T-LEVELS

Chief examiner's report

T Level Technical Qualification in Digital Support Services 603/6901/2

Autumn 2023 – core written examinations A and B

NCFE

Chief Examiner's Report

603/6901/2 – Core A and B

Assessment Dates: **Core A 6 December 2023**

Core B 13 December 2023

Paper number: **P002266**

P002267

This report contains information in relation to the externally assessed core sub-component provided by the chief examiner, with an emphasis on the standard of student work within this assessment.

The report is written for providers, with the aim of highlighting how students have performed generally, as well as any areas where further development or guidance which may be required to support preparation for future opportunities.

Key points:

- grade boundaries
- standard of student work
- responses to the external assessment questions
- administering the external assessment

It is important to note that students should not sit the core exam until they have received the relevant teaching of the qualification in relation to this sub-component, and that both papers must be taken in any given series that a student sits the core exam.

Grade boundaries

Raw mark grade boundaries for the series are:

	Overall	Notional Boundaries	
		Paper A P002266	Paper B P002267
Max	237	106	131
A*	204	92	111
A	179	83	96
B	154	71	83
C	130	59	70
D	106	48	57
E	82	37	45

Grade boundaries are the lowest mark with which a grade is achieved.

Students receive a grade for the core exam sub-component as whole, and although there are no official grades for the individual assessments in the core exam, it can be useful for students and teachers to see how the core exam grade was achieved. The grade boundaries given for each assessment are known as 'notional grade boundaries', as they are for illustrative purposes only. For further information on notional grade boundaries, please see the guide T Levels: notional boundaries for the core exam assessments available on the qualification page of the NCFE website.

For further detail on how raw marks are converted to uniform marks (UMS), and the aggregation of the core component, please see refer to the qualification specification.

Standard of student work

In this series, students generally performed well. Overall, students answered the majority of questions across Paper A and Paper B. However, there were some providers where chunks of questions were not answered by a large number of students.

There was a range of achievement seen throughout, including some exceptional answers on the 15-mark questions from a small selection of students/providers.

Responses to the external assessment questions

Core Paper A

Section A: [Business Context & Culture]

It was pleasing to see, students generally performed well within this section.

Q1 – the majority of students answered this question correctly, achieving full marks.

Q2 – students clearly understood this question and were able to successfully identify potential impacts on digital technology on society.

Q3 – some students struggled to identify a suitable mitigation technique here, such as regulating the use of digital technology (1), or reporting misuse to relevant authority, or Display Screen Equipment (DSE). Due to not achieving 3 (a), they could nor answer 3 (b), explaining the impact of this mitigation technique.

Q4 (a) – students on a whole successfully described each of the risks highlighted and explained the impact of one of these risks.

Q5 – most students could clearly explain one way that unsafe or inappropriate use of technology could impact the marketing interns, giving a good response and highlighting the impact.

Q6 – students generally struggled to achieve any/many marks for this question. Students were asked to 'explain one step Lily could take in planning to respond to the change effectively'. The response the student should have responded with should relate to the change in the law, for example: Lily could share information about the changes in law and the need for a new system with the stakeholders (1). This would help them to understand any changes that will be made and any impacts these changes could have (1) This would be enough to achieve the 2 marks awarded. It is important the student relates the question back to the change in the law.

Q7 – good understanding of this question, with good responses and examples given.

Q8 – students performed very well on this question and could successfully achieve the 3 marks awarded.

Q9 – this was a 6-mark question, and most students were able to achieve high marks for this question. The level of understanding on this question was evidenced clearly in the majority of responses.

Q10 – was a 15-mark question (12 overall for the question and 3 QWC). On the whole, students' found this section relatively easy to complete, however most lacked detail and comprehensive knowledge on the topic. The quality of written communication (QWC) as a whole was good.

Section B: [Diversity, Inclusion and Digital Environments]

Students performed better in the first half of this section some comments on each of the questions within this section:

Q11 – most students achieved the full 2 marks for this question. Excellent knowledge of cloud computing.

Q12 – excellent understanding of diversity and inclusion, with the majority achieving the full 2 marks.

Q13 – students successfully explained why storing data is important for the business. There were some very good responses highlighted in this question.

Q14 (a) – Excellent understanding of the graphics processing unit (GPU) and fans, with most achieving full 2 marks for this question. Q14 (b) – not all students achieved the full 2 marks for 14 (b). They were asked specifically to: explain how important one of these components would be in George's new computer. Some students mentioned the importance of one of the components, albeit with no relation to George's new computer, hence losing out on 1 mark. Some students gave the importance of both of these components. It is important the students read the whole question, and relate their answer to the scenario given, to ensure no marks are missing.

Q15 – students successfully explained this question well. Students have a good understanding of the topics within the question.

Q16 – students' knowledge on virtual computing systems was clear within their responses, as the majority answered this question very well.

Q17 – some students achieved the correct marks for this two-part question. However, not all students were aware of the correct layer, nor able to explain how the layer relates to network communication.

Q18 – many students lost marks with this question, due to students not having enough knowledge on each of the cloud services listed. Marks were also lost by students not assessing how one of these cloud services would be suitable for Sofia's company.

Q19 – many students achieved high marks for this question, giving valid approaches, along with reasonable explanations.

Q20 – was a 15-mark question (12 overall for the question and 3 Quality of Written Communication (QWC). On the whole, students found this section relatively straightforward to complete. Answers were mostly relevant, but often lost focus. The QWC was good.

Section C: [Learning and Planning]

Students performed relatively well within this section, with some high marks awarded for most questions.

Q21 – there was a mixed response with students achieving this 1 mark for this question. Most students did not seem to understand the term 'reflection technique', therefore losing out on this one mark.

Q22 – students had good understanding of this question and were able to describe this answer well.

Q23 – another question which was answered well by the majority of students, achieving the full marks allocated.

Q24 – another question which was answered well by the majority of students, achieving the full marks allocated.

Q25 – the majority of students understood the impact of artificial intelligence (AI) and achieved some marks for this question, albeit some students lost out on marks for not fully assessing the impact that AI could have on the logistics company. For example: AI could be used to plan efficient routes for drivers delivering fresh food by using real-time data to modify routes and avoid issues with traffic and road closures (1). This would help to ensure that drivers keep to their delivery schedule and cut down on rescheduled deliveries and on waste when delivering fresh food to customers (1). This may lead to Bindi's customers being more satisfied with delivery times and the impact on the environment cause by food waste (1).

Q26 – most students struggled achieving high marks for this question, due to lack of knowledge on each of the techniques listed.

Q27 – another question which was answered well by the majority of students, achieving the full marks allocated.

Q28 – another question which was answered well by the majority of students, achieving the full marks allocated.

Core Paper B

Section A: [Digital Support Services pathway]

It was pleasing to see, students generally performed well within this section.

Q1 – the majority of students answered this question correctly.

Q2 – students clearly understood this question and were able to successfully identify two key skills that would be included in the job description, along with successfully explaining why one of the identified key skills would be required for the service desk technician role.

Q3 – the majority of students answered this question correctly, achieving the full 2 marks.

Q4 – 4 (a) – most students could successfully identify two types of communication formats Officeel can use to share their survey results. 4 (b) – some students lost marks by not being able to fully explain one reason why open questioning can benefit Officeel when surveying their customers. Students needed to give a specific response on how it could benefit Officeel. For example: if Officeel uses open questioning in their survey, it will mean customers have an opportunity to share more information, beyond a yes or no to the question (1). This will provide Officeel with more insight about their customers' experiences with their current services/products (1).

Q5 – the majority of students answered this question correctly, achieving the full 2 marks.

Q6 – the majority of students answered this question correctly, achieving the full 2 marks.

Q7 – 7 (a) – many students lost marks for this question, due to lack of understanding of fault analysis tools, which lost them 2 marks for this question. 7 (b) – students were able to regain some marks with 7 (b), by being able to explain one requirement for external reporting of faults and problem resolution that will ensure Jack's compliance with relevant legislation, regulation and external standards.

Q8 – students performed well with this question, with good knowledge of assessing how prioritising and categorising incidents impacts the website hosting company.

Q9 – students performed well with this question, with good knowledge of pre-recorded e-learning materials. The students applied their knowledge and gave very good responses here.

Section B: Tools and testing

Students performed relatively well within this section, with some high marks awarded for some questions.

Q10 – most students achieved the full 2 marks for this question. Excellent knowledge of cloud computing.

Q11 – a lot of students seemed to get confused with black box testing and penetration testing for this question, and often struggled to give two suitable responses, such as to test the inputs and outputs against expected results (1) to measure the functional requirements of the system/programme (1).

Q12 – students performed well with this question, with good knowledge of collaborative communication tools. The students applied their knowledge and gave very good responses here.

Q13 – unfortunately many students lost marks for this question, due to not describing one way the graph could be used to present sales figures and market comparisons, which would help the sales manager. A suitable response would be: using the graph in Figure 1 to present sales figures and market comparisons will help the sales manager because it is easy to digest visually and determine the total sales figures for each company (1). This can be done in a timely manner as there is no need to analyse lots of numerical data (1).

We found that the majority of student responses were focused on themselves comparing the graph, for example, one typical response which didn't achieve any marks, stated 'Company A is doing better than Company B', or 'Product D did not sell many products'.

Q14 – most students achieved the full 2 marks for this question. Excellent knowledge of penetration testing.

Q15 – most students achieved the full 2 marks for this question, with good understanding of marketing analytics tools.

Q16 – high marks were given for Q16, with good assessment points on usability testing.

Q17 – most students achieved the full 3 marks for this question. Excellent knowledge on this topic.

Section C: Security and legislation

Students performed relatively well within this section, with some high marks awarded for some questions.

Q18 – majority students of achieved the 1 mark for this question, with excellent understanding of CIA.

Q19 – most students performed very well with this question and had good understanding of the Computer Misuse Act.

Q20 – student have excellent knowledge on consequences of having a weak password and achieved the full marks for this question.

Q21 – students performed relatively well within this question, with some high marks seen, based on good knowledge and understanding of legislation.

Q22 – another question where students excelled at, with great understanding of how anti-virus software works.

Q23 – some students struggled to achieve full marks for this question, due to lack of 'assessing the importance of' cyber essentials. Most students tended to just identify a basic response, but did not fully assess the question, or at least not enough to gain the full 3 marks. For example: as Tanveer will be accessing other business's confidential information, Cyber Essentials is important to them as it will help them monitor and update user access control of the business's digital systems (1). By controlling what access users inside and outside of their business have, they will ensure only the access that is needed is granted to them (1). This will ensure potential damage an attacker could make to Tanveer's business is minimised and client information is protected (1).

Q24 – students often answered this question well but did not always achieve the full 6 marks for the question. The question was looking for 6 discussion points across 2 ways compliance can impact an organisation, but often students only made 3 / 4 points.

Q25 – was a 15-mark question (12 overall for the question and 3 QWC). On the whole, students found this section relatively straightforward to complete, as the understanding of technical and non-technical vulnerabilities was very knowledgeable as a whole.

Answers were mostly relevant, and students made some good points. The QWC as a whole was good.

Section D: Data and digital analysis

Students performed well with certain questions within this section, although for a lot of these questions, students struggled to achieve as many marks:

Q26 – the majority students of achieved the 2 marks for this question, with excellent understanding of business resource considerations.

Q27 (a) – the majority of students were able to identify two sources of external data that may support the company's research and analysis and often achieved full marks for this question.

Q27 (b) – most students understood this question well and gained the full 2 marks for this question.

Q28 – most students achieved at least 1 mark for this question by identifying cloud storage options, albeit often struggled to achieve the full 2 marks. Possible answers include, object storage (1) elastic cloud/scalable storage (1) cloud-based database services (1).

Q29 – students often struggled to achieve the full marks for this question to: state two data models that can be used by Gallery Bee to logically structure its collections' data. The students' knowledge seemed to be weak on this subject of data models.

Q30 – students often struggled to achieve the full marks for this question to: explain two tools for problem solving and algorithm design that could be used by the distribution warehouse. The student's knowledge seemed to be weak on this subject of problem solving.

Q31 – students generally achieved low marks for this question, of being asked to assess how the action of pattern recognition will ensure the enforcement of car park rules. The responses made were not in relation to pattern recognition. The responses were very vague and simply stating how car park entry operates, rather than the function of pattern recognition. The mark scheme has some very good response examples.

Q32 – students generally achieved low marks for this question. Students were asked to evaluate the problem the student is encountering in relation to the computational thinking processes. Unfortunately, many students responded with responses not relating to computational thinking processes, such as those highlighted in the mark scheme. We were looking for responses in relation to abstraction or selection, for example.

Q33 – students generally achieved low marks for this question. Students were asked to assess the characteristics of the algorithm. Unfortunately, many students did not link their response to algorithms, for example: the finiteness, the input and output fields and logical sequencing of steps. Most responses just explained how to log in to the email system.

Q34 – was a 15-mark question (12 overall for the question and 3 QWC). On the whole, students found this section relatively straightforward to complete, as the understanding of data errors was knowledgeable as a whole. Answers were mostly relevant, and students made some good points. The QWC as a whole was good.

Administering the external assessment

The external assessment is invigilated and must be conducted in line with our Regulations for the Conduct of External Assessment.

Students must be given the resources to complete the assessment, and these are highlighted within the Qualification Specific Instructions Document (QSID).