GCE A LEVEL MARKING SCHEME

SUMMER 2025

A LEVEL
COMPUTER SCIENCE - COMPONENT 1
A500U10-1

About this marking scheme

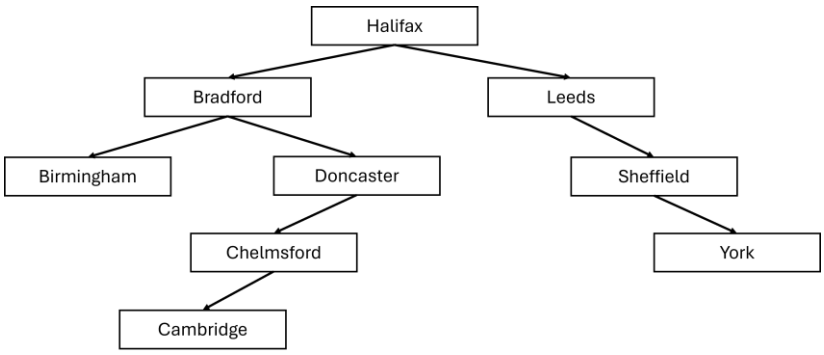
The purpose of this marking scheme is to provide teachers, learners, and other interested parties, with an understanding of the assessment criteria used to assess this specific assessment.

This marking scheme reflects the criteria by which this assessment was marked in a live series and was finalised following detailed discussion at an examiners' conference. A team of qualified examiners were trained specifically in the application of this marking scheme. The aim of the conference was to ensure that the marking scheme was interpreted and applied in the same way by all examiners. It may not be possible, or appropriate, to capture every variation that a candidate may present in their responses within this marking scheme. However, during the training conference, examiners were guided in using their professional judgement to credit alternative valid responses as instructed by the document, and through reviewing exemplar responses.

Without the benefit of participation in the examiners' conference, teachers, learners and other users, may have different views on certain matters of detail or interpretation. Therefore, it is strongly recommended that this marking scheme is used alongside other guidance, such as published exemplar materials or Guidance for Teaching. This marking scheme is final and will not be changed, unless in the event that a clear error is identified, as it reflects the criteria used to assess candidate responses during the live series.

GCE A LEVEL COMPUTER SCIENCE

SUMMER 2025 MARK SCHEME

Q		Answer	AO1	AO2	AO3	Total
1		A binary tree structure is designed to contain strings and uses the following rules: • The left pointer indicates the condition “earlier or at the same position in the alphabet” • The right pointer indicates the condition “later in the alphabet”				
	(a) (i)	Construct a binary tree using these rules and the data entered in the following order: Halifax, Leeds, Bradford, Doncaster, Chelmsford, Birmingham, Sheffield, York, Cambridge You may use letter abbreviations if you wish				
		 Award **1 mark** for correct root node Award **1 mark** for correct level 1 and 2 Award **1 mark** for correct level 3 and 4		1 1 1		3
	(a)(ii)	Carry out an in-order traversal of the tree				
		Birmingham, Bradford, Cambridge, Chelmsford, Doncaster, Halifax, Leeds, Sheffield, York		1		1
	(a)(iii)	Carry out a pre-order traversal of the tree				
		Halifax, Bradford, Birmingham, Doncaster, Chelmsford, Cambridge, Leeds, Sheffield, York		1		1
	(a)(iv)	Carry out a post-order traversal of the tree				
		Birmingham, Cambridge, Chelmsford, Doncaster, Bradford, York, Sheffield, Leeds, Halifax		1		1

Q		Answer	AO1	AO2	AO3	Total
	(b)	Describe two situations in which a binary tree would be the preferred method of data storage over a linked list				
		Award **1 mark** for each situation and **1 mark** expansion **Hierarchical relationship** of a file system. • Each node is a directory of the system, and the left and right nodes represent subdirectories. • This allows for a faster traversal and retrieval of information related to the file system structure. **Binary Search Operations** • Each node can represent an element of data where the left child contains elements smaller than the current node and right child contains elements greater than the current node. • This situation allows for efficient binary search operations, significantly reducing the time complexity compared to a linked list where linear search would be necessary. • Copying/deleting items of stored data efficiently Accept any other valid response	1 1 1 1 1 1 1			4

Q		Answer	AO1	AO2	AO3	Total
2		An online international e-commerce company produces a unique order code with each customer order. The order form comprises of a two-letter country code of the customer location, followed by a unique reference. • The country code can only contain **two** uppercase letters • The date is stored in the format DDMMYYYY • The unique reference is made up of one capital letter and 4 digits. Example: UK12032025G2376				
		Produce a Backus-Naur Form (BNF) definition for the order code				
		Award **1 mark** for each correct BNF notation up to a maximum of **5 marks** if incorrect notation used **Indicative content:** <upper> ::= “A”|”B”|”C”| . . . |”Z” <digit> ::= “0”|”1”|”2”|”3”|”4”|”5”|”6”|”7”|” 8”|”9” <country>::= <upper><upper> <day>::= “01”|”02”|”03” . . . “30”|”31” <month>::= “01”|”02”|”03” . . . “11”|”12” <year>::= “2025”|”2026”|”2027” . . . “9998”|”9999” <date>::=<day><month><year> <uniqueref>::=<upper><digit><digit><digit><digit> <surname>::=<upper>|<upper><surname> <order code>::=<country><date><uniqueref><surname>		1 1 1 1 1 1		6

<table>
<tr><th colspan="2">Q</th><th>Answer</th><th>AO1</th><th>AO2</th><th>AO3</th><th>Total</th></tr>
<tr><td>3</td><td></td><td>The algorithm below shows a sort procedure.

<pre>
counter = 0
swapped = TRUE
swaps = 0
length = list.length
while swapped == TRUE
    while counter < length-1
        if list(counter) > list(counter+1) then
            temp = list(counter)
            list(counter) = list(counter+1)
            list(counter+1]) = temp
            swaps = swaps + 1
        endif

            counter = counter + 1
    endwhile
    if swaps == 0 then
        swapped = FALSE
    else:
        swaps = 0
        counter = 0
    endif
endwhile
</pre></td><td></td><td></td><td></td><td></td></tr>
<tr><td></td><td>(a)</td><td>Name the sort method used in the algorithm</td><td></td><td></td><td></td><td></td></tr>
<tr><td></td><td></td><td>Award 1 mark for Bubble Sort</td><td>1</td><td></td><td></td><td>1</td></tr>
<tr><td></td><td>(b)</td><td>Dry run the algorithm using the following trace table using the following integers: 54, 45, 13, 26

<table>
<tr><td>list</td><td>counter</td><td>swapped</td><td>Swaps</td></tr>
<tr><td>54, 45, 13, 26</td><td>0</td><td>True</td><td>0</td></tr>
<tr><td></td><td></td><td></td><td></td></tr>
<tr><td></td><td></td><td></td><td></td></tr>
<tr><td></td><td></td><td></td><td></td></tr>
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<tr><td></td><td></td><td></td><td></td></tr>
</table></td><td></td><td></td><td></td><td></td></tr>
<tr><td></td><td></td><td>Award 1 mark for each correct row

<table>
<tr><td>list</td><td>counter</td><td>swapped</td><td>Swaps</td></tr>
<tr><td>54, 45, 13, 26</td><td>0</td><td>True</td><td>0</td></tr>
<tr><td>45, 54, 13, 26</td><td>1</td><td>True</td><td>1</td></tr>
<tr><td>45, 13, 54, 26</td><td>2</td><td>True</td><td>2</td></tr>
<tr><td>45, 13, 26, 54</td><td>3</td><td>True</td><td>3</td></tr>
<tr><td>13, 45, 26, 54</td><td>0</td><td>True</td><td>0</td></tr>
<tr><td>13, 26, 45, 54</td><td>1</td><td>True</td><td>1</td></tr>
<tr><td>13, 26, 45, 54</td><td>2</td><td>False</td><td>0</td></tr>
</table></td><td></td><td></td><td>1
1
1
1
1
1</td><td>6</td></tr>
</table>

Q		Answer	AO1	AO2	AO3	Total
4		Draw a truth table to prove the following:				
	(a)	Q = (NOT A OR B) XOR (A AND C)				
						5

A	B	C	NOT A	NOT A OR B	A AND C	Q = (NOT A OR B) XOR (A AND C)
0	0	0	1	1	0	1
0	0	1	1	1	0	1
0	1	0	1	1	0	1
0	1	1	1	1	0	1
1	0	0	0	0	0	0
1	0	1	0	0	1	1
1	1	0	0	1	0	1
1	1	1	0	1	1	0

Award **1 mark** for each possible A, B and C are correct		1
Award **1 mark** for **NOT A** column correct		1
Award **1 mark** for **NOT A OR B** column correct		1
Award **1 mark** for **A AND C** column correct		1
Award **1 mark** for **Q = (NOT A OR B) XOR (A AND C)** column correct		1
Award **full marks** if column Q correct		

	(b)	NOT (A AND B) = NOT A OR NOT B				
						4

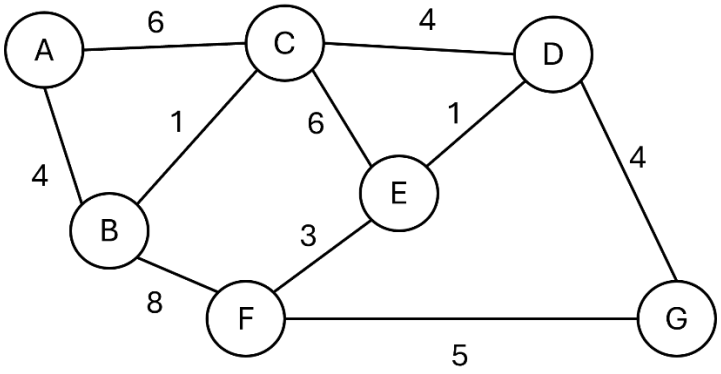
A	B	A AND B	NOT (A AND B)	NOT A	NOT B	NOT A OR NOT B
0	0	0	1	1	1	1
0	1	0	1	1	0	1
1	0	0	1	0	1	1
1	1	1	0	0	0	0

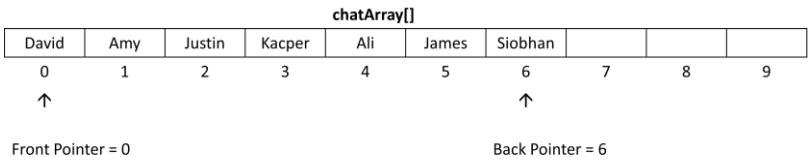
Award **1 mark** for each possible A, B correct		1
Award **1 mark** for **NOT A** and **NOT B** column correct		1
Award **1 mark** for **NOT (A AND B)** column correct		1
Award **1 mark** for **NOT A OR NOT B** column correct		1
Award full marks if columns **NOT (A AND B)** and **NOT A OR NOT B** correct		

Q		Answer	AO1	AO2	AO3	Total
5		Clearly showing each step, simplify the following Boolean expressions using Boolean algebra identities and De Morgan's law where appropriate				
	(a)	$B.(\bar{A}+C).A.(B+C).\bar{A}.B$				
		Award **1 mark** for each of the following up to a maximum of **4 marks** for incorrect final answer $B.B.(\bar{A}+C).A.(B+C).\bar{A}$ $B.(\bar{A}+C).A.(B+C).\bar{A}$ $B.(\bar{A}+C).0.(B+C)$ $B.0.(B+C)$ $0.(B+C)$ 0 Award full marks if correct final answer 0		1 1 1 1 1		5
	(b)	$\overline{\bar{A}.(\bar{B}+C)}$				
		Award **1 mark** for each of the following up to a maximum of **3 marks** for incorrect final answer $\bar{\bar{A}}+\overline{\bar{B}+C}$ $A+\overline{\bar{B}+C}$ $A+\bar{\bar{B}}.\bar{C}$ $A+B.\bar{C}$ Award full marks if correct final answer and use of De Morgan's Law $A+B.\bar{C}$		1 1 1 1		4
6	(a)	Describe **one** example where a shortest-path algorithm is appropriate.				
		Award **1 mark** for each scenario **1 mark** for expansion **Computer networking** • shortest-path algorithms are used to determine the most efficient route for data packets to travel from a source to a destination. **Digital Mapping** • Finding the shortest path to locations on a map and routing the map using the shortest distance **Game Playing** • Used for non-player character (NPC) movement to ensure realistic movement in the game. **Emergency Response Planning** • shortest-path algorithms help emergency responders plan the quickest routes to reach affected areas. Accept any other valid response	1 1 1 1 1 1 1 1			2

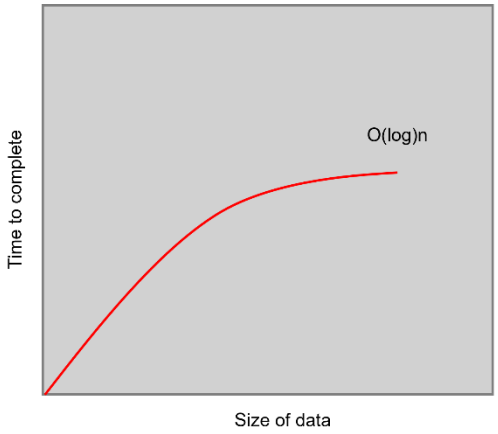
Q		Answer	AO1	AO2	AO3	Total
	(b)	The routing costs for a network of 7 nodes are stored in a two dimensional array, as shown below (0 indicates there is no route between the nodes).				

	A	**B**	**C**	**D**	**E**	**F**	**G**
A	0	4	6	0	0	0	0
B	4	0	1	0	0	8	0
C	6	1	0	4	6	0	0
D	0	0	4	0	1	0	4
E	0	0	6	1	0	3	0
F	0	8	0	0	3	0	5
G	0	0	0	4	0	5	0

	(i)	Draw a labelled diagram of the network.				
		Award **1 mark** for correct A, B, C and D connections Award **1 mark** for correct E, F and G connections Award **1 mark** for all values correct  		1 1 1		3
	(ii)	State the shortest path from node A to node G and calculate its cost.				
		A → B → C → D → G 4 + 1 + 4 + 4 = 13		1 1		2

Q		Answer	AO1	AO2	AO3	Total
7	(a)	The following people are in a queue for an online chat facility: David, Amy, Justin, Kacper, Ali, James, Siobhan Draw a clearly labelled diagram to show how the above queue can be represented using a one-dimensional array and necessary pointers.				
		 Award **1 mark** for identifying a front pointer Award **1 mark** for identifying a back pointer Award **1 mark** for representation of one-dimensional array		1 1 1		3
	(b)	Give another example of when a queue data structure might be used				
		Award **1 mark** for any suitable example • **Printer Queues:** When a user sends a document to the printer, the print job gets added to the end of the printing queue. • **Task Scheduling:** Utilising queues enables the scheduling of tasks based on their priority or the sequence in which they were initially received. • **Traffic Management System:** Queues play a vital role in orchestrating traffic flow within transportation systems, including airport control systems and road networks. • **Breadth-First Search Algorithm:** Employing a queue, the breadth-first search algorithm systematically explores nodes in a graph level by level. • **Resource Management:** Queues are instrumental in the efficient management and allocation of resources, such as printers or CPU processing time. • **Web Servers:** Web servers leverage queues to handle incoming requests from clients. These requests are sequentially added to the queue once received and processed by the server in the order of their arrival. Accept any other valid response	1 1 1 1 1 1			1

Q		Answer	AO1	AO2	AO3	Total
8		Below is an algorithm that searches for a data item in a one dimensional array. You can assume that the data in the array is in ascending order and that the data item being searched is present. 1 function binarySearch(dataList) 2 input searchItem 3 set low = 0 4 set high = Length(dataList) - 1 5 6 repeat while low <= high: 7 set midpoint = low + (high - low) DIV 2 8 9 if dataList(midpoint) = searchItem Then 10 return True 11 else if searchItem < dataList(midpoint) Then 12 set high = midpoint - 1 13 else 14 set low = midpoint + 1 15 end If 16 end repeat 17 18 output dataList(midpoint) 19 end function				
	(a)	Evaluate the efficiency of the search algorithm and, using Big O notation, determine the growth rate for time performance.				
		Award **1 mark** for each answer up to a maximum of **5 marks** Award **1 mark** for 4 operations/O(1) outside the loop Award **1 mark** for each iteration in the loop halves the number of elements until you get 1 left. Award **1 mark** for n values we halve the number until we get one value left which is $\log_2 n$. Award **1 mark** for n values we halve the number until we get one value left which is $\log_2 n + 4$. Award **1 mark** for identifying there are two instructions in the loop there for $2\log_2 n$. Award **1 mark** for identifying $\log_2 n$ dominates Award **1 mark** for identifying that the overall time performance is O(log n)			 1 1 1 1 1 1 1	5

Q		Answer	AO1	AO2	AO3	Total
	(b)	Draw a graph to illustrate the order of time performance				
		 Award **1 mark** for correct labelling of graph Award **1 mark** for correct gradient of line		1 1		2
9	(a)	Discuss the different methods of investigation during the system analysis process, describing the benefits and drawbacks for each method.				
		Indicative Content: **Interviews** Interviews are a qualitative research method that involves direct communication between an analyst or a team of analysts and key stakeholders and users. The primary goal of interviews in system analysis is to gather detailed and in-depth information about the current system, its processes, user requirements, and any issues or challenges. Benefits: • Direct interaction with stakeholders allows for in-depth understanding. • Clarification of ambiguous information through real-time dialogue. Drawbacks: • Time-consuming, especially for large groups of stakeholders. • Dependent on the interviewee's ability to articulate their needs accurately. **Questionnaires/Surveys** Questionnaires are a method of data collection used during system analysis to gather information from a large number of participants in a structured and efficient way. Questionnaires are often designed to obtain specific information about users' needs, preferences, and opinions related to the current system or the requirements of a proposed system.	6			6

Q		Answer	AO1	AO2	AO3	Total
		Benefits: • Efficient for collecting data from a large number of participants. • Allows for standardised data collection. • Anonymity may encourage honest responses. Drawbacks: • Limited opportunity for clarification or follow-up questions. • Responses may lack depth, and there's a risk of incomplete or inaccurate information. • Dependent on the respondents' willingness to participate. **Observation** Observation is the systematic and direct monitoring of activities, processes, and behaviours within the organisation of a current system. This method involves examination of how individuals interact with the current system, how processes are executed, and how information flows within the organisation. Benefits: • Provides a firsthand view of how the system operates in real-time. • Enables identification of issues that users might not be aware of. Drawbacks: • May not capture all relevant information, especially if certain processes are not observable. • Presence of an observer may influence user behaviour. **Document Analysis** Document analysis is used to review existing documents relevant to the system being studied. This involves a systematic and thorough examination of various types of documents, such as reports, manuals, forms, databases, policies, and any other written or recorded materials that provide information about the current system, its processes, and its requirements. Benefits: • Examining existing documents provides historical and organisational context. • Useful for understanding rules, policies, and regulations. Drawbacks: • Documents may be outdated or incomplete. • May not capture implicit knowledge or undocumented practices.				

Q		Answer	AO1	AO2	AO3	Total
		Workshops and Focus Groups A focus group is a qualitative research method that involves a small group of individuals who participate in a guided discussion led by a moderator. The purpose of a focus group is to gather insights, opinions, perceptions, and feedback on a specific topic or set of topics. A workshop is a collaborative and interactive session involving key stakeholders, analysts, and other relevant participants. This facilitates communication, gather information, and collectively work on understanding, defining, and refining system requirements, processes, or solutions. Benefits: • Collaboration among stakeholders can lead to consensus on system requirements. • Facilitates brainstorming and idea generation. Drawbacks: • Requires time and effort to organise, especially with diverse participant schedules. • Strong personalities may dominate discussions, leading to biased results.				

Band	AO1
3	**Award 5 – 6 marks** A very good discussion, which shows: • thorough knowledge and understanding of methods of investigations during the systems analysis process • a confident grasp of the benefits and drawbacks of each method.
2	**Award 3 - 4 marks** A good discussion, which shows: • generally secure knowledge and understanding of methods of investigations during the systems analysis process • a generally secure grasp of the benefits and drawbacks of each method.
1	**Award 1 - 2 marks** A basic discussion, which shows: • some knowledge and understanding of a method of investigations during the systems analysis process • some grasp of the benefits and drawbacks of a method.
	Award 0 marks • Response not creditworthy or not attempted.

Q		Answer	AO1	AO2	AO3	Total
	(b)	Describe the differences between a parallel and phased changeover methods. Suggest situations where each would be the most suitable changeover method.				
		Indicative Content **Parallel** • Parallel changeover is used when there can be opportunity for a system to fail. • Parallel changeover implements a new system alongside an existing system and if one fails the other takes over. • System tasks are run concurrently on both the new system and the existing causing a duplication of tasks. These tasks can be used to ensure consistency between the new and existing systems. • Parallel changeover is employed for critical systems such as those in hospitals and banks where data access and integrity are critical. **Phased** • Phased changeover is usually employed when a business has the required number of resources to effectively test a new system by deploying it into one area • This method allows bugs and other issues to be confined to just one area and when fixed the system can be rolled out on a much larger scale. • Phased changeover is used when a system can be deployed in units or modules. This works well when parts of a new system are being developed independently and upgrading an existing system. • When each module is implemented into an existing system many compatibility issues can occur between the new systems modules and the existing system. • Phased changeover can be employed in situations where it is ideal to use parts of the system in the first instance, such as a school management system, where the attendance section could be used first and then additional areas such as reporting can be introduced after staff are more familiar with the system.	6			6

Band	AO1
3	**Award 5 – 6 marks** A very good discussion, which shows: • thorough knowledge and understanding of both parallel and phased changeover methods • a confident grasp of identifying suitable situations for the changeover methods
2	**Award 3 - 4 marks** A good discussion, which shows: • secure knowledge and understanding of both parallel and phased changeover methods • a secure grasp of identifying suitable situations for the changeover methods
1	**Award 1 - 2 marks** A basic discussion, which shows: • some knowledge and understanding of parallel or phased changeover methods • some grasp of identifying a suitable situation for a changeover method
	Award 0 marks • response not creditworthy or not attempted.

Q		Answer	AO1	AO2	AO3	Total
10	(a)	Write an algorithm to search an unsorted one-dimensional array of integers.				

		item as integer
		found = FALSE
		length = array.length
		counter = 0
		
		while counter <length AND found = FALSE
		
		if array (counter) = item
		
		found = TRUE
		position = counter
		
		endif
		counter = counter +1
		endwhile
		if found = FALSE
		output "Item not found in the array"
		else
		output "Item found at position " + position
		endif
		
		Award **1 mark** for declare and initialise variables
		Award **1 mark** for setting length of array
		Award **1 mark** for use of loop with condition
		Award **1 mark** for searching item
		Award **1 mark** for assigning found
					1
					1
					1
					1
					1
						5

Q		Answer	AO1	AO2	AO3	Total
	(b)	Give **two** advantages of a linear search algorithm				
		Award **1 mark** for each bullet point up to a maximum of **2 marks** • is straightforward to implement • suitable for searching unordered lists • efficient for searching small datasets • suitable for performing occasional searches • low memory usage Accept any other valid response	 1 1 1 1 1			2

Q		Answer	AO1	AO2	AO3	Total
11	(a)	Describe the role of codes of conduct in promoting professional behaviour.				
		Award **1 mark** for each bullet point up to a maximum of **2 marks** • a code of conduct outlines professional expectations of an employee within an organisation. • it will outline the expectations with regards legal expectations of the employee • will include ethical principles that guide professionals in making ethical decisions • it will provide a framework for individuals • it will include the outcomes and sanctions of employees if these expectations are not maintained Accept any other valid response	1 1 1 1 1			2
	(b)	Discuss the advantages that computers have for employees				
		Indicative content • Increased efficiency of repetitive tasks • Remote work opportunities, providing flexibility of working hours. • Saving fuel cost and time of travel when working from home • Skill enhancement allows for employees to increase skills through online learning opportunities within the workplace. • Greater collaboration and communication meaning that employees can easily work together regardless of geographical location. • Greater job opportunities for those in computer specific skilled professions, such as software engineers, IT, cyber security, and other technical fields. • Computer tools and software empower employees to unleash their creativity, aiding in tasks such as design, content creation, and problem-solving. • AI can help with productivity and improve progress by supporting the development of a range of documents, coding etc. • In certain jobs computers and automation can be used in place of employees when working in hazardous environments.	8			8

Band	AO1 Max 8 Marks
3	**7-8 Marks** A very good discussion, which shows: • thorough knowledge and understanding of the impact of computers on employees, where the candidate has discussed at least three points • a confident grasp of how these impacts can be an advantage
2	**4-6 Marks** A good discussion, which shows: • generally secure knowledge and understanding of the impact of computers on employees where the candidate has discussed at least two points • a generally secure grasp of how these impacts can be an advantage
1	**1-3 Marks** A basic discussion, which shows: • some knowledge and understanding of the impact of computers on employees • some grasp of how these impacts can be an advantage
0	**0 Marks** • response not credit worthy or not attempted.

Q		Answer	AO1	AO2	AO3	Total
12		Describe the principal stages involved in the compilation process				
		Indicative Content: The compilation process is a series of stages that transforms source code written in a high-level programming language into executable machine code or an intermediate code that can be executed by a specific runtime environment. These stages collectively form the compilation process, converting human-readable source code into machine-executable code. Each stage plays a crucial role in ensuring the correctness, efficiency, and portability of the compiled program. The principal stages of the compilation process typically include: **Lexical Analysis** The first stage involves scanning the source code to break it into a sequence of tokens. These tokens are the smallest units of meaning, such as keywords, identifiers, literals, and symbols. The purpose is to create a stream of tokens that represent the structure of the source code. It is also usual to remove redundant parts of the source code, such as spaces and comments during the tokenisation phase. It is also likely that many keywords will also be replaced with more efficient tokens. **Syntax Analysis (Parsing)** The parser analyses the syntax of the source code based on a formal grammar. It verifies the arrangement of tokens to ensure they form valid statements according to the programming language's syntax rules. The purpose of this is to create a parse tree or abstract syntax tree (AST) that represents the hierarchical structure of the code. **Semantic Analysis** This stage checks the meaning of the statements and expressions in the source code. It ensures that the code adheres to the language's semantics, including type checking and scoping rules. The purpose of this is to catch semantic errors and gather information for subsequent optimisation and code generation stages. **Intermediary Code Generation** The compiler generates an intermediate representation of the source code. This can be a low-level intermediate code or an intermediate representation specific to a virtual machine.	12			12

Q		Answer	AO1	AO2	AO3	Total
		The purpose is to create a platform-independent representation that can be optimised before generating the target code. **Code Optimisation** The compiler analyses the intermediate code to improve its efficiency. Optimisation techniques include constant folding, dead code elimination, loop optimisation. The purpose is to enhance the performance of the generated code by minimising execution time, memory usage, or other relevant metrics. **Code Generation** This stage translates the optimised intermediate code into machine code or another low-level representation specific to the target platform. In order to produce executable code that can be run on the target hardware or a virtual machine.				

Band	AO1
4	**Award 10 - 12 marks** An excellent description, which shows: • thorough knowledge and understanding of the principal stages involved in the compilation process • clear knowledge is defined as numerous relevant detailed points from the indicative content. • addressed the question appropriately with minimal repetition • used detailed technical terminology
3	**Award 6 – 9 marks** A good description, which shows: • secure knowledge and understanding of the principal stages involved in the compilation process • secure knowledge is defined as several relevant points of the indicative content • used some technical terminology
2	**Award 3 – 5 marks** A limited description, which shows: • satisfactory knowledge and understanding of the principal stages involved in the compilation process • satisfactory knowledge is defined as limited relevant points of the indicative content • used limited technical terminology
1	**Award 1 - 2 marks** A basic description, which shows: • little knowledge and understanding of the principal stages involved in the compilation process • attempted to address the question but has demonstrated superficial knowledge of the topics specified in the indicative content
	Award 0 marks • response not creditworthy or not attempted.