BCS Professional Certificate in Business Finance

Version 2.0

Sample Paper

Attempt all 20 multiple-choice questions
1 mark awarded to each question.
Mark **only one answer** to each question. There are no trick questions.

Pass mark is 13/20.
Time allowed: 45 minutes.

Scenario One: Questions 1 to 6 relate to this scenario

MNP is a manufacturing company in the country of Seeland that plans to acquire a payroll package. One of the packages it is evaluating is sold by PayCo. As part of its supplier evaluation process, MNP has asked PayCo to provide its latest financial statements. These are summarised in table 1. The evaluation process requires MNP to calculate a number of financial ratios that measure the performance of PayCo.

Table 1

Extract from financial statements	
All figures in $000s	
ASSETS	
Non-current asssets	**201X**
Property, plant, equipment	1000
Total non-current assets	1000
Current assets	
Inventory	500
Trade receivables	350
Cash and cash equivalents	100
Total current assets	950
Total assets	**1950**
EQUITY AND LIABILITIES	
Share capital	1050
Retained earnings	500
Non-current liabilities	
Long-term borrowings	150
Current liabilities	
Trade payables	250
Total current liabilities	**250**
Total equity and liabilities	**1950**
Revenue	1500
Cost of sales	1000
Gross profit	500
Administrative expenses	50
Profit before tax and interest	450
Finance cost	25
Profit before tax	425
Tax expense	80
Profit for the period	345

Q1: What is the Return on Capital Employed (ROCE) of PayCo?

A. 22.13%.
B. 26.47%.
C. 30.00%.
D. 33.33%.

Q2: What is the acid test ratio of PayCo?

A. 0.88.
B. 1.80.
C. 3.80.
D. 18.00.

Q3: What is the gearing ratio of PayCo?

A. 1.80%.
B. 4.00%.
C. 6.75%.
D. 8.80%.

Q4: Which of the following statements is correct?

i. On average, PayCo pays its suppliers (payables) quicker than its customers pay PayCo (receivables).
ii. On average, PayCo pays its suppliers (payables) slower than its customers pay PayCo (receivables).
iii. On average, PayCo pays invoices received from suppliers (payables) within 90 days.
iv. On average PayCo receives payments from its customers (receivables) within 90 days.

A. i only.
B. i and iii.
C. ii only.
D. ii and iv.

Q5: What further information would be useful in analysing PayCo's financial performance?

A. Financial information for MNP for the last three financial years.
B. Financial information for the payroll software package sector in Seeland.
C. Financial information for the manufacturing sector in Seeland.
D. Financial information for all companies registered in Seeland.

Q6: Where would any concerns about PayCo's financial performance be documented in the business case produced by MNP for the payroll project?

A. As a risk.
B. As an option.
C. As an impact.
D. As an intangible cost.

Scenario Two: Questions 7 to 11 relate to this scenario

A business case has been constructed for a new building management system that will deliver certain benefits. The current hardware is being replaced and the new system will run on new energy-efficient hardware and will require fewer staff than the current system. Consequently, planned redundancies are included as staff savings in the business case.

The following investment appraisal for the project has been produced.

All figures in $000s						
Year	**0**	**1**	**2**	**3**	**4**	**5**
Costs						
Hardware	1000	100	100	100	100	100
Software	300	30	30	30	30	30
Training	30	10	5	0	0	0
Other costs	10	10	10	0	0	0
Benefits						
Energy savings	25	25	25	25	25	25
Staff savings	0	400	400	400	400	400
Other benefits	20	20	20	20	20	20

The company currently has £20m of equity and $10m of debt. The 'cost of equity' is 8%. The company uses a discount rate of 10% for its investment appraisals.

Present value factors as a discount rate of 10% are as follows:

Year 1: 0.909 Year 2: 0.826 Year 3: 0.751 Year 4: 0.683 Year 5: 0.621.

Q7: Ignoring the time value of money, in what year does the project breakeven?

A. Year 3.
B. Year 4.
C. Year 5.
D. It does not break even in the time period considered in the investment appraisal.

Q8: What is the Net Present Value of the project after five years?

A. -$131,720.
B. -$21,950.
C. +$245,000.
D. +$337,500.

Q9: Improved staff morale has not been included as a benefit in either the business case or the investment appraisal. Where should this benefit be included?

A. In just the business case.
B. In just the investment appraisal.
C. In the business case and the investment appraisal.
D. In neither the business case or the investment appraisal.

Q10: The company executives have requested that the internal rate of return is calculated for the investment. Which of the following is a reason for calculating the internal rate of return?

A. It indicates the date when the investment breaks even.
B. It determines the financial return on the investment.
C. It enables comparison between the percentage return on different investments.
D. It includes the intangible and tangible costs and benefits in the calculation.

Q11: What is determined by calculating the profit generated by an investment as a percentage of the capital invested?

A. The return on investment of the project.
B. The internal rate of return of the project.
C. The discount rate of the project.
D. The gross profit margin of the project.

Scenario Three: Questions 12 to 15 relate to this scenario

RJB Co manufacture widgets. The widget manufacturing factory has a fixed manufacturing cost of $60,000 per year. Each widget requires $5 of components and takes 20 minutes to make. There are two full-time administrator employees in the factory who are each paid $20,000 per year. There are also part-time assembly staff who are paid $6 per hour. The part-time staff are on contracts such that if they do not work for any reason they do not get paid. Each widget sells for $17.

Q12: How would the cost of the part-time assembly staff be classified?

A. As an overhead cost.
B. As a fixed cost.
C. As an indirect cost.
D. As a variable cost.

Q13: What is the annual breakeven point for widget manufacture?

A. 5883.
B. 8000.
C. 10000.
D. 14286.

Q14: What defines the extent to which the planned sales of widgets lies above the breakeven point?

A. The operating margin.
B. The operating profit.
C. The internal rate of return.
D. The margin of safety.

Q15: How would the components used in widget manufacture be classified?

A. As a variable indirect cost.
B. As a variable direct cost.
C. As a fixed indirect cost.
D. As a fixed direct cost.

Scenario Four: Questions 16, 17 and 18 refer to this scenario

The following table shows the budgeted and actual performance of WMN Co in the last month.

	Budget	**Actual**
Sales	50000 units	45000 units
Sales revenue	$150,000	$145,000
Raw material costs	($70,000)	($75,000)
Labour costs	($30,000)	($25,000)
Profit	$50,000	$45,000

Q16: What is the actual cost per unit?

A. $1.66.
B. $2.00.
C. $2.22.
D. $2.35.

Q17: What is the profit if the budget is flexed to reflect actual sales volumes?

A. $40,000.
B. $45,000.
C. $50,000.
D. $55,000.

Q18: WMN Co is considering leasing hardware to replace its current computer system. What is an advantage of leasing hardware?

A. The total lease cost of the hardware is less than purchasing it outright.
B. Automatic hardware updates are included in the leasing contract.
C. The cost of the hardware is spread across a number of years.
D. The hardware can be returned to the leasing company if it is unsuitable.

Scenario Five: Questions 19 and 20 refer to this scenario.

The following table shows the projected cash inflow and cash outflows of ZAQ Co. ZAQ Co had a positive cash balance of $20,000 at the start of January.

	January	February	March	April	May	June
Cash inflows	$10,000	$10,000	$20,000	$20,000	$20,000	$10,000
Cash outflows	$20,000	$20,000	$20,000	$30,000	$30,000	$60,000

Q19: What is the maximum overdraft required by ZAQ Co?

A. $30,000.
B. $40,000.
C. $10,000.
D. $20,000.

Q20: How many months will ZAQ Co use its overdraft facility?

A. 2 months.
B. 3 months.
C. 4 months.
D. 5 months.

Sample Paper Answers

Question	Answer
1	B
2	B
3	D
4	D
5	B
6	A
7	C
8	A
9	A
10	C
11	A
12	D
13	C
14	D
15	B
16	C
17	B
18	C
19	D
20	A

Note: In question 17, the flexed profit is actually the same as the actual profit. However, the individual revenue and cost figures (and hence variances) are quite different.