Key Messages

Overall, candidates appeared to have been fairly well prepared for this assessment. Candidates showed a reasonable level of understanding, though there are still areas of the syllabus which appear to be left untouched by many candidates.

For much of the paper some elaboration and detail is required in responses to questions. It is not sufficient to give brief answers.

Where alternatives are given in the question and reasons why a particular one should be chosen it is important that comparisons are made rather than just giving features.

Questions requiring simple and straightforward answers were done well, while the answers to more stretching questions needed to contain more explanation or discussion.

Centres are again reminded that this is ‘Applied ICT’ and candidates are expected to apply their knowledge to the context of the scenario. It is important for candidates to realise that they need to refer back to the scenario when answering questions; and where a question specifically asks them to do this they will find it difficult to gain marks if they do not.

General comments

Some questions which required choosing from a list such as Questions 1 and 2 were answered very well. This approach to answering other questions may be advisable where candidates could list their thoughts in rough before choosing, and elaborating on, items from their list that would be appropriate both to the scenario and to the phrasing of the question.

There still appeared to be a degree of rote-learned answers from previous years’ mark schemes. Rote-learning mark schemes is strongly advised against as, although questions might cover a similar topic, the questions themselves might change considerably. This was particularly the case with Question 4 where a number of candidates answered duty of confidence and duty of fidelity. With Question 3 a number of candidates gave answers for batch process control rather than batch processing.

Candidates must read questions carefully before answering. This was particularly the case with Questions 10 and 13(c) where candidates failed to describe in detail. With Question 9(a) a number of candidates described items without giving reasons.

Comments on specific questions

Question 1

Candidates did very well on this question. The small minority who did not achieve full marks seemed to struggle with the final statement.

Question 2

The majority of candidates gained all four marks for this question. Of those candidates that did not, incorrect answers seemed to be evenly distributed.
Question 3

This question was not very well answered. Many candidates could only identify that batch processing was not a continuous process. Most candidates mixed up batch processing with batch process control. Where candidates did gain more than one mark it was usually because they explained that the nurse needed to be warned immediately.

Question 4

A number of candidates identified that the two methods involved using anonymous and aggregated information and achieved good marks. However, the description of aggregated information for some candidates failed to include that it uses information from a group which is combined. Many unfortunately gave definitions of duty of confidence and duty of fidelity whilst others gave encryption for an answer.

Question 5

This question was fairly well answered, although some candidates struggled to make valid points related to the scenario or failed to give different uses. A minority just gave answers such as making phone calls or sending texts without relating it to the scenario.

Question 6

This was not well answered. Many just rephrased the question writing answers such as set up camera, set up monitor etc. Where candidates did gain marks it was for describing the logging in process and the arranging of a date and time. Some candidates failed to recognise that the equipment for video conferencing had already been made available and that the question was about how to ensure that it was made ready to enable the video conference to commence.

Question 7

Candidates did not perform well on this question. Candidates who provided correct responses often only gave answers related to volume of data.

Question 8

(a) Candidates did not do as well on this part as expected. Many produced vague answers like it should be neat or it should be attractive or well laid out. A small number gave a list of field names rather than features. Those that gained any marks tended to score three or more, thereby suggesting that some candidates had been better prepared for this topic than others.

(b) This was even more poorly answered than part (a), with cheaper, quicker, being popular vague answers. Many did not answer it as a comparison even though it asked for it in the question.

Question 9

Overall, this question produced the weakest responses compared to other questions on the paper. Candidates performed better on part (b) than part (a).

(a) Only the higher ability candidates seemed able to gain marks and even they tended to only achieve one mark with few getting two or more. Many candidates struggled to provide a reason for the included item. Some candidates gave vague answers such as ‘how to do other tasks’. Many candidates just gave one word answers.

(b) Many candidates made at least one good point. However, some candidates gave vague responses or general comments about Rafael rather than the lack of technical documentation which gained no credit. It appeared that a number of candidates did not fully understand what the question was asking them. Difficulty in upgrading the system was a popular correct answer.
Question 10

Candidates frequently gave one word answers for the method, despite being asked by the question to describe it in detail. Responses to the drawback of these methods often provided the candidates with the marks they achieved. Many candidates still find this topic difficult, therefore were only able to achieve low marks.

Question 11

Overall, this question was reasonably well answered.

(a) This part was not as well answered as expected with many vague answers such as attracting international markets and similar points. However, many candidates gained at least one mark for answers related to paying lower wages and/or paying less rent for the building.

(b) For this part, many candidates gained marks for the answers relating to the accent and dialect of the operator or customer within the same country. Some even answered that people could go to the call centre if they had a problem and that calls would be cheaper

Question 12

(a) It was disappointing to see many candidates struggle with this topic. However, most candidates gained at least one mark. Many candidates could only identify that the attached file needed to be compressed and failed to give the other stages that would be required prior to successfully sending the email message.

(b) This part was better answered with many candidates gaining at least one mark. Candidates were able to explain that the school may not have suitable software to open the file and did not have enough storage space on their computer to open a big file. However, some candidates only managed to describe one of these.

(c) This question was answered quite poorly. Many candidates gave vague responses or general comments which showed that they had little understanding of the topic. Some candidates incorrectly mixed up Boolean data types with Boolean operands. A minority of candidates used AND, OR and NOT separately and performed well, with candidates showing more understanding of NOT. Speech marks were also well described when given. Very few candidates gave relevant answers.

Question 13

Candidates did well on this question with parts (a) and (b) being particularly well answered.

(a) The majority of candidates gave at least four correct answers. Cookies proved to be a stumbling block as did hacking.

(b) Virtually all candidates gained the mark for part (i) with many going on to gain at least one mark for part (ii)

(c) Where candidates knew the methods they seemed unable to describe them in any detail. Considering the phrasing of the question it was surprising to see so many one word answers or just general phrases given.
**Key Messages**

Overall, candidates appeared to have been fairly well prepared for this assessment.

Candidates showed a reasonable level of understanding, though there are still areas of the syllabus which appear to be left untouched by many candidates.

For much of the paper some elaboration and detail is required in responses to questions. It is not sufficient to give brief answers.

Where alternatives are given in the question and reasons why a particular one should be chosen it is important that comparisons are made rather than just giving features.

Questions requiring simple and straightforward answers were done well, while the answers to more stretching questions needed to contain more explanation or discussion.

Centres are again reminded that this is ‘Applied ICT’ and candidates are expected to apply their knowledge to the context of the scenario. It is important for candidates to realise that they need to refer back to the scenario when answering questions; and where a question specifically asks them to do this they will find it difficult to gain marks if they do not.

**General comments**

Some questions which required choosing from a list such as Questions 1 and 2 were answered very well. This approach to answering other questions may be advisable where candidates could list their thoughts in rough before choosing, and elaborating on, items from their list that would be appropriate both to the scenario and to the phrasing of the question.

There still appeared to be a degree of rote-learned answers from previous years’ mark schemes. Rote-learning mark schemes is strongly advised against as, although questions might cover a similar topic, the questions themselves might change considerably. This was particularly the case with Question 4 where a number of candidates answered duty of confidence and duty of fidelity. With Question 3 a number of candidates gave answers for batch process control rather than batch processing.

Candidates must read questions carefully before answering. This was particularly the case with Questions 10 and 13(c) where candidates failed to describe in detail. With Question 9(a) a number of candidates described items without giving reasons.

**Comments on specific questions**

**Question 1**

Candidates did very well on this question. The small minority who did not achieve full marks seemed to struggle with the final statement.

**Question 2**

The majority of candidates gained all four marks for this question. Of those candidates that did not, incorrect answers seemed to be evenly distributed.
Question 3

This question was not very well answered. Many candidates could only identify that batch processing was not a continuous process. Most candidates mixed up batch processing with batch process control. Where candidates did gain more than one mark it was usually because they explained that the nurse needed to be warned immediately.

Question 4

A number of candidates identified that the two methods involved using anonymous and aggregated information and achieved good marks. However, the description of aggregated information for some candidates failed to include that it uses information from a group which is combined. Many unfortunately gave definitions of duty of confidence and duty of fidelity whilst others gave encryption for an answer.

Question 5

This question was fairly well answered, although some candidates struggled to make valid points related to the scenario or failed to give different uses. A minority just gave answers such as making phone calls or sending texts without relating it to the scenario.

Question 6

This was not well answered. Many just rephrased the question writing answers such as set up camera, set up monitor etc. Where candidates did gain marks it was for describing the logging in process and the arranging of a date and time. Some candidates failed to recognise that the equipment for video conferencing had already been made available and that the question was about how to ensure that it was made ready to enable the video conference to commence.

Question 7

Candidates did not perform well on this question. Candidates who provided correct responses often only gave answers related to volume of data.

Question 8

(a) Candidates did not do as well on this part as expected. Many produced vague answers like it should be neat or it should be attractive or well laid out. A small number gave a list of field names rather than features. Those that gained any marks tended to score three or more, thereby suggesting that some candidates had been better prepared for this topic than others.

(b) This was even more poorly answered than part (a), with cheaper, quicker, being popular vague answers. Many did not answer it as a comparison even though it asked for it in the question.

Question 9

Overall, this question produced the weakest responses compared to other questions on the paper. Candidates performed better on part (b) than part (a).

(a) Only the higher ability candidates seemed able to gain marks and even they tended to only achieve one mark with few getting two or more. Many candidates struggled to provide a reason for the included item. Some candidates gave vague answers such as ‘how to do other tasks’. Many candidates just gave one word answers.

(b) Many candidates made at least one good point. However, some candidates gave vague responses or general comments about Rafael rather than the lack of technical documentation which gained no credit. It appeared that a number of candidates did not fully understand what the question was asking them. Difficulty in upgrading the system was a popular correct answer.
Question 10

Candidates frequently gave one word answers for the method, despite being asked by the question to describe it in detail. Responses to the drawback of these methods often provided the candidates with the marks they achieved. Many candidates still find this topic difficult, therefore were only able to achieve low marks.

Question 11

Overall, this question was reasonably well answered.

(a) This part was not as well answered as expected with many vague answers such as attracting international markets and similar points. However, many candidates gained at least one mark for answers related to paying lower wages and/or paying less rent for the building.

(b) For this part, many candidates gained marks for the answers relating to the accent and dialect of the operator or customer within the same country. Some even answered that people could go to the call centre if they had a problem and that calls would be cheaper.

Question 12

(a) It was disappointing to see many candidates struggle with this topic. However, most candidates gained at least one mark. Many candidates could only identify that the attached file needed to be compressed and failed to give the other stages that would be required prior to successfully sending the email message.

(b) This part was better answered with many candidates gaining at least one mark. Candidates were able to explain that the school may not have suitable software to open the file and did not have enough storage space on their computer to open a big file. However, some candidates only managed to describe one of these.

(c) This question was answered quite poorly. Many candidates gave vague responses or general comments which showed that they had little understanding of the topic. Some candidates incorrectly mixed up Boolean data types with Boolean operands. A minority of candidates used AND, OR and NOT separately and performed well, with candidates showing more understanding of NOT. Speech marks were also well described when given. Very few candidates gave relevant answers.

Question 13

Candidates did well on this question with parts (a) and (b) being particularly well answered.

(a) The majority of candidates gave at least four correct answers. Cookies proved to be a stumbling block as did hacking.

(b) Virtually all candidates gained the mark for part (i) with many going on to gain at least one mark for part (ii)

(c) Where candidates knew the methods they seemed unable to describe them in any detail. Considering the phrasing of the question it was surprising to see so many one word answers or just general phrases given.
APPLIED ICT

Key Messages

Overall, candidates appeared to have been fairly well prepared for this assessment with the general standard of answers being higher than last year.

Candidates showed a good level of understanding though there are still areas of the syllabus which appear to be left untouched by many candidates.

On much of the paper some elaboration and detail is required in candidate responses. It is not sufficient to give brief answers.

Questions requiring simple and straightforward answers were done well, while the answers to more stretching questions needed to contain more explanation or discussion.

Centres are again reminded that this is ‘Applied ICT’ and candidates are expected to apply their knowledge to the context of the scenario. It is important for candidates to realise that they need to refer back to the scenario when answering questions.

General comments

Some questions which required choosing from a list such as Questions 1 and 2 were answered very well. This approach to answering other questions may be advisable where candidates could list their thoughts in rough before choosing, and elaborating on, items from their list that would be appropriate both to the scenario and to the phrasing of the question.

There still appeared to be a degree of rote-learned answers from previous years’ mark schemes. Rote-learning mark schemes is strongly advised against as, although questions might cover a similar topic, the questions themselves might change considerably. This was particularly the case with Question 10a where a number of candidates answered with different types of test data.

Comments on specific questions

Question 1

Candidates did very well on this question, although part (b) was not as well answered as the other parts.

Nearly all candidates gained full marks for parts (a), (c) and (d).

Part (b) had nearly a third of candidates answering incorrectly with many thinking you could produce posters on a standard printer.

Question 2

Nearly all candidates gained all four marks for this question. Of those candidates that did not, slightly more candidates thought that workers would have to work longer hours.

Question 3

Candidates, generally, performed fairly well on this question with part (a) producing slightly better responses than part (b).
(a), (b) Most candidates were able to describe these, but without going into sufficient detail to gain the second mark.

Question 4

(a) This was not very well answered with the majority of candidates failing to gain a mark. There seemed to be some misunderstanding about the type of calendar and candidates often confused this with more general project management terms. A tenth of all candidates failed to attempt this part of the question.

(b) This was very well answered with most candidates gaining at least four marks. Virtually all candidates gained marks for the first and fifth descriptions. Incorrect answers were evenly distributed among the other three descriptions.

Question 5

This question was well answered with most candidates gaining at least two marks and the most able doing very well. However, the question required candidates to describe each method and a lot of candidates only gave vague descriptions that failed to describe the method in full.

Question 6

This question was, overall, not very well answered. Candidates did much better on part (a), with part (b) providing the weakest answers.

(a) Most candidates gained at least one mark. A number of candidates failed to gain marks as they were unable to describe the purpose of the hardware using the scenario and just gave general answers.

(b) Many candidates did not seem to understand call control or only had a basic grasp of the concept. A number failed to name the types of call control and therefore could not describe it. For those that managed to name the types correctly, a significant number were not able to describe it clearly enough.

(c) A number of candidates gave good examples of both sets of risks. A lot of candidates were able to name a risk but failed to describe it in enough detail, also they failed to explain that health risks are due to long term use of computers, and risks associated with different aspects of computer use. Although candidates were able to identify safety risks they failed to explicitly describe the correct risk and the impact it would have.

Question 7

Candidates performed well on this question. All candidates managed to achieve marks with the more able candidates gaining very good marks.

(a) The vast majority of candidates were able to give at least two good descriptions of drawbacks, although a number of candidates added answers based on security issues despite the question asking them not to.

(b) The majority of candidates were able to give at least two good descriptions of drawbacks. Where candidates failed to gain marks it was by providing too vague descriptions of the drawbacks.

(c) A number of candidates gave answers that showed they had a good idea of the benefit, however, their answers were often too vague. Disappointingly, a number of candidates’ answers were based on travel despite the question stem saying not to include this.
Question 8

Candidates did not perform particularly well on this question.

(a) The majority of candidates were able to gain at least two marks. A lot of candidates were able to describe what phased implementation is correctly. However, only a few candidates were able to compare the advantages or disadvantages with parallel running in a successful manner. A number tended to ignore the comparison with parallel running and gave answers based on general advantages.

(b) Only the more able candidates did quite well on this question. One in eight candidates did not attempt the question. Most candidates did not appear to understand the topic with many resorting to listing items of user documentation.

Question 9

This question was answered very well, particularly part (a).

(a) Most candidates knew the LEFT function though there were occasional incorrect cell references.

(b) Candidates did not seem to know the MID function, but were able to pick up marks for correct cell references.

Question 10

Candidates, generally, performed fairly well on this question.

(a) A number of candidates confused this question with one based on test data. A lot of candidates still confuse the different types of validation checks and failed to state which field these checks would be carried out on. Most candidates were able to provide an example of a validation check with a description.

(b) Less able candidates failed to give sufficient detail in their answers giving only vague benefits and drawbacks. More able candidates gained good marks with more detailed descriptions of benefits and drawbacks.

(c) Most candidates were able to gain at least one mark by describing one feature. A number of candidates gave answers related to an on-screen input form rather than a report. Although certain features would be similar, many are not, and so this limited the opportunity for candidates to gain marks.

(d) This was not as well answered as the other parts. A number of candidates just gave features of an inkjet printer without comparing it with other types of printer such as a dot matrix or laser printer.
General comments

This paper proved more challenging to candidates than some previous papers, and therefore gave a much better differentiation to higher level candidates. There were significant differences in the range of results from Centre to Centre and from candidate to candidate within Centres. The paper gave a good spread of marks and candidate errors were spread evenly throughout all sections of the paper.

A small number of candidates failed to print their name, Centre number and candidate number on some of the documents submitted for assessment. Without clear printed evidence of the author of the work, Examiners were unable to award any marks for these pages. It is not acceptable for candidates to annotate their printouts by hand with their name as there is no real evidence that they are the originators of the work.

Some candidates omitted one or more of the pages from the required printouts; and a small number submitted multiple printouts for some of the tasks and failed to cross out those printouts that were draft copies. Where multiple printouts are submitted, Examiners will only mark the first occurrence of each page. Candidates must be aware of the dangers of cutting and pasting cropped versions of evidence in order to save space on a sheet. It often looks impressive but this invariably leads to the loss of crucial data which could achieve marks. Some candidates printed work that was too small to read even using magnification devices. Candidates MUST ensure that all text can be easily read with the naked eye.

A significant number of candidates ignored clear instructions in the question paper, for example: in question 3 the paper instructs “Do not use IF functions”. Despite this many candidates used nested IF functions in their solutions.

As in previous sessions, some Centres punched holes in the corners of the scripts, then joined the pages together with treasury tags or tied them with string. Sometimes these holes obscured text which was required for marking, resulting in the loss of potential marks.

Overall the paper performed very well.

Comments on specific questions

Question 1

This question was completed well by most candidates, as evidenced by their subsequent printouts of their Evidence Document.

Question 2

Almost all candidates successfully used nested IF functions to display a grade for each candidate. Fewer followed the instruction “Use the most efficient method to solve each task”. For this instruction only two levels of nested IF functions were required (or three if candidates added some form of error trapping), but a significant number of candidates used three levels with no error trapping. The most common error on this question was in the candidates’ logic; with the correct selection for if <30 then “Fail”, but then stating if >=30 then “Pass” so the solutions for >=80 and >=60 could never be reached and no results of Merit or Distinction were shown.

Most candidates used conditional formatting to automatically shade cells where the candidates’ Baseline Grade was equal to “Fail”. Some did not show evidence of the conditional formatting rule and only provided evidence of filling the cell grey. A number of candidates did not set the correct print areas and/or display row
and column headings in their printouts. However, most candidates who submitted both of the required printouts performed well on this question.

**Question 3**

The most common error was the use of nested IF functions in solutions to display the correct iGCSE grades, despite a clear instruction that stated “**Do not use IF functions**”. The better candidates’ solutions used a short reference table (similar to the one provided in the question) which was sorted into order and allowed all mark ranges from 0 to 70+. A reference for the mark of 0 was often omitted. Some candidates produced a full list of every mark from 0 to 80 with its grade (which although it worked is a less efficient method) and many candidates did not show any evidence of this reference data for use with their lookup function.

**Question 4**

This question generated a lot of creative solutions, with many candidates using an IF function followed by nested lookup functions, although a number of above level solutions were seen using index and match functions. The use of a random number caused a number of candidates some issues. Centres are reminded that candidates can use the on-line help features of their application packages for the practical examinations in this syllabus. There were many creative attempts which included the used of the RAND or RANDBETWEEN functions. A full range of marks were seen on this question.

**Question 5**

Most candidates who attempted this question created a presentation which included the use of a master slide. Almost all candidates had the practical skills in this area but many were less successful at describing what master slides are, why they should be used and how to use them in a presentation. A significant number of candidates ignored the instruction to explain “**in your own words**” and copied text from the internet or online help packages. The most common of these was the use of office.com to provide the text which was copied verbatim and pasted into the slides. This question required candidates to apply their answers to the question stem which gave the context of the question. Some reference to the new teachers and the target audience (parents of Tawara High School) was required and the most successful candidates applied master slides matching the Schools colour scheme (including the logo provided in **Question 4**). There were some well-planned answers which used good presentation design techniques with bulleted lists/key points and more detail added to the presenter notes. Very few candidates added presenter notes; where they were added they were often the same as the content of each slide. Few candidates achieved most of the marks on this question.
Key Messages

Many candidates appeared to have good subject knowledge and some excellent technical descriptions were seen. However, many candidates did not apply their knowledge to the given scenarios and to the context set in the questions and, while they appeared to know the syllabus content quite well, they failed to score the top marks because their knowledge was not applied appropriately.

It was also quite apparent that some candidates did not read the question carefully before attempting to answer it. Candidates appeared to look for ‘key words’ in the question and then wrote answers about the key words without applying their knowledge to the actual question or scenario. Candidates must read the scenarios carefully and must apply their knowledge when answering the questions.

Some candidates did not attempt to answer all the questions and consequently lost the opportunity to score the marks.

Again, a number of candidates wrote extended or replacement answers in the white spaces on the exam paper or added extra pages to the answer booklet but made no reference or indication that they had done so; they left the Examiner to find the additional answers and risked not having them marked. While Examiners are trained to look for, and mark, additional answers, they cannot be expected to search every examination paper for a few lines of orphaned writing for every candidate. When candidates write additional or extended answers outside of the lines supplied, it is very important that candidates indicate on the main question paper that they have done so and indicate where the Examiner can find the additional parts to their responses – a simple ‘continued on..’ would suffice. It should be noted that there are always sufficient lines printed on the examination paper for candidates to write their answers; candidates should not need to use additional pages.

Comments on specific questions

Question 1

This question was about the services that would be provided on a government website and should have been answered quite well given that this is a mainstream topic. Most candidates did answer the question well and gave a good description of the services. However, a large number of candidates gave one word answers that just stated the service but did not include a description so did not score any marks. Candidates must give descriptions rather than one word answers.

Question 2

This question asked candidates to discuss the benefits and drawbacks of putting government services and information on line. Many candidates did not apply their knowledge to the scenario and question and wrote generic answers about the use of websites – some even wrote about hacking, online shopping and banking which were not relevant. Candidates must read the scenarios carefully and they must apply their knowledge when answering the questions.

Question 3

Questions about the digital divide have appeared in various forms over several series, so it concerning that some candidates did not know what the digital divide is. However, many candidates provided good answers and gained high marks on this question. Good answers referred to expanding the telecommunications infrastructure to provide access to the internet in all areas, subsidising the cost of computers or mobile devices for citizens, and providing training in ICT for citizens.
Question 4

This question required candidates to describe antisocial uses of ICT and to suggest ways of preventing them. Good answers described e.g. cyber bullying, distribution of malware such as viruses, phishing and pharming along with appropriate prevention methods. Poor answers did not describe the antisocial uses or repeated the answers e.g. the amending and corruption of data are the same. Again, one word answers were also seen and these did not attract marks – the question asked for descriptions.

Question 5

This question was about how the use of online banking and shopping could lead to fraud. Many candidates interpreted this to be a question about hacking and the collection of personal data by unauthorised users and did not go on to explain how this could lead to fraud; this did not attract the marks. Good answers explained how the intercepted/stolen data could be used to perpetrate fraud e.g. goods purchased using others’ financial details, money removed from others’ bank accounts using their stolen data and goods being fake or not arriving from online sellers.

Question 6

This question was about the specific features of websites that encourage sales of goods or make purchasing easier. Good answers described the websites use of search engines, categories of goods and hyperlinks to other goods that the buyer might wish to purchase. Poor answers described features common to most websites such as the use of text for descriptions of the items for sale. Marks were awarded for good descriptions of the use of images and e.g. videos but not for simple statements.

Question 7

This question required candidates to describe in some detail the processing of totalling the costs and the paying for the items; marks were awarded for describing the stock control that occurs and for the required login process. Many candidates omitted details of the payment process and gave outline answers of the steps taken by the purchaser to choose and purchase an item – this did not score many marks. Good answers described the payment process referring to the process of making and authenticating the payment transaction.

Question 8

This question was about how encryption is used by a website and browser in the transfer of data over the internet. Good answers referred to the use of https, SSL and digital certificates. Many candidates answered this question well but too many described the storage of the data and not the transfer, or described the effect of viruses and the prevention of such.

Question 9

This question was about the role of network items.

Part (i) was not well answered; many candidates omitted this question completely, many scored a mark for describing where the proxy server would be located but few could accurately describe its role. Good answers should have included the caching of web pages for faster retrieval, network translation services and filtering of inappropriate/unwanted websites.

Part (ii) was also not well answered; most answers were superficial and lacked accurate details. Good answers should have included the control of access to the LAN, the inspection of data packets and the use of key words for use against a predetermined list of addresses and words and the subsequent allowing or dropping of the packets.

Part (iii) a surprising number of candidates did not give any response for this question. Good answers included references to the storage of company files such as business documents or templates for access via a network by company employees. Poor answers repeated the question by stating that ‘file servers store files’ but without any further description of the role.
Question 10

This question required candidates to show their understanding of intranets and extranets by comparing and contrasting the features of both. Most candidates knew about intranets being used to share resources within a company, and that extranets are used to allow remote access to intranets, but only a very small number of candidates were able to add further correct details in order to gain the higher marks.

Question 11

This question was quite well answered and most candidates were able to gain four or five marks for this question. Good answers included reference to the security and data transmission speed of cabled networks and the relative low cost and possible mobility when using a wireless network. Other factors included the ease of installation, the range of coverage, the suitability of wired or wireless for LANs depending on the layout and structure of buildings, the flexibility of the methods, and the ease of extension and additions of nodes and users. Poor answers were superficial and did not explain the reasons behind the uses.
Key Messages

Many candidates appeared to have good subject knowledge and some excellent technical descriptions were seen. However, many candidates did not apply their knowledge to the given scenarios and to the context set in the questions and, while they appeared to know the syllabus content quite well, they failed to score the top marks because their knowledge was not applied appropriately.

It was also quite apparent that some candidates did not read the question carefully before attempting to answer it. Candidates appeared to look for ‘key words’ in the question and then wrote answers about the key words without applying their knowledge to the actual question or scenario. Candidates must read the scenarios carefully and must apply their knowledge when answering the questions.

Some candidates did not attempt to answer all the questions and consequently lost the opportunity to score the marks.

Again, a number of candidates wrote extended or replacement answers in the white spaces on the exam paper or added extra pages to the answer booklet but made no reference or indication that they had done so; they left the Examiner to find the additional answers and risked not having them marked. While Examiners are trained to look for, and mark, additional answers, they cannot be expected to search every examination paper for a few lines of orphaned writing for every candidate. When candidates write additional or extended answers outside of the lines supplied, it is very important that candidates indicate on the main question paper that they have done so and indicate where the Examiner can find the additional parts to their responses – a simple ‘continued on..’ would suffice. It should be noted that there are always sufficient lines printed on the examination paper for candidates to write their answers; candidates should not need to use additional pages.

Comments on specific questions

Question 1

Many candidates answered this question quite well and realised that this question was about the use of data logging and not about the use of computers in monitoring environmental conditions. Good answers referred to the automatic, continuous logging of data of such variables as temperature with the use of sensors, the storage of the data and its subsequent export to e.g. spreadsheets. Poor answers were generic answers about the sensors and the use of the data by computer systems rather than applied answers referring to the scenario and question.

Question 2

Many candidates answered this question well. This question was about the ‘functions’ available in spreadsheets and not about the general features of spreadsheets. Good answers described functions such as MAX and MIN, COUNTIF etc. and how these could be used to analyse data. Poor answers did not describe the functions but simply stated that spreadsheets could be used to add totals or make graphs or stated the features such as use of cells.

Question 3

Many candidates answered this question well and could discuss both the benefits and drawbacks of the use of computers compared to manual methods for environmental monitoring. Poor answers were those that stated points without any expansion or simply listed a number of bullets points.
Question 4

Most candidates knew what FTP was, but few answered the question by describing how it would be used. The question asked candidates to describe how it would be used to transfer data between the factory and head office, so good answers should have included the login process, the setting up of a connection and the details of the actual transfer. Poor answers merely stated what the FTP acronym stood for and the fact that it was used for upload/download of files.

Question 5

This question was about authentication and was answered quite well by most candidates.

Part (a) required candidates to define ‘authentication’. Most candidates could state that authentication is ‘proving who you are to the computer system’ and scored the mark.

Part (b) required candidates to describe methods other than passwords but too many ignored this instruction and did describe the use of passwords. Candidates must read the question carefully.

Question 6

Part (a) was about the use of firewalls for keeping data secure. Most candidates could describe the role/use of firewalls and scored good marks for this question. Poor answers lacked detail and were superficial.

Part (b) (i) many candidates scored the marks for this question by referring to the failings of security guards such as being open to bribery, lacking attention or being forgetful. However, a significant number took the term ‘security guards’ to mean software and did not score any marks.

Part (b) (ii) most candidates understood encryption but many were unable to describe the drawbacks. Poor answers stated what encryption was and how it worked – not answering the question – but few described drawbacks such as encryption requiring more processing power, the problems that lost keys can cause, or the fact that criminals can use encryption to hide their activities.

Question 7

Most candidates could describe the function of the anti-malware applications listed but few actually described how they would be used. Candidates must read the question and not just write down all they know about the words that they see in the question. Good answers described how the anti-malware application would be deployed and used.

Question 8

A significant number of candidates could describe how spread spectrum transmission is used and scored good marks, but most did not seem to know the term despite its clear presence in the syllabus. Many candidates confused ‘spread spectrum transmission’ with ‘Wi-Fi’ and described the use of Wi-Fi thus not scoring marks.

Question 9

Many candidates answered this question well. The drawbacks of infrared were well understood by most candidates. However, a significant number of candidates appeared to think that the infrared wireless in use by computing devices was able to ‘burn’ or otherwise harm people.

Question 10

This question was quite well answered by some candidates but the details of WEP that make it less desirable for use, such as only a limited number of keys being available so only a small amount of data traffic can lead to the key being recovered and the encryption being broken, did not appear to be understood by most. Poor answers were vague and referred to WEP being superseded, but did not state how or why.
Question 11

This question was not well answered. Most candidates gave poor answers by describing the benefits and drawbacks of networks rather than concentrating on the question. The question was about the connecting of LANs into WANs and the benefits and drawbacks of doing so. Good answers referred to e.g. sharing of peripherals between LANs, allowing centralised backups and the storage of files centrally with drawbacks such as the expense and the increased security risks.

Question 12

Part (a) most candidates could answer this question and most scored good marks. Good answers identified the component parts of an expert system and described each in some detail, along with stating what an expert system is. Poor answers were those that just listed the components.

Part (b) this question was answered quite well but too many candidates gave responses that were forbidden by the question: car fault diagnosis and route scheduling.

Question 13

This question was about the inputs that would be necessary for the shortest route to be determined. Both parts of the question were quite well answered but there were some poor answers and a few responses left blank.

Part (a) this question was well answered with sensible inputs being seen from most candidates.

Part (b) this question was well answered with sensible inputs being seen from most candidates. It was pleasing to note that there were very few, if any, repeats of the answers to part (a).
General Comments

The majority of candidates were well prepared for this session and many Centres are to be congratulated for addressing issues highlighted in previous reports.

Comments on Specific Questions

Task 1 – Complete a table to record prizes and prize winners

In the first task candidates were required to:

- create a table as specified in the question paper
- use a lookup function to display the details (the item and value) of the current prizes recorded in the prizes.csv file
- generate a random (prize winning) number in the range of membership numbers shown in the XLClub.csv file
- use a lookup function to display the name and details of the XLClub members eligible to win the prize
- paste the values in a new spreadsheet and print a copy.

This task was done well by most candidates. Some used cut and paste to display the details of the prizes but it should have been clear that this was a monthly draw and the prizes could change. Evidence of the use of paste-link would satisfy the possibility of using the solution for a new prize draw in subsequent months but no candidates provided evidence of this.

The generation of a random number within the range of member numbers was most efficiently done by the use of the RANDBETWEEN() function with references to the membership numbers. Once again, to ensure repeatability the numbers should be referenced from the source data – the XLClub.csv file. Most candidates inspected the full range of numbers in the MembershipList.csv file and manually entered the upper and lower values.

The member numbers in the XLClub file were not contiguous so the lookup function was required to find the nearest member number above the randomly generated prize winning number. Most candidates realised the need to use the TRUE parameter to achieve this.

The task specified that no member should win more than one prize. Some candidates, however, failed to realise that randomly generated prize winning numbers and non-contiguous member numbers could result in a single member winning multiple prizes. So as not to unduly penalise candidates who were unfortunate enough to experience the duplication only one mark was lost if they failed to spot the problem.

When producing the printout, candidates were required to match the layout and format as shown in the question paper. This included the text-wrap, centring, and emboldening of the labels. The majority of candidates failed to produce a printout with the required formatting and Centres could benefit from ensuring candidates realise the importance of this aspect. In general, any text or formatting specified for entry by candidates must be exactly as shown in the question paper.
Task 2 – Create a database and a mail merge to notify the prize winners

Since the data needed for the merged letters was contained in multiple files candidates were instructed to create a database. Only a handful of candidates analysed the data sufficiently and avoided the duplication of data. This skill is tested in all database work for the practical papers and, in general, it seems that normalisation of data is something many Centres need to cover in more depth.

It was pleasing to see that almost all candidates provided sufficient evidence of the database structure and relationships. Although not specifically required by the question paper, candidates who showed evidence of their results and method for generating the source data for the merge, gained some advantage by ensuring follow though marks could be awarded for the merged letters. Centres might consider making candidates aware of situations where providing extra evidence might be advantageous.

Many, indeed most, candidates managed to create a successful merge document and printed the merged letters.

The most challenging part of the task was the inclusion of the correct text using conditional fields. The most efficient solution would be to use nested fields but full marks could be obtained for this part of the task by a linear arrangement of three conditional fields and correct use of the null result.

Marks for the merge document were awarded for the insertion and spacing of the correct fields, the syntax of each conditional field and the merge field criteria. A number of candidates included the email address and telephone number fields in the address block and lost the mark for doing so.

Clearly, any errors in spelling or punctuation in the conditional fields would also be apparent in the merged letters. Careful “proofing” of the printouts was therefore important.

Task 3

(a) – Prepare a report based on a parameter query

For this task, candidates had to create a report where users were prompted to enter the Focus Group name and display the names of the members, the funds raised by each member and the total and average funds raised by the group.

In general, this was done well by most candidates but there were two common errors. Many failed to move the Focus Group name and label into the report header and, as in previous sessions, some candidates failed to insert sufficiently clear explanatory text for the prompt. Centres might benefit from ensuring candidates have sufficient experience of working in the report design view and are aware that the prompt is intended to help unskilled users understand what input is required for the query.

(b) – Format the report in a word processing application

This was a fairly simple task and almost all candidates who produced the report managed to export the data. A surprising number, however, failed to ensure that the layout and formatting of the document was suitable for publication in a business context.

Task 4 – Print labels to use as name badges for members who raised over £250

It was possible to select the members whose badges were to be printed in a number of ways. Any non-manual method was suitable but candidates who used a database query or SkipIF conditional fields had the advantage of being able to exclude the specified member automatically. In general, candidates should be encouraged to use selection methods that avoid the need for manual deselection.

Candidates were also required to add the conditional text “Premier Fund Raiser” to the badges of members who raised over £350.

Most candidates who attempted this task completed it well. Of these, only a small number failed to sort the labels into the correct order and format the text as required.
In conclusion

For this session, the main issues for Centres to bear in mind seem to be:

- databases should be designed to avoid the duplication of data in related tables
- where possible solutions should be designed to be repeatable with minimal intervention if data is changed
- any formatting or text specified for entry by candidates must be exactly as shown in the question paper
- the importance of “proofing” printouts to ensure layout, spacing, formatting and punctuation that is fit for purpose in a business context
- the importance of providing context for users – particularly with respect to prompts in parameter queries
- consideration of the evidence required to ensure follow through marks could be awarded in the event of errors.