3.1 Finance and accounts

Name: _____ Class: _____ Date: _____ **Total: 29 marks**

KEY WORDS working capital • investment appraisal

Finance and accounts

Objective

Choose appropriate sources of finance, read the income statement and balance sheet, calculate and interpret the profitability and liquidity ratios, forecast cash flow, and appraise an investment with payback, ARR and NPV (syllabus 3.1–3.5, 3.7–3.8).

1 Key knowledge and worked examples

Unit 3 toolkit. Capital expenditure buys non-current assets; revenue expenditure runs the business. Sources: retained profit, sale of assets, owners' savings (internal); share capital, loans, overdrafts, trade credit, leasing, crowdfunding, microfinance, business angels (external). Income statement: revenue 600 000, cost of sales 360 000, gross profit 240 000, expenses 150 000, profit 90 000. Balance sheet: non-current assets 320 000, current assets 80 000, current liabilities 40 000, non-current liabilities 160 000, equity 200 000. GPM 40%, profit margin 15%, ROCE 25%; current ratio 2.0, acid test 1.25. Straight-line depreciation $(22\,000 - 2\,000)/4 = 5\,000$ a year. Third workshop: payback 3 years, ARR 8.3%, NPV +18 600 at 6%.

2 Practice

2.1 Distinguish capital expenditure from revenue expenditure, giving one example of each for the repair business. [2]

2.2 State two internal and two external sources of finance, with one reason a profitable company might still prefer an external loan. [3]

2.3 A diagnostic machine costs 22 000, has a residual value of 2 000 and a four-year life. Calculate the annual straight-line depreciation charge. [2]

2.4 Revenue is 600 000, cost of sales 360 000 and expenses 150 000. Calculate gross profit, profit for the year, the gross profit margin and the profit margin. [4]

2.5 Current assets are 80 000 (inventory 30 000) and current liabilities 40 000. Calculate the current ratio and the acid test, and interpret the pair. [4]

3 Exam-style questions

3.1 *(Original, Paper 2 style.)* The five-year loan of 160 000 carries 8% interest. Using the accounts above, calculate the return on capital employed and state, with a reason, whether the loan is earning its keep. [4]

3.2 *(Original, Paper 2 style.)* In March the repair business opens with 12 000, receives 42 000 and pays out 48 000; in April it opens with the March closing balance, receives 44 000 and pays out 55 000. Calculate the closing cash for each month and explain one action the forecast should trigger. [4]

3.3 *(Original, Paper 2 style.)* The third workshop costs 120 000 and is expected to add net cash flows of 40 000 a year for four years. The cost of capital is 6% (discount factors 0.943, 0.890, 0.840, 0.792). Calculate the payback period, the average rate of return and the net present value, and comment on what each method shows. [6]