## Answers

1 Morello Landscapes

| (a) | Cash budget | Jan | $\begin{gathered} \text { Feb } \\ £ \end{gathered}$ | $\underset{f}{\mathrm{Mar}}$ | Apr | $\begin{gathered} \text { May } \\ £ \end{gathered}$ | $\begin{aligned} & \text { Jun } \\ & £ \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Cash inflows |  |  |  |  |  |  |
|  | Opening debtors | 2,400 |  |  |  |  |  |
|  | Contract receipts | 20,000 | 60,000 | 40,000 | 40,000 | 40,000 | 200,000 |
|  | Returned deposits ( $5 \times £ 500$ ) |  | 2,500 |  |  |  |  |
|  | Car disposal proceeds |  |  |  | 3,000 |  |  |
|  |  | 22,400 | 62,500 | 40,000 | 43,000 | 40,000 | 200,000 |
|  | Cash outflows |  |  |  |  |  |  |
|  | Opening creditors: |  |  |  |  |  |  |
|  | - Materials | 6,600 |  |  |  |  |  |
|  | - Miscellaneous | 2,570 |  |  |  |  |  |
|  | Digger hire ( $5 \times £ 1,200$ ) | 6,000 |  |  |  |  |  |
|  | Digger deposit ( $5 \times £ 500$ ) | 2,500 |  |  |  |  |  |
|  | Materials: |  |  |  |  |  |  |
|  | - Soil | 12,600 |  |  |  |  |  |
|  | - Turf |  |  |  |  |  | 43,200 |
|  | - Sand |  |  | 2,200 |  |  |  |
|  | - Cement |  |  | 3,100 |  |  |  |
|  | - Bricks/stones |  |  |  |  | 76,500 |  |
|  | - Shrubs |  |  |  |  | 16,700 |  |
|  | - Other materials | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 |
|  | Waste disposal | 8,500 |  |  |  |  |  |
|  | Salaries [(£21,600/12) x 5] | 9,000 | 9,000 | 9,000 | 9,000 | 9,000 | 9,000 |
|  | Bonus ( $5 \times £ 1,500$ ) |  |  |  |  |  | 7,500 |
|  | Van lease payments[(£3,960/12)x | x3] 990 | 990 | 990 | 990 | 990 | 990 |
|  | New car costs |  |  |  | 18,500 |  |  |
|  | Depreciation - ignore (non-cash) |  |  |  |  |  |  |
|  |  | 50,760 | 11,990 | 17,290 | 30,490 | 105,190 | 62,690 |
|  | Net cash flow | $(28,360)$ | 50,510 | 22,710 | 12,510 | $(65,190)$ | 137,310 |
|  | Opening balance | $(14,200)$ | $(42,702)$ | 7,381 | 30,091 | 42,601 | $(22,589)$ |
|  | Overdraft interest | (142) | (427) | - | - | - | (226) |
|  | Closing balance | $(42,702)$ | 7,381 | 30,091 | 42,601 | $(22,589)$ | 114,495 |

(b) Benefits

Mr Morello will reduce his delivery costs since only one delivery from Hardcastle Ltd will be necessary.
He may also reduce his purchase costs by making purchases before any potential price rises come into effect.
He will also benefit from an increased bulk purchase discount, since he will now receive a $10 \%$ discount on the sand and cement.

The materials will also be available as and when required. This means that workers will not have to sit idle waiting for materials to arrive. There will therefore be a greater chance of the contract being completed on time. In turn, this means that the penalty will not be payable.

Workers will also be able to start another job earlier should the contract be completed within the six month period. This will bring extra revenue to the business.

## Costs

If more materials are left on driveways for longer, there is an increased risk of stock loss either due to pilferage, weather, or accidents. For example, the sand and cement may get damaged by rain/wind, and the stones/bricks may get cracked.

Since there is restricted storage space on the driveways anyway, some materials may need to be stored elsewhere, for which there will be a cost (e.g. local warehouse).

Insurance costs will probably rise if greater quantities of stock are to be held at one time.
There is also the cost of capital being tied up in stock.
Finally, if the customer needs to change his requirements, pre-ordered materials may become surplus, resulting in increased costs for Mr Morello unless the contract states that changes the customer will be responsible for such costs.
(c) Contracts

Legal intention
Both parties to a contract must have intended it to be legally binding. In commercial arrangements such intention is assumed. In domestic or social arrangements such intention may need to be proved.

## Offer

An 'offer' is a definite promise to be bound on specific terms. It can be made orally or in writing. It can also be implied from a person's conduct. An offer can be revoked at any time before it is accepted.

## Acceptance

'Acceptance' is the unconditional agreement, by the offeree, to all the terms of the offer. As with an offer, it can also be oral, written or implied from a person's conduct.

## Consideration

'Consideration' is one party doing something in exchange for another party doing something. Often, there is just an exchange of promises, or alternatively, consideration may simply be the price.
Note: Only two elements were required.
(d) Sources

Bank references
Trade references
Credit reference agencies
The press
County Court records
Company Registry search
Informal conversations with people connected
Internet
NOTE: Only four sources were required.

2 'Nippers'
(a) NPV

Option 1: No change
Net present value $=(£ 98,000 \times 4.355)+(£ 500,000 \times 0.564)=\underline{£ 708,790}$
Option 2: Extending the premises
Time
0
Planning permission
(ignore - sunk)
Building costs: materials

- labour
$(45,000)$

|  | $(40,000)$ |  |  |
| :---: | :---: | :---: | :---: |
|  | 98,000 | 135,000 | 135,000 |
|  |  |  | 600,000 |
| $(45,000)$ | 58,000 | 135,000 | 735,000 |
| 1 | 0.909 | $2 \cdot 882$ | $0 \cdot 564$ |
| $(45,000)$ | 52,722 | 389,070 | 414,540 |

The NPV of option 2 is $£ 811,332$

## Working 1

AF for $T^{2}$ to $T^{5}=3.791-0.909=2.882$

## Option 3: Selling

Since the nursery would be sold immediately, the NPV of this option is simply the sale proceeds of $£ 850,000$ (applying a discount factor of 1 at $T_{0}$ )
Mrs Dibble should sell to the developer (Option 3) since this option produces the highest NPV.
(b) Other factors to take into account

- If Mrs Dibble extends the nursery she will provide work for her brother and stop him from possibly going bankrupt.
- The extension will also provide much needed additional child care places for local children.
- The extension will enable Mrs Dibble to carry on working. She may have to look for a new job if she sells up, given that she wishes to work until retirement age.
- Mrs Dibble's staff will all lose their jobs if she sells to the developer.
- The shortage of child care in the area will increase further if Mrs Dibble sells to the developer since all the children will lose their places at the nursery.
- However, the building of the extension is likely to cause some noise and disruption at the nursery.
- Mrs Dibble may want the building to remain a nursery, in part as a monument to her good work over the years.

Note: Only four factors were required.

## 3 Noise Ltd

(a) Whether to pay within one week

Effective interest rate over 46 days is:
$\frac{2}{98}=2.04 \%$
Compound annual interest rate is:
$\left[1.0204{ }^{365 / 46}-1\right] \times 100=17 \cdot 38 \%$.
(Simple annual interest rate is $2.04 \% \times \frac{365}{46}=16 \cdot 18 \%$.)
Noise Ltd should pay early as the annualised benefit of the discount (17.38\%) exceeds the opportunity cost of capital (12\%) [Alternative method of calculation

Cost of not taking the discount:
$\left(\frac{100-d}{100-d}^{\frac{365}{t}}-1\right) \times 100$
where $d$ is the size of the discount;
$t$ is the reduction in payment period in days which would be necessary to obtain the discount.
$\left.\left(\frac{100}{98}^{\frac{365}{46}}-1\right) \times 100=17 \cdot 38 \%\right]$
(b) Benefits of offering settlement discounts

- Customers are encouraged to pay early, which reduces the costs associated with providing trade credit, such as financing costs, and also the administrative costs of chasing debts.
- The cash flow position of Speak Ltd will be improved, enabling the company to maintain liquidity.
- Customers may actually buy more from Speak Ltd, as the discount may make their prices appear cheaper than those of competitors.
- There may be fewer bad debts arising since customers are keen to pay early and benefit from discounts.

Note: Only three benefits were required.
(c) Credit control systems

## Awareness of supplier's terms

The customer must be fully aware of the supplier's terms. As well as the terms being clearly printed in bold on the face of every invoice, payment terms should be clearly stated in writing when the order is confirmed.

Even before this time, when the customer account is set up, the contract should state that the customer accepts the supplier's terms.

## Accurate and prompt invoicing

Invoices should be correctly drawn up. They will need to include the customer's name and address, product details and costs, customer's authorisation reference, purchase order number and supplier's details. The invoice should be totalled correctly and it should be clear where payment is to be sent to and by what time.
The invoice must be sent out promptly to maximise time for payment.

## Awareness of customer's systems

It is important to understand the payment system at your customer's business. Some businesses make payments to suppliers only once a month. If this is the case, they will have a cut off point each month by which invoices must be received and processed. Some businesses have an informal policy that suppliers are not to be paid until a reminder or even final reminder is received.

Some businesses will only pay out a certain amount each month in order to control their cash flow.
Without this knowledge of client's systems, debts cannot always be collected promptly.

## System of statements and reminders

Your customer should be sent a monthly statement showing, as a minimum, the individual invoices outstanding, the age of the invoices and the total balance outstanding.
Late payments should always be followed by the issue of a reminder and perhaps a telephone call. Should the debt still remain unpaid, a final reminder should be issued.
If all else fails and it appears that the customer has no intention of paying, the debt should be passed promptly to a debt collection agency.

## 4 Zimmer plc

(a) Advantages of debt finance

- Debt finance is cheaper than equity finance. This is because, firstly, it is less risky for the lender and, secondly, interest on debt is deductible for tax purposes whereas dividend payments are not.
- Issuing debt is relatively cheap compared to issuing equity. This is because there is no need to issue a prospectus etc for a debt issue.
- The issue of debt does not affect ownership and control of the company because debt holders are not owners of the company.
- It is easier to arrange debt finance than equity finance. The company law requirements and the Stock Exchange rules (if it is a listed company) make the issue of equity quite a lengthy procedure.


## Disadvantages of debt finance

- As the level of debt increases with each debt issue, the cost of equity will also increase to reflect the increased financial risk of the company.
- Debt, unlike equity, has to be repaid at the end of its term. This can cause financial difficulty for the company if they have insufficient funds. If a company cannot pay its debts it faces the risk of bankruptcy.
- Interest MUST be paid on debt whereas dividend payments on ordinary shares are discretionary. Unlike with dividends, if the company is having a bad year it must still pay its interest charges.
- If the company has borrowed at a floating rate of interest, the company is subject to interest rate risk. This means it risks having to pay increased interest charges if the interest rates go up.
- Security for the debt may be required by the lender. This can restrict the company's use of the assets on which the debt is secured.
- Loan agreements may make the company subject to restrictive covenants. These are effectively promises to keep, e.g., the current ratio at a certain level.
(b) Reasons for issuing preference shares
- Preference shares do not carry voting rights. This means that they do not give the purchaser any control over the decisions made by the company. Hence, the issue of preference shares does not dilute control.
- Preference share capital is not secured on the assets of the company like debt. It does not therefore restrict the company's borrowing power or its use of its assets.
- Preference dividends do not have to be paid if the company cannot afford it, although they will often carry the right to cumulative dividends, i.e. if the dividend is not paid one year, it is carried forward to the next year and so on.
- Irredeemable preference shares lower the company's gearing ratio, which is generally seen as a good thing. However, redeemable preference shares are usually treated as debt for the purpose of calculating the gearing ratio, so they WILL increase gearing.


## (c) Factors considered by a bank

The factors to be considered are set out below.

## The character of the borrower

Before lending money, the bank will need to decide whether the borrower is of good character. This will involve looking at the borrower's past record and conducting a personal interview with the applicant.
If a person is applying for a loan, they will often be credit scored. If a company is making the application, the bank will probably use key ratios to analyse the company's financial position.

## The ability to borrow and repay

The bank looks at a business customer's financial performance in order to ascertain their likely future position.
If the owner re-invests profits in the business rather than drawing them all out, it shows that he has some confidence in the success of the business. This makes the bank more likely to lend to the business.
When dealing with a company that is applying for finance, the bank may check whether the company has the authority to borrow the funds it is requesting. The company's articles of association provide this information.

## The margin of profits

The bank lends money in order to make money. It needs to ensure that it makes enough of a profit to warrant the risk that it takes by lending.
Most banks have lending policies which require them to charge different interest rates to customers depending on the reason for the borrowing. This is because some types of lending are more risky than others.
Ultimately, it is the bank's discretion to charge whatever interest rate they choose. For risky ventures, the rate will obviously be higher.

## Purpose of the borrowing

The purpose of the borrowing affects not only the interest rate but also the bank's decision as to whether or not to lend in the first place.
A bank will not lend money for an illegal purpose. It will normally lend in order to finance working capital, provided that the company's liquidity position is still manageable.
Lending to finance new business ventures is more risky since many of them fail. The bank will be more cautious in these cases.

## Amount of the borrowing

Firstly, the bank will need to make sure that the applicant is not asking for more money than he needs for the purpose specified. If he is, this casts doubt over his ability to repay.
Secondly, the bank needs to be sure that the applicant is asking for enough money. If he is not, the bank may well end up having to lend more in order to safeguard the original loan.

## Repayment terms

The bank must not lend money to a person or company who does not have the ability to repay it, with interest, irrespective of any security available for the loan. Security should only be called upon as a last resort if there is a sudden unexpected inability to pay.
A repayment term should be set which is realistic. Overdrafts are repayable on demand and are therefore more risky for the borrower.

## Insurance against the possibility of non-payment

When lending large sums of money to an individual or to a company, the bank may well ask for the loan to be secured. This security may take the form of title deeds to property - either property of the company or the individual's house, depending on who is making the application for finance.
A borrower may take out payment protection insurance, so that his repayments are covered even if his financial position deteriorates.

Note: Only four factors were required.
Marks
1 (a) Cash budget
Opening debtors ..... 0.5
Contract receipts ..... 2
Returned deposits ..... $0 \cdot 5$
Van sales proceeds - correct fig. ..... 2
Opening creditors:

- materials ..... 0.5
- miscellaneous ..... 0.5
Digger hire ..... 0.5
Digger deposit ..... 0.5
Materials:
- Soil ..... 1
- Turf ..... 1
- Sand ..... 1
- Cement ..... 1
- Bricks/stones ..... 1
- Shrubs ..... 1
- Other materials ..... 1
Waste disposal ..... 0.5
Salaries ..... 0.5
Bonus ..... 0.5
Van lease payments ..... 1
New van costs ..... 0.5
Depreciation - ignore ..... 2
Overdraft interest ..... 1
Net cash flow ..... 1
Opening balance ..... 1
Closing balance ..... 1
Presentation ..... 1
(b) Stock
Benefits
- delivery costs ..... 1
- bulk order discount ..... 1
- materials readily available ..... 1
- no penalty ..... 1
- increased revenue ..... 1
- avoid price increases ..... 1
Costs
- damage to stock ..... 1
- warehouse cost ..... 1
- insurance cost ..... 1
- capital tied up ..... 1
- materials becoming surplus ..... 1
Max. marks ..... 8
(c) Contracts
Each element$\frac{2}{4}$
(d) Creditworthiness
Every source
Max. marks$\frac{1}{4}$
Total marks ..... 40
Marks
2 (a) NPVs
Option 1
Correct relevant cash flows ..... 1
Correct DF/AF ..... 1
Follow-on NPV ..... 1
Option 2
Planning permission ..... 1
(ignore - sunk)
Building costs: materials ..... 1
- labour ..... 1
Operating cash inflows ..... 2
Sale price ..... 1
Correct DF/AF ..... 1
Net cash flow ..... 1
Discounted cash flow ..... 1
Follow-on NPV ..... 1
Option 3
Correct NPV ..... 1
Use of annuity factors ..... 1
Conclusion ..... 1Presentation1
Max. marks ..... 16
(b) Factors
Each factor$\frac{1}{4}$
Max. marks
Total marks ..... 20
3 (a) Discount calculation
Effective discount ..... 3
Annualised ..... 3
Conclusion ..... 1
Marks ..... 7
(b) Benefits of settlement discounts
Each benefit
Max. marks$\frac{1}{3}$
(c) Features
Supplier's terms ..... 3
Accurate and prompt invoicing ..... 3
Customer's systems ..... 3
Statements and reminders ..... 3
Max. marks ..... 10
Total marks ..... 20


## 4 (a) Debt

For each adv./disadv explained
Max. marks
8
(b) Preference shares

Each reason
(c) Bank lending

Each factor explained

