

2.1.3

THINKING PROCEDURALLY

TOPIC WISE EXAM QUESTIONS

ANSWERS

A-LEVEL

OCR

8	(b)	<p>1 mark each to max 2 e.g.</p> <ul style="list-style-type: none"> • Connect to database • Access usernames in file/database • Check username against file/database • Hash password • Access password/hash in file/database • Check password entered/hashed vs stored • Output result 	2	Allow other suitable subprocedures that link to the scenario.
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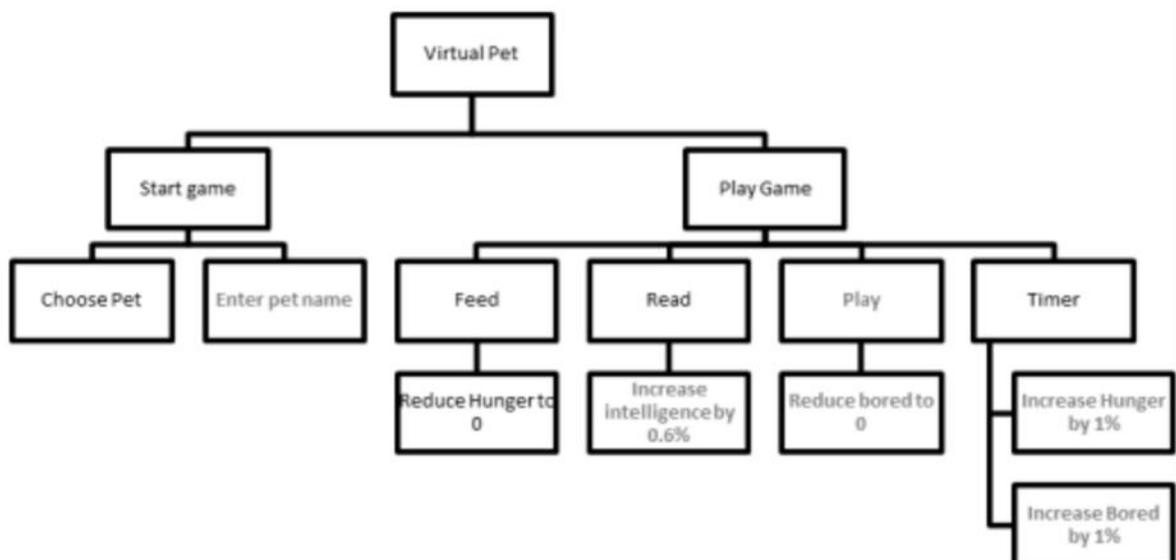
1	(a)	<p>1 mark per box up to a maximum of 4 marks</p> <pre> graph TD A[Function rooms] --> B[Check availability] A --> C[Choose room] A --> D[Make Payment] A --> E[Check payment] B --> F[Enter date] B --> G[Display available rooms] E --> H[Check payment details] E --> I[Send confirmation email] </pre>
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2	(a)	<p>ii 1 mark for stating a suitable procedure name and 1 mark for a suitable purpose (4 marks in total), e.g.:</p> <ul style="list-style-type: none"> • Procedure Name: registerAccount • Purpose: To load up the registration page when the user wants to create a new account • Procedure Name: validateDetails • Purpose: To check the suitability of a new username and password entered • Procedure Name: checkLogin • Purpose: Checks a username and password matches those stored when a customer logs in • Procedure Name: checkStock • Purpose: Checks an item is in stock before the item can be added to a shopping basket 	4 A02.1 (4)	<p>The procedure name must be relevant to the context in the question.</p> <p>Both a procedure name and purpose must be stated for 2 marks.</p> <p>Allow other suitable examples that are relevant to the context.</p>
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<p>8ai</p>	<p>1 mark per box up to a maximum of 3 marks.</p> <ul style="list-style-type: none"> • Select puzzle and display blank grid (below new game) • Select box and change colour of boxes (below play game) • Compare to answer and display correct/incorrect (below check answer) <p>e.g.</p> <pre> graph TD Nonogram --> NewGame Nonogram --> PlayGame Nonogram --> CheckAnswer NewGame --> SelectPuzzle NewGame --> DisplayBlankGrid PlayGame --> SelectBox PlayGame --> ChangeColourBoxes CheckAnswer --> CompareToAnswer CheckAnswer --> DisplayCorrectIncorrect </pre>	<p>Boxes might be in 1 box, or split down into many.</p> <p>Positioning only needs to be below those identified.</p> <p>Ignore any additional/irrelevant boxes.</p> <p>3 AO2.2 (3)</p>
<p>8aii</p>	<p>1 mark per bullet up to a maximum of 2 marks, e.g:</p> <p>e.g.</p> <ul style="list-style-type: none"> • Splits the problem into smaller chunks • Smaller problems are more manageable • Smaller problems are easier to solve • To see where code can be reused in the solution • To split tasks between different programmers 	<p>2 AO1.1 (1) AO1.2 (1)</p>

<p>4bi</p>	<p>1 mark per bullet, max 2 per sub-procedure</p> <p>e.g.</p> <ul style="list-style-type: none"> • Select character (name, gender) • Gives the user options for choosing a character • Choose level • Give the user the choice of level (easy, normal, challenging) and take the user input • Touch enemy • Called to determine if the character touches an enemy • Lose life • Remove a life, if <0 then game over • End level • Move onto next level <p>One mark for identifying sensible subroutine, 1 mark for description</p>	<p>6</p> <p>AO2.1 (2) AO2.2 (2) AO3.2 (2)</p>	<p>Do not award any user <i>input</i> related procedures e.g. Left/Right input (but character movement <i>output</i> on screen left/right would be valid)</p> <p>Allow other reasonable responses from the scenario e.g. generate enemy()</p>
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3	a	i	Save string in file	1 AO2.2 (1)	
3	a	ii	<p>1 mark per bullet, max 2 per advantage to max 4 e.g.</p> <ul style="list-style-type: none"> • Procedures can be re-used • No need to reprogram/saves time • Program can be split between programmers • Can specialise in their area • Speed up completion time • As multiple procedures worked on concurrently • Easy to test/debug • As each module can be tested on its own then combined. 	4 AO1.2 (4)	Allow any appropriate advantages



2	b		<p>1 mark for sub-procedure names (to max 3) 1 for description (to max 3)</p> <p>e.g.</p> <ul style="list-style-type: none"> • startGame [1] • loads the game, displaying the load-up screen[1] • displayMap [1] • outputs the map onto the screen[1] • selectArea [1] • the user clicks on the area of the map and this is displayed on screen[1] • loadPuzzle [1] • loads the puzzle for the chosen area and displays it on screen [1] 	6 AO2.2 (6)	<p>Allow any reasonable sub-procedure and description for the context</p> <p>Do not award marks for character movement.</p>
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**If you found this
useful, drop a follow
to help me out!**

THANK YOU!

GCST