delays;
- machines have to be more complex and therefore more expensive;
- the workforce may be less motivated;
- if batches are small, the unit cost will be relatively (to flow production) high.

Any other relevant advantage or disadvantage.

Allocate **[1 mark]** for a correct identification of each advantage and disadvantage up to **[4 marks]**. Do not allocate more than **[2 marks]** in each category.

- (d) **Discuss the advantages for operating companies of leasing the carriages rather than purchasing them from *Buffer to Buffer*.** **[4 marks]**

The advantages of leasing may include the following:

- the leasing company will do maintenance and repairs;
- a good option for companies with liquidity problems and / or cash shortage;
- carriages can be replaced more often;
- provide operational flexibility.

**[4 marks]**

For a discussion of two advantages.

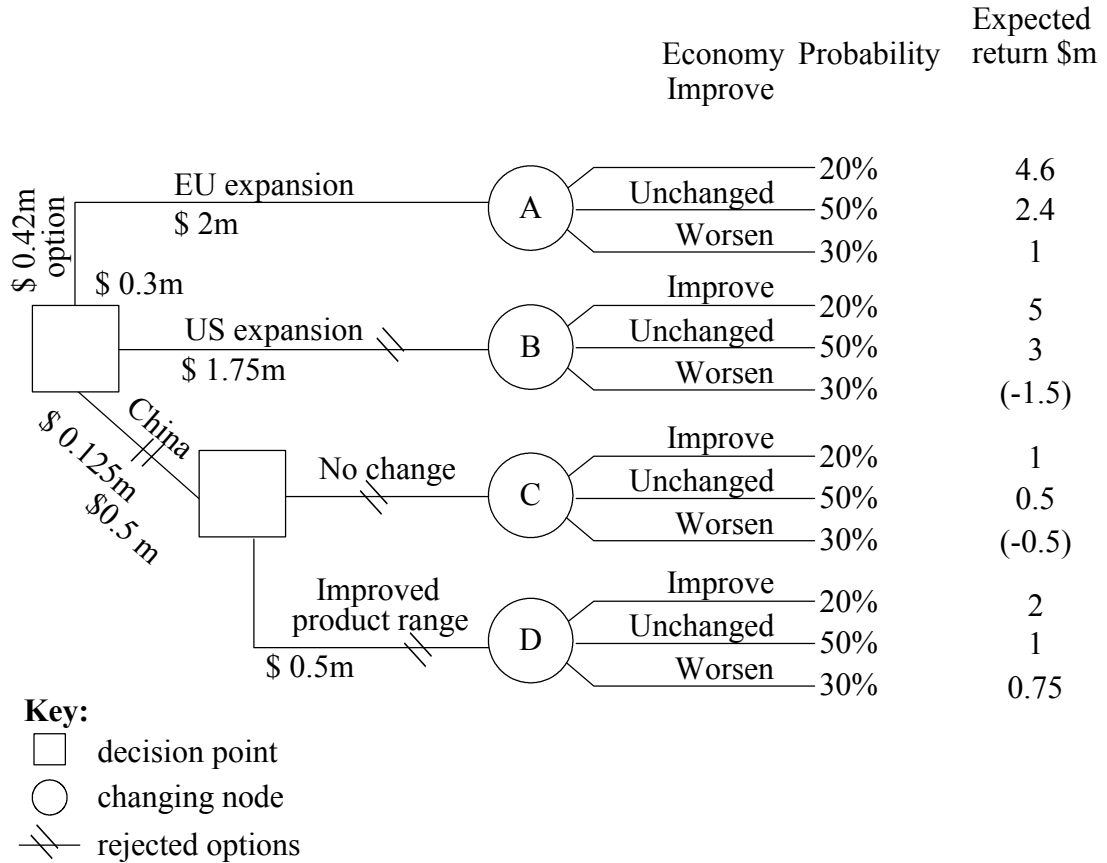
**[2 to 3 marks]**

For an identification of two advantages but discussion was not included. For an identification and discussion of one advantage

**[1 mark]**

For an identification of one advantage.

6. (a) Construct a decision tree and select the most desirable option for expansion of Mr Yin's business on financial grounds. Show all your working. [8 marks]



Calculations

**Option 1:** \$ 4.6m × 0.2 = \$ 0.92m  
 \$ 2.4m × 0.5 = \$ 1.2m  
 \$ 1m × 0.3 = \$ 0.3m  
 \$ 2.42m - \$ 2m (costs) = \$ 0.42m = net expected value  
 \* the most profitable options

**Option 2:** \$ 5m × 0.2 = \$ 1.0m  
 \$ 3m × 0.5 = \$ 1.5m  
 (\$ 1.5m) × 0.3 = (\$ 0.45m)  
 \$ 2.05m - \$ 1.75m = \$ 0.3m = net expected value

**Option 3:**

- without change to product range:
  - \$ 1m × 0.2 = 0.2
  - \$ 0.5m × 0.5 = 0.25
  - \$ (0.5m) × 0.3 = (0.15)
  - \$ 0.3 m - \$ 0.5m (costs) = (\$ 0.2m)

**Option 4:**

- with a change to product range:  
 $\$ 2\text{m} \times 0.2 = \$ 0.4\text{m}$   
 $\$ 0.5\text{m} \times 0.5 = \$ 0.5\text{m}$   
 $\$ (0.5\text{m}) \times 0.3 = \underline{\$ 0.225\text{m}}$   
 $\$ 1.125\text{m} - \$ 1\text{m} = \$ 0.125\text{m}$

**[7 to 8 marks]**

For an accurate decision-tree which is appropriately labelled and includes workings that justify the selection of the most desirable option. **[7 marks]** only when a key is not provided.

**[4 to 6 marks]**

For **[6 marks]** there is a largely accurate decision-tree. At the lower end of the band labelling may be incomplete and there may be several mistakes in calculations.

**[2 to 3 marks]**

The decision-tree contains significant errors. The candidate may confuse decision points and chance nodes.

**[1 mark]**

For a fundamentally flawed decision tree.

- (b) **Describe how Mr Yin may have gathered the information to produce the decision tree.** **[3 marks]**

Mr Yin may have carried out market research, both primary and secondary, to produce the probabilities for economic growth. The research could have involved government statistics, forecasts of economic institutes and economic analysts *etc.*

The costs of expansion could have come from previous expansion data, various quotes from building companies and desk research using standard costing. Several of the figures are likely to be estimates.

**[3 marks]**

For identification of primary and secondary sources using a range of examples mentioned above.

**[2 marks]**

For identification of at least some sources but may not include both primary and secondary sources.

**[1 mark]**

For identification of a single source of information.

**(c) Explain *two* advantages and *two* disadvantages of using a decision tree. [4 marks]**

Possible advantages:

- the construction of the decision tree diagram may formalise the process,
- shows possible courses of actions not considered before,
- forces management to take account of risks involved in decisions and could lead to a more rational decision.

Possible disadvantages:

- the information is often estimated (probabilities as well as profit);
- this technique ignores qualitative issues: image, objectives, social responsibility, human resource issues / motivation, skills;
- the process may be complicated and time consuming and is subject to constant changes in the external environment;
- *any other valid advantages/disadvantages will be acceptable.*

**[4 marks]**

Explanation of two advantages and two disadvantages.

**[2 to 3 marks]**

An “imbalanced explanation”. For **[2 marks]** the answer is limited in scope – a list rather than explanation is provided.

**[1 mark]**

A vague, very superficial answer.

**(d) Assess the difficulties that the organization may face selling its product abroad. [5 marks]**

Assessment of the difficulties of expansion may include:

- culture;
- legal barriers regarding the importation of Chinese products;
- language barriers;
- competition from existing firms in the EU;
- extra costs of marketing mix ... in labelling, different ways of promotion *etc.*;
- setting up new distribution and supply network;
- *any other relevant point.*

Mr Yin’s ability to overcome above will depend on the expertise of his staff, his ability to negotiate abroad, connections, level of adaptation *etc.*

**[5 marks]**

A consideration and assessment of at least three relevant obstacles.

**[3 to 4 marks]**

Consideration and assessment of two obstacles.

**[1 to 2 marks]**

A list of possible obstacles or for an assessment of one obstacle.

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