



MARK SCHEME
DIGITAL TECHNOLOGY AND INNOVATION

Subject: DTI

Paper Code: 6901

Maximum Mark: 40

YEAR: 2026

ANNOTATIONS

The following annotations are used in marking this paper and should be used by markers.

Annotation	Use or meaning
✓	Correct and relevant point made in answering the question.
X	Incorrect point or error made.
REP	Repeat
A	An extraneous figure
BOD	Benefit of the doubt given.
SEEN	Noted but no credit given
OF	Own figure
FB	For Both
XX	Not Answered

Generic Marking Principles

These generic marking principles must be followed by all markers when assessing candidates' responses. They should be used together with the specific details provided in the mark scheme or the generic level descriptors for each question. Every question paper and its corresponding mark scheme will also adhere to these marking principles.

GENERIC MARKING PRINCIPLE 1:

Marks must be awarded in accordance with:

- the specific content of the mark scheme or the generic level descriptions provided for the question,
- the specific skills identified in the mark scheme or descriptors, and
- the standard of performance expected from candidates, as exemplified through standardisation scripts.

GENERIC MARKING PRINCIPLE 2:

Only whole marks are to be awarded. No half marks or fractional marks should be given under any circumstances.

GENERIC MARKING PRINCIPLE 3:

Marks must be awarded positively:

- Credit must be given for correct and valid responses, as outlined in the mark scheme.
- Where a candidate's response exceeds the expected content or extends beyond the syllabus in a relevant way, appropriate credit may be awarded, in consultation with the Chief Marker.
- Marks are awarded when the candidate demonstrates clear evidence of knowledge, understanding, or skill.
- Marks must not be deducted for incorrect answers, omissions, or irrelevant material.
- Spelling, punctuation, and grammar should only be considered if explicitly stated in the question's assessment criteria. However, responses must be sufficiently clear in meaning.

GENERIC MARKING PRINCIPLE 4:

Rules must be applied consistently across all scripts, including cases where candidates do not follow specific instructions or where generic level descriptions are applied. For example, if a candidate writes more answers than required or responds in the wrong format, the marker should still assess the response based on the marking scheme. If the marking scheme includes a penalty for not following instructions, it should be applied. If no penalty is mentioned, valid responses should still be credited.

In the case of generic level descriptions such as "basic understanding" or "detailed explanation", all markers must interpret and apply these levels in the same way across all scripts. This helps ensure that every candidate is marked fairly and consistently.

GENERIC MARKING PRINCIPLE 5:

The full range of marks available in the mark scheme must be used where appropriate. However, the actual distribution of marks may depend on the quality of responses observed.

GENERIC MARKING PRINCIPLE 6:

Marks must be awarded strictly based on the criteria and expectations defined in the mark scheme. Judgments should not be influenced by grade thresholds, grade descriptions, or assumptions about overall candidate performance.

Point-Based Marking

Guidance

- **DO credit answers which are worded differently from the mark scheme if they clearly convey the same meaning (unless the mark scheme requires a specific term).**
- **DO credit alternative answers/examples which are not written in the mark scheme if they are correct.**
- **DO NOT credit answers simply for using a 'key term' unless that is all that is required. (Check for evidence it is understood and not used wrongly.)**
- **DO NOT credit answers which are obviously self-contradicting or trying to cover all possibilities.**
- **DO NOT give further credit for what is effectively repetition of a correct point already credited unless the language itself is being tested. This applies equally to 'mirror statements' (i.e. polluted/not polluted).**
- **DO NOT require spellings to be correct, unless this is part of the test. However, spellings of syllabus terms must allow for clear and unambiguous separation from other syllabus terms with which they may be confused (e.g. Corrasion/Corrosion).**

Calculation

- **The mark scheme will outline the steps for the most likely correct method(s), including the marks allocated for each step, the correct answer(s), and the marks awarded for the final answer.**
- **If working or explanation is required to obtain full credit, this will be clearly stated in both the question paper and the mark scheme. In all other cases, a correct final answer should receive full marks even if no supporting working is provided.**
- **If a candidate applies a valid method that is not specifically included in the mark scheme, equivalent marks should be awarded for achieving equivalent stages of the solution.**
- **Where a candidate uses an incorrect figure obtained from earlier working, the 'own figure rule' applies. Full marks may still be awarded provided the method used is correct and complete. Additional guidance or exceptions to this principle will be specified in the mark scheme where necessary.**

MARK SCHEME

Question	Answer	AO/ Mark	Additional Guidance
1	Control Unit (CU)	AO2_1	
2	0x	AO1_1	
3	AND gate	AO1_1	
4	Quantum computer	AO1_1	
5	Ready	AO2_1	
6	It learns from labelled training data	AO1_1	
7	To	AO2_1	
8	Impersonation → Using someone else's identity online	AO2_1	
9	TypeError occurs	AO2_1	
10	=, +=, -=	AO1_1	
11	Superposition	AO2_1	
12	Simplify Boolean expressions	AO1_1	
13	It works with a wider range of devices	AO2_1	
14	Dechen	AO2_1	
15	X=RAM, Y=ROM	AO1_1	
16	They can use sensor information to make decisions automatically	AO1_1	
17	It preserves all original data.	AO1	
18	Image collection	AO2_1	
19	HTTP	AO1_1	
20	Computer → Switch → Router → Modem → Internet	AO2_1	
21	Dynamic website	AO2_1	

22	It calculates its position by measuring signals from multiple satellites.	AO2_1	
23	HTML and CSS	AO1_1	
24	44,100 sound samples every second.	AO1_1	
25	Horizontal scaling	AO2_1	
26	Immutability	AO2_1	
27	White-hat hacker	AO1_1	
28	SSL certificate	AO1_1	
29	Phishing.	AO1_1	
30	Malware	AO2_1	
31	Count $\leftarrow$ Count + 1	AO2_1	
32	Error	AO2_1	
33	Both conditions evaluate to True.	AO2_1	
34	Consent-based sharing	AO2_1	
35	Array usually store elements of the same data type	AO1_1	
36	It remains available until the program ends	AO1_1	
37	Both can be imported into another Python program	AO1_1	
38	A package	AO2_1	
39	one or two arguments	AO1_1	
40	Automatically closes the file after use	AO1_1	