Write your name here

Surname

Other names

Centre Number

Candidate Number

Information Technology
Level 3
Unit 2: Understanding Organisations

Monday 10 June 2013 – Morning
Time: 1 hour 30 minutes

Paper Reference
IT302/01

You must have:
Insert (enclosed)
Calculator

Total Marks

Instructions

- Use **black** ink or ball-point pen.
- **Fill in the boxes** at the top of this page with your name, centre number and candidate number.
- Answer **all** questions.
- Answer the questions in the spaces provided
  – *there may be more space than you need*.

Information

- The total mark for this paper is 90.
- The marks for **each** question are shown in brackets
  – *use this as a guide as to how much time to spend on each question.*

Advice

- Read each question carefully before you start to answer it.
- Keep an eye on the time.
- Try to answer every question.
- Check your answers if you have time at the end.

Turn over ▶

P41074A0116

PEARSON

Answer ALL questions. Write your answers in the space provided.

1 Greenfields and The Claypit leisure centres are owned by the city council.

(a) State what type of business they are.

(1)

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(b) Study the management structure diagram, Figure 2 on page 3 of the insert.

(i) State **two advantages** of this management structure.

(2)

1 ....

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2 ....

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(ii) State **one disadvantage** of this management structure.

(1)

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(Total for Question 1 = 4 marks)

2 The city council has decided to lease the leisure centres and has produced a procurement strategy.

(a) Describe what is meant by **procurement**.

(2)

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(b) Explain the stages involved in the procurement process.

(6)

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(Total for Question 2 = 8 marks)

3 Colin Douglas has proposed introducing a new computer system to replace the legacy systems.

(a) State what is meant by a **legacy system**.

(1)

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(b) Describe **three** problems the leisure centres may encounter if they continue to use their existing systems.

(6)

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(c) Describe **one** problem the reception and administration departments may encounter if the present computer systems are replaced.

(2)

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(Total for Question 3 = 9 marks)

BLANK PAGE

4 A new, integrated computer system is needed for the centres.

(a) The cost of the integrated computer system will be £60 000 and it is expected to increase profit by £15 000 per year.

Using the figures, calculate the Return on Investment after 5 years.

(2)

Space for working

Answer:..

(b) Colin has calculated that after five years, the Net Present Value (NPV) of the computer system will be £5 000.

Explain what is meant by **Net Present Value**.

(2)

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(c) The income for Greenfields in February was £23 500. The expenditure was £17 600.

Calculate the gross profit for the month.

(1)

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Colin's forward planning has shown that the profitability of the centres will increase over the coming five years.

(d) Explain what is meant by **profitability**.

(2)

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(e) The economic environment of the region will have an effect on the success of the leisure centres.

(i) Describe **two negative** economic factors which may affect the success of the leisure centres.

(4)

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(ii) Describe **one positive** economic factor which may affect the success of the leisure centres.

(2)

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(Total for Question 4 = 13 marks)

5 The existing computer systems are incompatible and this may cause problems transferring data to the new, integrated system.

(a) Explain why different data structures may cause a problem when transferring data.

(2)

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Internet protocols and network interfaces are needed to ensure smooth transfer of data between networks.

(b) Discuss, using examples, the purpose of protocols and network interfaces in data transfer.

(9)

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(Total for Question 5 = 11 marks)

6 The current booking system for the astroturf pitches is shown on Figure 1 on page 2 of the insert.

(a) Describe **one** problem with the current booking system.

(2)

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As part of the review of centre practices, Colin has carried out a time and motion study.

(b) Discuss the likely benefits of a time and motion study for Colin and his staff.

(9)

At a meeting between Colin and the centre managers, it was agreed that a new, integrated website should be developed.

(c) Discuss how a new website could be used to enhance **customer relations**.

(9)

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(Total for Question 6 = 20 marks)

7 Colin wishes to allow members access to some facilities without having to register at reception.

(a) Describe **one** system Colin could use to allow members to sign in automatically.

(2)

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The centres employ a number of staff.

(b) State **three IT** security procedures which may be adopted to prevent unauthorised access to **data**.

(3)

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(c) The Data Protection Act is intended to protect personal data.

Evaluate what the reception staff must do to comply with this Act.

(6)

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(Total for Question 7 = 11 marks)

8 Colin has recognised that there are no effective stock control measures in place.

(a) Explain **two** benefits of introducing a computerised stock control system.

(4)

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2 ....

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Question 8 continues on the next page.

P 4 1 0 7 4 A 0 1 5 1 6

Technology is being introduced to train and support staff in:

- implementing leisure centre policies and procedures
- managing customer service and relations.

(b) Evaluate the strengths and weaknesses of using technology solutions to meet these training needs.

(10)

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(Total for Question 8 = 14 marks)

TOTAL FOR PAPER = 90 MARKS

Edexcel Principal Learning

Information Technology
Level 3
Unit 2: Understanding Organisations

Monday 10 June 2013 – Morning

Do not return this insert with the question paper.

P41074A

PEARSON

Leisure centres

Background

Greenfields and The Claypit are leisure centres in a city in the east of England. Greenfields was set up ten years ago and The Claypit six years ago. They are owned and run by the city council, and are heavily subsidised to maintain the facilities on offer.

They both have all the facilities associated with leisure centres, such as a fitness suite, badminton and squash courts and a sports hall. They are run as separate centres and manage their own membership and booking systems.

There are also three astroturf sports pitches within the city, used by local hockey and football teams. These pitches may be booked through either of the centres.

All booking of the pitches and other facilities is done over the phone or in person at a centre.

Figure 1 shows the system used for booking an astroturf pitch.

Booking astroturf pitches
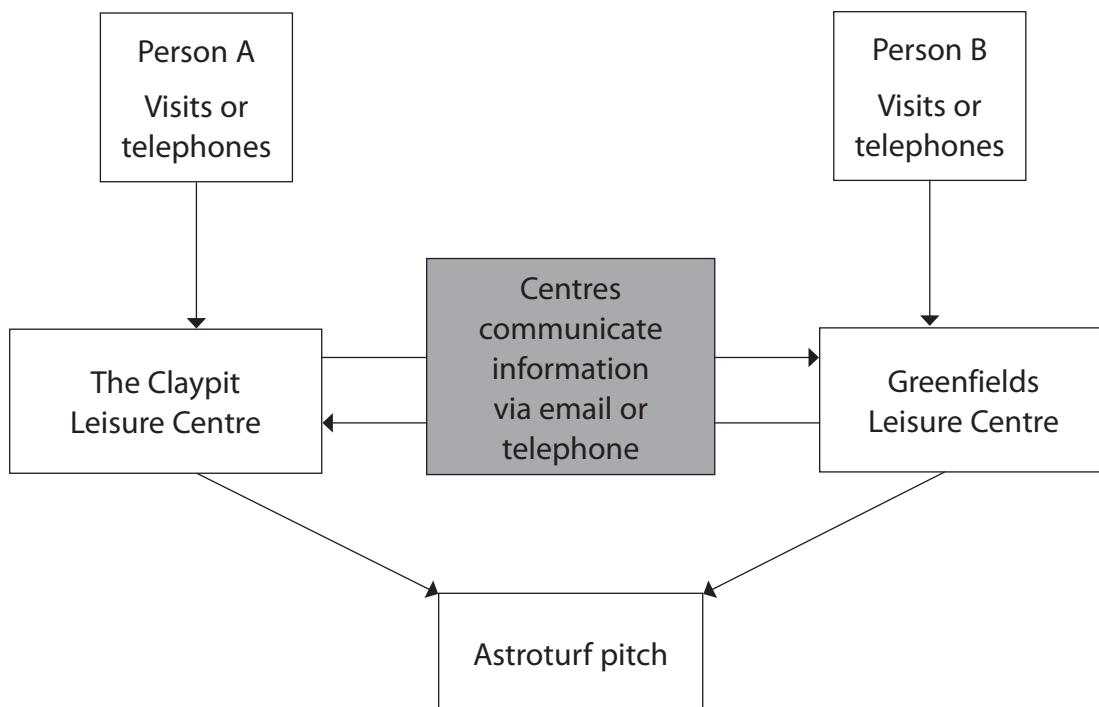
Figure 1

Management Structure

The management structure is the same in each centre and is shown in Figure 2.

The Management structure of the Leisure Centres

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                            ┌─────────────┐
                            │   Manager   │
                            └──────┬──────┘
        ┌──────────┬──────────────┼──────────────┬──────────┐
┌───────────────┐ ┌───────────┐ ┌─────────────┐ ┌──────────┐ ┌───────────┐
│ Reception and │ │Ground staff│ │Catering staff│ │ IT staff │ │  Finance  │
│administration │ │           │ │             │ │          │ │   staff   │
│     staff     │ │           │ │             │ │          │ │           │
└───────────────┘ └───────────┘ └─────────────┘ └──────────┘ └───────────┘
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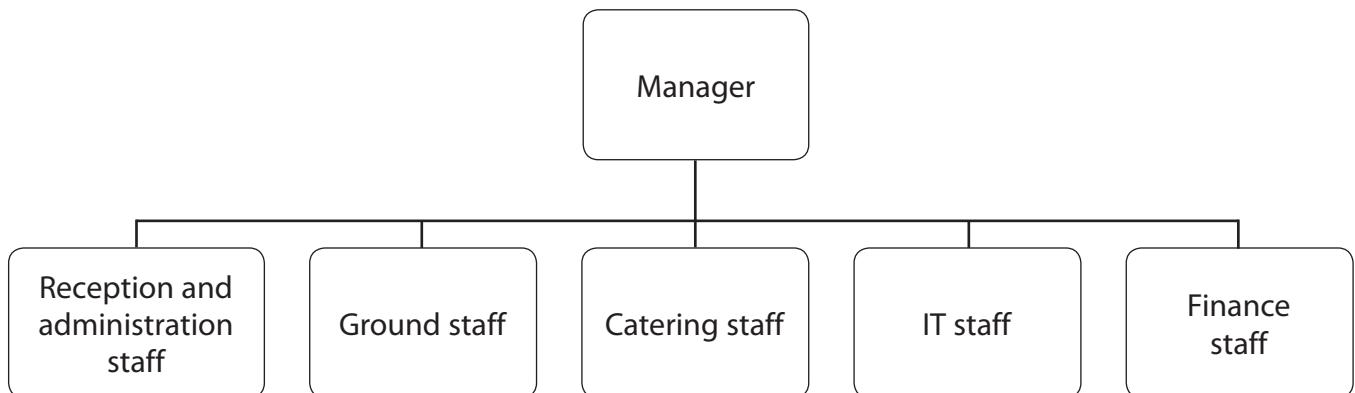
Figure 2

Given an economic climate where the council is reducing expenditure, it has been decided that the leisure centres will be made available to lease by a private company and must become self financing. The council wishes the leisure centres to be leased as one business.

The council has drawn up a procurement strategy to enable companies to bid for the lease. Colin Douglas, a council officer, has been appointed to oversee the procurement strategy.

Business review

Colin Douglas has carried out a business review and identified that:

- there has been very limited marketing of the centres and the local community is unaware of all the facilities on offer

- the IT systems at the centres use different operating systems and the systems are out of date

- a website would improve customer relations and increase the use of the centres

- stock control is an area for improvement.

Business processes and improvements

Colin has carried out a time and motion study of roles and responsibilities of staff and the use of resources. The study highlighted problems with duplication of tasks, lack of coordination in areas and resources being underused. The study identified a number of improvements which could be made in running the centres.

Colin has asked the reception and administration departments of each centre for a list of members and the facilities they use most. The results show that the two most popular facilities are the fitness suite and the badminton courts. A survey of the members using these facilities has shown that queuing at the reception desk to sign in can be a lengthy process.

IT in the leisure centres

Although IT is used in the leisure centres, records of members' details and financial transactions are often inaccurate and thus unreliable. A new IT system is proposed and staff will need training in using the new system. This training includes guidance on data security as personal details of members are stored. It has been decided to use a Computer Aided Learning (CAL) package.

All of the data from the existing systems will have to be transferred to the new system.