

Mark Scheme June 2007

Results Mark
Scheme

GCSE Business & Communication systems (1504.04)

Business and Communication Systems
June 2007 - Paper 4H - Higher Tier - Mark Scheme

1 (a)(i) Explain ONE way in which access to patient information could be restricted.

(AO2 - Apply = 1, AO3 - Select/Analyse = 2)

Valid points could include:

levels of access - read only for some data - nurses
restrictions on amending/altering some details
access only on a particular computer - dentists
password protect some files

Level 2

Candidate analyses

2-3

Level 1

Candidate applies knowledge

1

(ii) Assess the effectiveness of anti-virus software.

(AO4 - Evaluate = 3)

Valid points could include:

anti-virus software checks for viruses - it is easier to prevent viruses entering in the first place than having to deal with the consequences so finding and deleting before they do any damage is important - using the latest virus checking/deletion software with monthly updates ensures protection

3

(iii) Consider the implications if organisations do not protect data from being stolen, lost or damaged?

(AO4 - Evaluate = 4)

Valid points could include:

hackers can cause damage by deleting important files - need to rekey - time/expense
personal information can be used in an inappropriate manner - illegal/unethical
dependent on stored data if lost/damaged find it hard to carry on
if lost/damaged can be difficult to get back
losing patient data may mean wrong treatments are given - sue
because all in one place can be stolen/searched easily/quickly
because viruses can do real damage eg format hard drives
appropriate mention of DPA

4

(b)(i) Using THREE methods, describe how Dovecotes could prevent computer equipment from being stolen.

(A01 – Demonstrate 3, A02 – Apply 3)

Valid points could include:

Install an alarm system/CCTV means whole building secure

Fitting metal bars/shutters particularly on ground floor makes it more difficult to get into rooms/buildings

Keypad locks on doors can only be opened by authorised personnel

Alarms on all computers which work when main security alarms switched off eg during day

Attaching hardware to desks makes it very difficult to remove 6

QWC - 3 marks

Quality of Written Communication (QWC)

There are 3 marks available for Quality of Written Communication for this question.

To meet the criteria the candidate must:

- present relevant information in a form that suits its purpose (use of appropriate business language);
- ensure text is legible and that spelling, punctuation and grammar are accurate so that meaning is clear;
- use a suitable structure and style of writing (logical sequencing).

(ii) Explain any problems, other than loss of patient information, Dovecotes might have if computer equipment is stolen.

(A02 –Apply 1, A03 – Select/Analyse 3)

Valid points could include:

Could lose important data/information on hard drives – bad if not backed up on removable device or paper based – may need to re-key in – may not have up-to-date back up – implications of this

Cost/time of replacing hardware slows everything down whilst waiting for replacements – could affect efficiency 4

Level 2

Candidate analyses 2-4

Level 1

Candidate applies knowledge 1

2 (a) Explain how a manual filing system might affect the efficiency of Dovecotes.

(AO1 - Demonstrate = 2, AO4 - Evaluate = 4)

Valid points could include:

confidential patient details seen by everyone - no longer confidential
may need many files - take up space which could be used for something else
records can get mislaid if filed incorrectly or not returned to the correct place - take time locating records, if ever
can get torn/dirty - may make reading difficult - could make mistakes in patient treatment
difficult to find information with many records because can't sort quickly
ink/pencil fades with time - difficult to read records
difficult to change method - from alphabetical to chronological - computer can do it in a few seconds
all taking up time when employees could be doing other things
can be used as back up

Level 2

Candidate makes judgement(s) 3-6

Level 1

Candidate demonstrates knowledge 1-2

(b)(i) Using examples from Dovecotes, explain what is meant by sort, search and create a report.

(AO1 - Demonstrate = 4, AO2 - Apply = 2)

Sort means rearranging all records in a file into an order-
alphabetical/numerical/data

eg an alphabetical list of patients

Search/query used to find specific information eg all patients under 21

Report means printing all/part of information in database - eg printing only specified fields eg telephone numbers of patients

Level 2

Candidate applies knowledge 5-6

Level 1

Candidate demonstrates knowledge 1-4

Not all 3 max 4

(ii) Analyse how the features in a database might benefit Dovecotes.
(AO2 - Apply = 3, AO3 - Select/Analyse = 2, AO4 - Evaluate = 3)

Valid points could include:

can produce lists/reports quickly - daily print out of patient appointments - each dentist has their own list
can do calculations - charges for treatment - don't have to search through for each charge - less errors
can use lists of addresses to prepare address labels/reminders - mail merge - don't have to be typed individually
can use searches/sorts to analyse patient treatments eg how many crowns fitted/no show patients/those who haven't visited in the last year

Level 3

Candidate makes judgement(s)

6-8

The facilities of storing patients' records on a database benefits Dovecotes tremendously. They are able to change patient details easily or change the order of the database quickly from alphabetical to order of age, enabling them to analyse the age of patients who use the practice. This would help them when informing patients on new treatments available eg teeth whitening. Another facility means that patients' letters can be sent out using mail merge with their details easily transferred to a word processor file. Address labels could also be prepared for envelopes which would mean no one would have to type each one individually. This would mean no spelling mistakes would be made creating a good impression.

Level 2

Candidate analyses

4-5

Level 1

Candidate applies knowledge

1-3

3 (a) Discuss the reasons Dovecotes might have had for using a time rate system.

(AO1 - Demonstrate = 1, AO2 - Apply =2, AO3 - Select/Analyse = 3, AO4 - Evaluate = 4)

Valid points could include:

wages based on an hourly rate - basic pay = hours x rate - overtime is calculated and added to give gross pay - rate agreed annually
using a time card keeps record of hours worked - helps calculate weekly wage -
can monitor number of hours worked and pay accordingly
know when late - see patterns of lateness - can speak to employee
easier to gain flexibility because change hours staff work to suit
can use overtime rates to encourage/motivate staff to work extra hours/Saturday mornings/late nights
more experienced staff get higher hourly rate - incentive to gain more qualifications
simple/cheap to operate but no real financial incentive to workers other than overtime because of guaranteed wage

Level 4

Candidate makes judgement(s)

7-10

Wages are calculated using an hourly rate eg £5 per hour. A receptionist's gross pay would consist of her basic pay plus any overtime which might be calculated at time and a half eg £7.50 per hour. Keeping a record of hours worked enables Margaret to see how many hours exactly each employee has worked and whether they are working all the hours they are supposed to and are not arriving late in the morning or in the afternoon. If she can see that they are persistently late then she can speak to them. Because those nurses with more qualifications are paid on a higher rate this is an incentive to do more training which will see nurses and receptionists getting more wages. Paying generous overtime rates also means staff are more likely to be willing to work extra hours when needed to ensure the practice is always fully staffed.

Level 3

Candidate analyses

4-6

Wages are calculated using an hourly rate eg £5 per hour. A receptionist's gross pay would consist of her basic pay plus any overtime which might be calculated at time and a half eg £7.50 per hour. Keeping a record of hours worked enables Margaret to see how many hours exactly each employee has worked and whether they are working all the hours they are supposed to and are not arriving late in the morning or in the afternoon. Because those nurses with more qualifications are paid on a higher rate this is an incentive to do more training. Paying generous overtime rates also means staff are more likely to be willing to work extra hours when needed.

Level 2

Candidate applies knowledge

2-3

Level 1

Candidate demonstrates basic knowledge

1

(b) Consider the benefits job sharing might have for ...
(AO1 - Demonstrate = 1, AO2-Apply = 1, AO3 - Select/Analyse = 3, AO4 -Evaluate =5)

Valid points could include:

job sharing is a way for 2 people to fill one job - each one has a permanent part time job - they split the hours/pay/holidays/benefits between them according to how many hours they each work

can cover for one another if one ill/needs time off

particularly suits women who return to work after maternity leave but do not want the responsibility of a full time job

easier to arrange a family life/career if the person wants to return to work

means staff stay at Dovecotes - less pressure on them - more content and relaxed at work

continuity of job/staff - no massive change of staff - only may need to employ another member of staff instead of two - keeping the expertise in the practice/know patients - working together will not cause too much inconvenience for the practice - helps the practice be flexible - more willing to help out if needed

Level 4

Candidate makes judgement(s) 6-10

Because the two dental nurses want to work part-time it seems sensible to allow them to job share. As they are both doing the same job this would be relatively easy to arrange. There is no division of duties as the nurses are interchangeable. However a relatively high level of communication and co-ordination is needed to ensure the job share works smoothly. It means the nurses can spend more time at home with their children whilst retaining their job, if only on a part-time basis. This also means they will be happier in their jobs knowing they will have more time with their families. Amongst the advantages for the practice is the fact that staff stay and do not leave which means continuity. It also means the practice may only need to employ one more full time nurse and not two, if both of them had decided to leave. This would have involved the practice in time and money recruiting and selecting.

Level 3

Candidate analyses 3-5

Because the two dental nurses want to work part-time it seems sensible to allow them to job share. There is no division of duties as the nurses are interchangeable. However a relatively high level of communication and co-ordination is needed. It means the nurses can spend more time at home with their children whilst retaining their job, if only on a part-time basis. This also means they will be happier in their jobs knowing they will have more time with their families. Amongst the advantages for the practice is the fact that staff stay and do not leave. It also means the practice may only need to employ one more full time nurse and not two, if both of them had decided to leave.

Level 2

Candidate applies knowledge 2

Level 1

Candidate demonstrates basic knowledge 1

If one-sided max 6