ENGLAND GCSE COMPUTER SCIENCE OCR · UNIT 4 · 25 QUESTIONS

Programming, Defensive Design and Testing — Practice Test

This practice test was made by AI and there may be mistakes. If a question or answer looks wrong, use the Flag a mistake button to let Brett know so he can fix it.

1 **A tablet app is written in a high level language. What does this mean?**

- **A** The code is binary that the CPU runs directly, in some situations
- **B** The code uses only binary numbers
- **C** The code is close to human language and easy to read
- **D** The code can never be changed

Understand It with Pulse | Flag a mistake

2 **A robot program stores the distances to 5 objects in one variable. What should it use?**

- A A Boolean variable
- B A single integer variable
- C An array
- D A constant that never changes

Understand It with Pulse | Flag a mistake

3 **A games console program checks if a player has more than 100 points. What does it use to test this?**

- A A comparison operator
- B A function that returns a string only
- C An array that stores 100 values
- D A loop that repeats 100 times

Understand It with Pulse | Flag a mistake

4 **A smartphone app repeats a task until the user taps stop. Which loop should it use?**

- A WHILE
- B DO UNTIL used for one repeat only
- C IF used for selection only
- D FOR

Understand It with Pulse | Flag a mistake

5 **A laptop runs a program that asks for a password. The program checks the password is at least 8 characters long. What is this check called?**

- A A type check
- B A range check
- C A presence check used for blank data only
- D A length check

Understand It with Pulse | Flag a mistake

6 **A keyboard is used to type a program. The programmer writes a comment to explain a tricky part. Why is the comment useful?**

- A It stores the code on the hard disk only, in some situations
- B It makes the code run faster every time
- C It explains what the code does so it is easier to maintain
- D It stops errors happening in the code

Understand It with Pulse | Flag a mistake

7 **An array holds 20 items and the first item has index 0. What is the index of the last item?**

- A 19
- B 190
- C 20
- D 18

Understand It with Pulse | Flag a mistake

8

What does a length check do?

A It checks that data is the right type

B It checks a number is within an allowed range

C It checks that text is the right length

D It checks that data has been entered at all

Understand It with Pulse | Flag a mistake

9

What is erroneous test data?

A Data that a program should accept and work with

B Data that a program should reject

C Data that is never entered by a user

D Data at the very edge of what is allowed

Understand It with Pulse | Flag a mistake

10 **When should a DO UNTIL loop be used?**

- **A** When the steps must run at least once and the condition is checked at the end
- **B** When the number of repeats is known in advance
- **C** When the condition must be checked before the first repeat, in some situations
- **D** When a value must be stored in an array

Understand It with Pulse | Flag a mistake

11 **What does 13 DIV 3 give?**

- **A** 40
- **B** 5
- **C** 1
- **D** 4

Understand It with Pulse | Flag a mistake

12 **What does a compiler do?**

- **A** It stores a program on the hard disk only
- **B** It translates a program one line at a time as it runs, in some situations
- **C** It finds errors in a program without running it
- **D** It translates a whole program into machine code before it runs

Understand It with Pulse | Flag a mistake

13 **Which keywords are used for selection in OCR pseudocode?**

- **A** DO UNTIL used for loops only
- **B** FOR TO NEXT
- **C** IF THEN ELSE ENDIF
- **D** WHILE ENDWHILE

Understand It with Pulse | Flag a mistake

14 **Which logic gate gives True only when both inputs are True?**

- A A gate that gives True when either input is True
- B OR
- C AND
- D NOT

Understand It with Pulse | Flag a mistake

15 **What does 25 MOD 4 give?**

- A 10
- B 2
- C 6
- D 1

Understand It with Pulse | Flag a mistake

16 **What does string concatenation do?**

A It joins two strings together

B It splits a string into single letters

C It changes a string into a number

D It counts the characters in a string

Understand It with Pulse | Flag a mistake

17 **A FOR loop runs from i = 1 TO 20. How many times does it run its steps?**

A 200

B 21

C 19

D 20

Understand It with Pulse | Flag a mistake

18 **Why must a file be opened before it is used?**

- A So the file can be deleted from the computer, in some situations
- B So the program can read from it or write to it
- C So the file can be stored on the hard disk
- D So the file can be printed on a printer

Understand It with Pulse | Flag a mistake

19 **What does the Boolean operator AND do?**

- A It changes True to False and False to True
- B It gives True when either value is True
- C It gives True only when both values are False
- D It gives True only when both values are True

Understand It with Pulse | Flag a mistake

20 **A program only accepts ages from 1 to 10. Which value would a range check reject?**

A 1

B 110

C 10

D 11

Understand It with Pulse | Flag a mistake

21 **What data type is the word hello?**

A Boolean used for true or false only

B Integer

C Real

D String

Understand It with Pulse | Flag a mistake

22 **What is the length of the string data?**

A 3

B 40

C 5

D 4

Understand It with Pulse | Flag a mistake

23 **Why are subprograms useful?**

A Code runs faster every time it is used

B Code can be reused instead of written out again

C Code never needs to be tested at all

D Code can only be used once in a program, in some situations

Understand It with Pulse | Flag a mistake

24 **An array holds 8 items and the first item has index 0. What is the index of the last item?**

- A 8
- B 7
- C 70
- D 6

Understand It with Pulse | Flag a mistake

25 **What is verification?**

- A Checking that data is sensible before it is used
- B Checking that a program runs without errors
- C Checking that data was entered correctly
- D Checking that files are stored safely on a disk

Understand It with Pulse | Flag a mistake

ANSWER KEY

1.	C	**10.**	A	**19.**	D
2.	C	**11.**	D	**20.**	D
3.	A	**12.**	D	**21.**	D
4.	A	**13.**	C	**22.**	D
5.	D	**14.**	C	**23.**	B
6.	C	**15.**	D	**24.**	B
7.	A	**16.**	A	**25.**	C
8.	C	**17.**	D		
9.	B	**18.**	B		

© 2026 Brett Robbins. All Rights Reserved.