



GCSE EXAMINERS' REPORTS

INFORMATION AND COMMUNICATION TECHNOLOGY

JANUARY 2015

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INFORMATION AND COMMUNICATION TECHNOLOGY

General Certificate of Secondary Education

January 2015

UNIT 1/4331 - Understanding ICT

Principal Examiner: Kathy Butcher

Comments on individual questions

- Q.1 (a) This question was mostly well answered by all candidates and the correct features of Desktop Publishing software were selected. Candidates are still entering answers such as bold, font and italic on their own. Need to ensure candidates give full answers such as bold font and italic text.
- (b) Extremely well answered. Candidates correctly identified spell checker as the correct feature of DTP software to detect spelling mistakes.
- Q.2 (a) This question was very well answered by all candidates. Almost all candidates clearly understood the advantage of the 12 megapixel camera was to give a better quality photograph. A few candidates simply said “better quality” or “takes a better photograph” which was not enough.
- (b) Well answered – a significant number of candidates clearly understood that Tablet B had more storage space and a memory capacity of 32GB.
- (c) Most candidates chose 4G or Wi-Fi as their answer.
- (d) A significant number of candidates were able to give two uses of GIS on a tablet.
- Q.3 (i) This question was accessible to most candidates and was generally answered well.
- (ii) Answered well by some candidates.
- Q.4 Most candidates found this question extremely accessible and their knowledge of online booking was very good.
- (a) Well answered by many candidates although some were giving items of data that were already on the form.
- (b) Answered well and most candidates found the tick box format extremely accessible.
- (c) Well answered – most candidates gained at least one mark here. Some vague answers still appearing such as “Don’t have to leave the comfort of own home.” This was not awarded credit as candidates are expected to qualify their answers by stating that it saves travel time, saves travel costs or that it is more convenient for people with a disability.

- Q.5 (a) Well answered - to make each record/student unique or similar was given by most candidates.
- (b) Well answered by some candidates.
- (c) Extremely well answered.
- (d) Mostly well answered.
- (e) Quite poorly answered by most candidates. Even though backing up was eliminated as it featured in the question - answers such as “make a second copy” or “save a copy onto a USB” were seen quite frequently. Most candidates were able to achieve one mark for stating that a password could be used to keep the database safe and secure.
- (f) Answered fairly well by the majority of candidates. Many candidates were able to name a validation technique and state which field it would be applied to. Most candidates who attempted this question were able to gain at least one mark.
- Q.6 (a) Poorly answered by most candidates. Candidates tended to answer the question as if it related to searching for an item on a website. Most candidates who answered were able to gain at least one mark with the popular answer of using the Internet.
- (b) (i) Well answered.
- (ii) Mostly well answered.
- (c) (i) Poorly answered by many candidates. Many candidates were simply giving advantages of online tutorials here. Some candidates were able to gain full marks, however the pattern was to give two features but without examples – giving most candidates who attempted the question 2 out of the available 4 marks.
- (ii) Extremely well answered – most candidates were able to give one advantage of an online tutorial to gain one mark.
- Q.7 (a) Very well answered by all candidates – Tie was correctly identified by almost all candidates as being the data in cell A9.
- (b) Fairly well answered by most candidates – Absolute was identified as being the correct type of cell referencing used. The tick box format made the question accessible to all candidates.
- (c) Well answered.
- (d) Fairly well answered by most candidates.
- (e) Poorly answered by many candidates, however a significant number of candidates did attempt to construct an IF statement of some type which was impressive.

- Q.8 (a) Extremely well answered – most candidates could list three different uses of a mobile phone.
- (b) Fairly well answered – a significant number of candidates were able to give a disadvantage of downloading music and many said viruses could be introduced. The advantages were not answered as well with many candidates incorrectly stating music could be downloaded for free as an advantage.
- Q.9 (a) Fairly well answered with many candidates achieving at least one mark. Many candidates named the weather sensors incorrectly and this meant that marks were lost.
- (b) Quite well answered although many candidates did not give two different methods of displaying weather information e.g. they would answer with bar chart and graph which could only be awarded one mark out of the available two marks.
- (c) Quite well answered although there were quite a few one word answers rather than a description.

Q.10 Email as a topic for the essay question was new and was answered well by most candidates. Many of the candidates were able to give a clear, coherent answer that fully and accurately identified at least four advantages of email out of the available six marks. Correct popular answers from candidates included advantages such as being able to add attachments, access email from many devices and that emailing can be cheaper than traditional post and text messaging. Candidates did not do quite as well with the email misuse part of the question and were giving answers such as “You may forget somebody’s email address”. Correct popular answers included misuses such as viruses and phishing with a description of the matching preventions.

The majority of candidate’s answers were very detailed and showed an in depth knowledge of the email topic. The responses for this question were extremely impressive and in some cases well above GCSE standard. The quality of written communication was assessed on this question and spelling and grammar was very good and very few candidates lost marks due to incorrect terminology, spelling and grammar used.

INFORMATION AND COMMUNICATION TECHNOLOGY

General Certificate of Secondary Education

January 2015

Unit 3/4333: ICT in Organisations

Principal Examiner: Mark Thomas

Comments on individual questions

- Q.1 Very well answered. Most candidates were able to name the two devices and state whether they are used for either input or output. Some candidates incorrectly wrote “camera” instead of webcam.
- Q.2 (a) (i) Poorly answered. Very few candidates gave ‘notator’ for the first part and only some gave ‘MIDI’ for the second part.
- (ii) Well answered. Most candidates knew that the WAV format would take longer to download than the same file stored in MP3 format.
- (b) Well answered. Most candidates were able to recognise the true statements about bit mapped and vector graphics. Some candidates incorrectly thought that an image stored as a bitmap graphic takes up less memory than the same image stored as a vector graphic.
- (c) Very well answered. Most candidates were able to correctly name two digital imaging tools or techniques that could be used when creating a still digital image.
- Q.3 Well answered. Popular advantages included smaller file sizes and faster download speeds. Some candidates stated that compression ‘saves space’ which was not accepted. A popular disadvantage included ‘loss in quality’.
- Q.4 (a) (i) Poorly answered. A significant number of candidates seemed unfamiliar with the term ‘router’ or confused it with a wireless modem.
- (ii) Quite well answered. Some candidates confused the purpose of a gateway with a bridge.
- (iii) Quite well answered. Some candidates confused the purpose of a bridge with a gateway.
- (b) Poorly answered. A significant number of candidates described the purpose of a switch on a network instead of the process of packet switching.

- Q.5 (a) (i) Very well answered.
- (ii) Very well answered.
- (iii) Quite well answered. Some candidates gave an explanation of the stop motion animation technique instead of rotoscoping.
- (b) Well answered. Most candidates were able to state what is meant by persistence of vision.
- (c) Well answered. Most candidates were able to describe what is meant by a story board.
- Q.6 (a) Most candidates knew that a URL and hosting is required to allow access to a company's website on the Internet.
- (b) From the list provided most candidates knew that the HTML programming language could be used to create a website.
- (c) Poorly answered. A significant number of candidates wrote that a website/webpage is saved as a bookmark. This was not accepted as it is the address/URL of the website that is stored, not the page itself.
- Most candidates were able to state what is meant by a homepage.
- Very few candidates were familiar with the term 'leader board'. Popular incorrect answers included a list of highest scores on a computer game or a league table.
- (d) Quite well answered. Most candidates were able to state that the golden triangle is the area on a web page where a user focuses first. Few candidates gained the second mark, which is that the web page contains search engine results.
- (e) Well answered. Popular answers included hyperlinks, hotspots, animations and videos.
- (f) Very well answered. Popular answers included laptops, smartphones and tablets.
- Q.7 (a) Poorly answered. Very few candidates were familiar with the term 'operating system'. Some candidates gained one mark by stating that it controls the computer, but very few stated that an operating system is software.
- (b) Quite well answered.
- (c) (i),(ii)&(iii) Very poorly answered. Most candidates were unable to name any processing methods.
- Q.8 Well answered.

- Q.9 (a) (i) Well answered. Most candidates were able to state what is meant by the term validation.
- (ii) Poorly answered. A significant number of candidates were unable to state what is meant by the term verification. A popular incorrect answer was that the process ensures that data is correct.
- (b) (i) Very poorly answered. Some candidates seemed completely unfamiliar with this type of verification check.
- (ii) Poorly answered. Some candidates wrote about data being typed twice to check if it is correct, but not to check if it matches.
- (c) (i)&(ii) Very poorly answered. Range check was a popular incorrect answer.
- Q.10 (a) Poorly answered. Candidates were unable to suggest suitable key fields for either application – often giving a definition of its purpose. Some candidates incorrectly stated that a PIN number is a key field at an ATM.
- (b) Quite well answered. Touch screen and swipe cards were popular correct answers for banking and payroll respectively.
- (c) Very poorly answered. Candidates answers were often too vague, e.g. “Pay” or “Salary”.

Q.11 Quite well answered. Popular correct answers included firewalls, biometric scans to allow access to data and locks to restrict access to buildings. Burglar alarms were not accepted, as they would not prevent data from being lost or stolen.

Back-ups were also a popular unqualified answer. In order to gain this mark, candidates were expected to state that backups are stored off-site – as the question required candidates to give physical data protection methods.

A significant number of candidates gave non-physical methods of data protection, e.g. anti-virus software and passwords.

Q.12 Many of the candidates were able to give a clear, coherent answer fully and accurately describing the uses, advantages and disadvantages of robotics. The most popular use included car manufacturing processes. Popular advantages were that repetitive tedious jobs are done to the same consistent standard, robots can work 24/7 and that they can work in dangerous places. Popular disadvantages were the initial costs, loss of human jobs and cost of maintenance.

A significant number of candidates failed to answer the question at all for expert systems. For those candidates that attempted the question, medical diagnosis was the most popular use. Popular advantages included that the computer can store far more information than a human, data can be kept up-to-date and the expert system is always available 24 hours a day. Popular disadvantages included the initial expensive development costs, lack of 'human touch' and the effect of GIGO.

Most candidates used the correct terminology when answering the question and used accurate spelling, punctuation and grammar.



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