

MARKSCHEME

May 2004

BUSINESS AND MANAGEMENT

Higher Level

Paper 1

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SECTION A

1. (a) **Define, with reference to the case study, what is meant by *outsourcing production (line 82)*.** **[2 marks]**

Using a contractor to produce yachts under the *Riveau Yachts* name.

[2 marks]

Accurate definition with illustration from the case study, such as outsourcing to the Americas or Asia

[1 mark]

A definition with no reference to the case study.

- (b) **Discuss the advantages and disadvantages to *Riveau Yachts* of expansion through outsourcing production rather than manufacturing all the yachts themselves.** **[10 marks]**

Advantages

- a relatively quick form of expansion
- lower capital costs for the expansion
- maintains control over the marketing of the *Riveau Yachts* brand
- avoids exporting problems and costs
- lower distribution costs
- ready established supply chain
- helps with recruitment problems / labour shortages
- more flexible to changing levels of demand
- *any other relevant reason.*

Disadvantages

- loss of quality control
- costs of drawing up agreements
- monitoring costs
- potentially lower revenues
- communication problems
- possible redundancies
- ethical issues relating to outsourced firm
- exchange rate fluctuations
- *any other relevant reason.*

[9 to 10 marks]

A balanced and detailed discussion of the advantages and disadvantages of outsourcing production. Discussion is closely related to the case study, and uses relevant business terms.

[6 to 8 marks]

A balanced discussion of the advantages and disadvantages of outsourcing production. Discussion is related to the case study and uses some relevant business terms. At the bottom end of the range the discussion may be more general.

[3 to 5 marks]

At least one advantage and disadvantage of outsourcing production with some explanation of each point or perhaps a list of relevant advantages and disadvantages without full explanation. There is some attempt at discussion of the advantages and disadvantages but this may not be specific to the case study.

[1 to 2 marks]

A limited answer with an advantage and/or disadvantage but probably just listed. There is little or no discussion.

2. (a) **Using examples from the case study explain the difference between fixed and variable costs.** **[6 marks]**

Fixed costs: costs that do not vary with the level of output (or other appropriate definition). Examples from *Riveau Yachts* could include

- design costs of yachts
- marketing costs
- administration and office expenses
- interest payments on loan capital
- rent on factory
- costs associated with machinery *e.g.* depreciation
- *any other relevant example (relevant to production of yachts).*

Variable costs: costs that vary with the level of output (or other appropriate definition). Examples from *Riveau Yachts* could include

- costs of raw materials – wood, paint, glass fibre
- labour costs for production workers
- equipment for yachts
- *any other relevant example (relevant to production of yachts).*

[5 to 6 marks]

The difference between fixed and variable costs is well explained. The examples used are sufficient and relevant to the case study.

[3 to 4 marks]

The difference between fixed and variable costs is explained. The examples used are adequate and have some relevance to the case study.

[1 to 2 marks]

There is limited understanding of fixed or variable costs. There may be no examples used.

- (b) Evaluate *three* different methods of costing that would help with *Riveau Yachts'* aim of introducing cost control. **[10 marks]**

Full costing – allocating indirect costs in some arbitrary way, for example as a percentage of variable costs taken by each product.

Absorption costing – absorbing costs to a particular cost centre. Costs can be apportioned in various ways. For example, labour costs apportioned according to number of employees involved in that area.

Marginal costing – costing according to contribution that product makes to overheads and profit.

Activity-based – looking at the total costs of each activity carried out by the firm. Assigns all the resource costs to the output produced.

Standard costing – comparing expected costs of activities with actual costs and looking at variances between actual and expected.

Candidates should evaluate the appropriateness of each type of costing for *Riveau Yachts* who are producing a number of different versions of the same product. It may be possible to create cost centres for each model and allocate overheads according to production. However, many costs may be difficult to allocate. The yachts are produced on the same production line and this may make many overheads difficult to allocate with many facilities and all administration and marketing being shared. Labour and other direct costs will be easier to allocate but workers nevertheless work on a number of models at any time. The “value” of the information to the firm will depend on how important it is to identify the profitability of each model. As the process is labour-intensive, this may make the development of cost centres and other costing approaches easier.

[8 to 10 marks]

A full evaluation of three methods of costing including thorough definition and explanation of each method. Evaluation is fully related to the case study and clearly identifies how each method helps *Riveau Yachts* with their aim of higher cost control.

[5 to 7 marks]

Evaluation of at least two methods of costing including some definition and explanation of each method. Evaluation is generally related to the case study but may tend to description at the lower end of the band. The candidate relates the evaluation to the aim of tighter cost control, but this may be limited at the lower end of the band.

[3 to 4 marks]

Limited, if any, evaluation of at least one method of costing with a brief definition and explanation of each method. There may be some limited attempt to relate this to the case study but with a tendency to description rather than evaluation.

[1 to 2 marks]

A limited, descriptive answer, perhaps with a list of costing methods but little or no definition or explanation.

3. (a) Using an appropriate tool (such as the Boston Consulting Group Matrix) represent the product portfolio of *Riveau Yachts* as outlined in *Appendix 1*. **[4 marks]**

It is expected that candidates will use the Boston Matrix but less relevant tools such as product life cycle and positioning maps may be used and should be credited according to the bands below.

Boston Matrix

Market growth

		High	Low
Market share	High	Star S1200B S1200L D950	Cash cow Z850
	Low	Problem child X1025	Dog J800

Allow some flexibility in positions particularly for the J800 and D950.

[4 marks]

A completely accurate and labelled Boston Matrix or other tool with all products allocated reasonably accurately according to information given.

[2 to 3 marks]

A reasonable attempt to represent a Boston Matrix or other tool using some of the information from *Appendix 1* but not always with precision.

[1 mark]

Limited and imprecise answer.

- (b) Make recommendations to the company as to how they could develop the D950 model.**

[6 marks]

To develop the D950, the firm may want to

- use market research to identify the target market for the D950
- from the results of the market research develop a marketing strategy to target the appropriate segment
- use finance from cash cow to fund further product development and build and improve the product
- adapt the marketing mix as appropriate to target the market more closely
- *any other relevant point.*

[5 to 6 marks]

Thorough recommendations to the firm, closely related to the case study and the position of the D950 in the product portfolio.

[3 to 4 marks]

Some recommendations to the firm, though perhaps tending to be a little descriptive and perhaps not related to the case study.

[1 to 2 marks]

A limited, essentially descriptive answer with little or no reference to the product or case study.

Candidates should be rewarded appropriately if their answer is consistent with the position selected in part (a).

4. (a) Prepare a SWOT analysis for *Riveau Yachts*.

[10 marks]

Strengths

- dominant market position in Europe
- high quality, skilled and experienced labour force
- high profile of Jacques and Yves
- well balanced product portfolio
- strong brand
- high repeat sales
- price competitive
- *any other relevant point.*

Weaknesses

- inflexibility in production
- rising labour turnover
- increasing difficulty in recruiting skilled staff (location a contributory factor?)
- rate of growth of sales falling in some markets
- autocratic leadership style of Jacques and Yves
- lax stock control
- product orientation
- high proportion of sales in France
- labour - intensive production
- *any other relevant point.*

Opportunities

- the growth and development of charter holiday market
- expansion of trade in Europe with introduction of Euro
- growth in new markets like the Americas, Asia and the Baltic States
- continued income growth and income elastic product
- developments in production methods and trends towards more flexible production
- *any other relevant point.*

Threats

- competition increasing in many product areas
- possible introduction of environmental legislation
- high costs of development of new products
- external economic shocks with global slowdown
- terrorists and other threats affecting markets
- *any other relevant point.*

[8 to 10 marks]

A full and detailed SWOT analysis which has a balanced analysis of all areas and accurately identifies internal strengths and weaknesses and external opportunities and threats. The analysis is closely related to the case study.

[5 to 7 marks]

The SWOT analysis is reasonably full and detailed but may not be balanced or cover the whole range of issues. The analysis is generally related to the case study. There may be some confusion between internal strengths and weaknesses and external opportunities and threats.

[3 to 4 marks]

Some attempt at identifying strengths, weaknesses, opportunities and threats but probably unbalanced and with limited description or explanation of each point raised. Points raised may be descriptive rather than related to the case study.

[1 to 2 marks]

A limited, descriptive answer with little relation to the case study and points listed with little or no description or explanation.

- (b) Using the SWOT analysis (prepared in (a)) evaluate which of the approaches suggested by Future Strat (lines 85-91) Riveau Yachts should adopt.**

[12 marks]

Candidates should relate the internal strengths and weaknesses and external opportunities and threats they have identified to each of the four options. Credit should also be given as appropriate for new points raised though they need to refer to their SWOT analysis to get to the highest levels.

- Focus on existing markets
to do this they need to look closely at their product portfolio and the relevant marketing strategy. They need to work to develop the brand further and offer opportunities for existing customers to upgrade to a larger model. Careful development of the marketing mix will be required. Trade in Europe is expanding with the introduction of the Euro. However, the threat of environmental legislation may increase the risk of this option.
- New product development
there are opportunities in the charter holiday market but this may mean high development costs for the new versions required and may have associated risks e.g. exchange rate risks. However, the firm is price competitive and may gain further economies of scale with expansion.
- Selling existing products to new markets
there are expansion opportunities in the Americas and Asia and emerging markets like the Baltic States but the company has already begun to look at many of these. This option may carry greater risks, but offer more long-term potential.
- Diversification into other markets and products
the company may be able to use the work force and equipment to develop related products or act as a subcontractor for other firms. However, the easiest route for diversification may be to merge with a related company with some potential synergies. This option may be risky as they are moving away from their core competences.

Credit should be given for relevant points under each heading and points related to the earlier SWOT analysis. Candidates must make a supported judgment of the approach they recommend. A combination of approaches may be acceptable if justified.

[10 to 12 marks]

A full, detailed and thorough evaluation of all four approaches with the evaluation closely related to the SWOT analysis carried out in part (a). All points raised are relevant to and related to the case study. A clear and justified judgment is given as to the most appropriate approach or combination of approaches.

[7 to 9 marks]

Reasonable evaluation of at least two of the four approaches with reference to the SWOT analysis from part (a). Points raised are generally related to the case study though some may tend to be a little descriptive. Some judgment is offered as to the most appropriate approach or combination of approaches though the judgment may not be fully supported.

[4 to 6 marks]

Some evaluation of at least one of the four approaches with reference to the SWOT analysis though this may be limited at the lower end of the band. Points raised may have some relation to the case study but will be essentially descriptive at the lower end of the band. There may possibly be some judgment offered as to an appropriate approach at the upper end of the range, though this may not be entirely appropriate.

[1 to 3 marks]

A limited, essentially descriptive answer. Points may follow the SWOT analysis but may be simply listed or repeated and not fully applied to the question.

SECTION B

Answer **one** question from this section.

5. (a) **If the financial director chooses to use the reducing balance method of calculating depreciation and charged depreciation at 30 % each year, what would be the book value at the end of 5 years? Show your workings.**

[3 marks]

Each year's depreciation allowance calculated by taking 30 % of the net book value at the end of the previous year.

Year	Depreciation allowance	Book value
1	45 000 (30 % of \$150 000)	105 000
2	31 500 (30 % of \$105 000)	73 500
3	22 050 (30 % of \$73 500)	51 450
4	15 435 (30 % of \$51 450)	36 015
5	10 804.5 (30 % of \$36 015)	25 210.5

[3 marks]

Fully correct answer with all workings shown.

[2 marks]

Essentially correct perhaps with one or two errors continued through the table, but with an appropriate method of calculation. Maximum of **[2 marks]** if all the table is correct but with no workings shown.

[1 mark]

Identification of correct approach or definition of reducing balance but with inadequate calculations and workings or two or more errors in the calculations.

(b) Use the profit and loss account and balance sheet in *Appendices 2 and 3* respectively to calculate the following ratios:

- Net profit margin for 1993 and 2003
- Current ratio for 1993 and 2003
- Return on capital employed for 1993 and 2003.

[6 marks]

$$\text{Net profit margin} = \frac{\text{net profit}}{\text{sales revenue}} \times 100$$

$$\begin{aligned} \text{Net profit margin} \quad 1993 &= (\$5\,244\,475 / \$36\,794\,175) \times 100 = 14.25 \% \\ &2003 = (\$13\,477\,550 / \$156\,777\,550) \times 100 = 8.6 \% \end{aligned}$$

$$\text{Current ratio} = \frac{\text{current assets}}{\text{current liabilities}}$$

$$\begin{aligned} \text{Current ratio} \quad 1993 &= \$10\,865\,000 / \$5\,915\,000 = 1.84 : 1 \\ &2003 = \$48\,644\,000 / \$17\,286\,000 = 2.81 : 1 \end{aligned}$$

$$\begin{aligned} \text{Return on capital employed} \\ &= \frac{\text{net profit before interest and tax}}{\text{total capital employed}} \times 100 \end{aligned}$$

$$\begin{aligned} \text{ROCE} \quad 1993 &= \$5\,244\,475 / \$11\,500\,000 = 45.6 \% \\ &2003 = \$13\,477\,550 / \$73\,947\,000 = 18.23 \% \end{aligned}$$

[1 mark] for each correctly calculated ratio up to [6 marks].

Up to [2 marks] for correct identification of the formulae and an attempt to calculate the values with an appropriate method, but with errors in the calculation or the use of inappropriate data.

Up to [1 mark] for correct identification of the formulae for the ratios, but with little or no calculation.

- (c) **Using ratio analysis and information from the profit and loss account and balance sheet in *Appendices 2 and 3* respectively, evaluate the financial performance of *Riveau Yachts* from the perspective of a potential investor.** ***[11 marks]***

Relevant points to be raised

- gross profit margin falling – indicates rising cost of sales or falling average revenue. Perhaps poor management of raw materials, rising raw material costs or increased competition reducing relative prices and therefore margins
- net profit margin falling – as above, but also increased admin costs, top-heavy employment in marketing and admin, more marketing staff required to cope with greater competition, lower productivity in management and admin, diseconomies of scale or perhaps inadequate cost control
- current ratio increased significantly – now high. Perhaps too much cash and other current assets tied up in assets not working hard enough – too much working capital? Offers potential for funds for further investment and development. Indicates a firm with a high level of liquidity
- ROCE – fallen significantly in the last decade, but still significantly higher than returns offered by other investments – therefore efficient use of capital employed. Needs to be put in context of whole industry for full comparison. Why fallen? Perhaps lower margins from higher levels of competition, perhaps high capital cost of expansion has led to lower relative returns
- between 2001 and 2003 the values for many ratios have begun to improve again and this may be a positive sign to an investor that measures implemented by the management team are starting to take effect
- *any other relevant evaluation of ratios or profit and loss account figures including ratios in addition to those calculated in part (b).*

[9 to 11 marks]

A full evaluation using ratio analysis appropriately including interpretation of at least three ratios perhaps including ratios in addition to those calculated in part (b) and analysis of the balance sheet and profit and loss account. Answer clearly identifies the importance of the ratios and other figures to an investor and the importance of looking at values across the industry before making any investment decision.

[6 to 8 marks]

A sound evaluation using ratio analysis and at least two or three ratios, but perhaps lacking reference to other aspects of the profit and loss account or balance sheets and perhaps not relating the ratio values fully to the case study. Perhaps not interpreted from the investor's perspective, but rather the business perspective.

[3 to 5 marks]

Examination of perhaps one or two of the ratios, but lacking detail on the others or perhaps lacking reference to the profit and loss account and balance sheet and the rest of the case study. Perhaps just a listing of some points without full evaluation.

[1 to 2 marks]

Essentially descriptive answer simply referring to some ratios but lacking any evaluation or interpretation of the values and implications of them. Lacking in any real reference to the case study.

6. (a) **Riveau Yachts need to analyse the cash flows resulting from the sale of the new models. Assuming a starting balance of \$50 000 and monthly expenses of \$4 000 000 and taking into account the sales variances prepare a cash statement for Riveau Yachts for January to April 2004.** *[5 marks]*

Candidates need to adjust the sales budget using the sales variances and adjust the prices for the discounts. The resulting cash statement should be

Cash Flow	January	February	March	April
Opening balance	50 000	-2 432 750	-3 589 500	931 750
Expenses	4 000 000	4 000 000	4 000 000	4 000 000
Revenue	1 517 250	2 843 250	8 521 250	4 118 250
Closing balance	-2 432 750	-3 589 500	931 750	1 050 000

[5 marks]
Full answer with all values correct.

[3 to 4 marks]
Substantially accurate answer but perhaps with two or three errors in calculation or missing values.

[1 to 2 marks]
Over three errors in calculation or a set of figures missing.

(Avoid double penalizing of errors.)

- (b) **Identify three possible methods that Riveau Yachts could use to finance any cash shortages they may face from the launch of the new yachts. Evaluate which method will be the most appropriate for them.** *[7 marks]*

- Possible methods of financing shortages of working capital
- overdraft or other short-term loans or extension of credit facilities
 - sell off excess stocks of raw materials
 - sell fixed assets and lease them back
 - sell debts to a factoring company
 - tightening of credit control.

Evaluation of appropriate method should focus on the nature of the cash shortage identified and the nature of the solution. Cash shortage is only for a two month period, so short-term solutions are most appropriate.

[6 to 7 marks]
Full evaluation of at least three methods of financing working capital shortages and discussion of how appropriate each is for the cash shortages faced by Riveau Yachts.

[3 to 5 marks]

Evaluation of at least two methods of financing working capital shortages with some limited discussion of how appropriate each may be for *Riveau's Yachts* needs or perhaps three or more methods but with little evaluation of each type.

[1 to 2 marks]

Identification of some methods of financing working capital shortages, but with little or no evaluation. Maximum of **[2 marks]** for a list with no explanation or evaluation.

(c) Discuss possible reasons for the sales variances identified in the table.

[8 marks]

Students need to identify pattern of variances – essentially adverse at start of time period and then favourable after two months, though variances are mostly adverse for the S1200 model.

Possible reasons for adverse variances

- slow start to bookings, therefore charter operators delay investment in new yachts
- economic slowdown affecting demand as products are income elastic
- insufficient discounting to attract early purchases
- brand not as strong in charter market as standard markets
- insufficient marketing of yachts to operators or insufficient sales support
- hesitancy about adoption of new designs
- external factors – terrorist activities etc. leading to slow demand growth
- unusual seasonal conditions
- *any other relevant reason.*

Possible reasons for favourable variances

- charter operators slow to adopt, but favourable reception to early adoption increasing sales later
- possible failure of a competitor
- marketing effort slow to take effect
- external factors – weather *etc.*
- income growth/economic recovery
- changes in consumer tastes
- unusual seasonal conditions
- *any other relevant reason.*

[6 to 8 marks]

Full discussion of both favourable and adverse variances giving a number of reasons for variances – all variances explained and related to *Riveau Yachts* and their market.

[3 to 5 marks]

Identification of several reasons for variances with some limited discussion of why they have arisen, though reasoning perhaps not fully related to the case study, or perhaps some reasons general ones rather than specific to the case study.

[1 to 2 marks]

Essentially descriptive answer with identification of one or two reasons for variances but with no or limited discussion of their relevance to *Riveau Yachts*.
