ENGLAND GCSE COMPUTER SCIENCE OCR · FINAL EXAM · 50 QUESTIONS

Final Exam — 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 **What does the CU do?**

- A It stores data permanently
- B It carries out calculations on numbers
- C It controls the flow of data and carries out instructions
- D It sends output to the monitor and the printer, in some situations

Understand It with Pulse | Flag a mistake

2 **A router sends data from a home computer to a website. What does the router use to decide where to send the data?**

- A The colour of the computer case
- B The IP address of the destination
- C The size of the monitor used by the user
- D The number of files stored on the computer

Understand It with Pulse | Flag a mistake

3 **A robot sorts a list of distances from smallest to largest with an insertion sort. What does it do with each new distance?**

- A It checks the middle distance and halves the list, in some situations
- B It inserts it into the correct place among those already sorted
- C It splits the list in half and merges the halves
- D It swaps it with the largest distance in the list

Understand It with Pulse | Flag a mistake

4 **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

5 **What does colour depth mean?**

- A The number of colours a camera can see
- B The number of pixels in a photo
- C The number of bits used for each pixel
- D The size of a photo file in bytes

Understand It with Pulse | Flag a mistake

6 **A tablet is far from the wireless access point and the connection is slow. Why?**

- A The size of the screen used by the user
- B The number of files stored on the tablet, in some situations
- C The colour of the tablet case
- D Distance from the access point weakens the signal

Understand It with Pulse | Flag a mistake

7 **A laptop sorts a short list of scores with a bubble sort. What does the laptop compare first?**

- A Two scores chosen at random from the list
- B The first score and the last score
- C The middle score and the scores around it
- D The first two scores in the list

Understand It with Pulse | Flag a mistake

8 **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

9

What is lossless compression?

A Compression that lets the original data be rebuilt exactly

B Compression that makes a file smaller by losing quality, in some situations

C Compression that removes data that is not needed

D Compression that only works on photos and music

Understand It with Pulse | Flag a mistake

10

What is a drawback of copper cable?

A It sends data too fast for computers to use, in some situations

B It is slower than fibre and signals weaken over distance

C It is the most expensive cable to install

D It cannot be used inside a building

Understand It with Pulse | Flag a mistake

11 Why is a trace useful?

- A It shows what a program does and helps find errors
- B It makes a program run faster than before, in some situations
- C It stores the program on the computer
- D It prints the program out on paper

Understand It with Pulse | Flag a mistake

12 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

13 **A text file has 8000 characters and each character uses 8 bits. What is the file size in bytes?**

A 16,000

B 80,000

C 8,000

D 4,000

Understand It with Pulse | Flag a mistake

14 **Why does a network slow down at busy times?**

A The cables get longer at busy times

B The server stores fewer files than before

C The computers use less electricity

D More users share the same bandwidth

Understand It with Pulse | Flag a mistake

15 How can automation affect jobs?

- A Machines can take over jobs that people used to do
- B Machines never change the jobs people do
- C Machines can only do jobs that need no skill
- D Machines always create more jobs than they remove, in some situations

Understand It with Pulse | Flag a mistake

16 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

17 **What is the denary value of the hexadecimal number 2A?**

A 26

B 420

C 42

D 58

Understand It with Pulse | Flag a mistake

18 **Which of these is utility software?**

A Antivirus software

B A word processor

C A game played on a computer

D A web browser used to visit web pages

Understand It with Pulse | Flag a mistake

19 **When is a bubble sort a good choice?**

A When the list is not in any order and is long

B When the list needs to be searched not sorted

C When the list is very long

D When the list is short

Understand It with Pulse | Flag a mistake

20 **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

21 **A tablet is an embedded system in a car dashboard. What does that mean?**

- **A** It has no CPU and no memory at all
- **B** It is only used for playing games
- **C** It can run any program a user installs
- **D** It is built in to do one limited job

Understand It with Pulse | Flag a mistake

22 **A file is downloaded at a rate of 10 megabits per second for 40 seconds. What is the size of the file in MB?**

- **A** 25 MB
- **B** 100 MB
- **C** 50 MB
- **D** 500 MB

Understand It with Pulse | Flag a mistake

23 **A bubble sort sorts a list of 10 items. How many passes does it need at most?**

- A 90
- B 9
- C 10
- D 8

Understand It with Pulse | Flag a mistake

24 **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

25 **What is 00010000 plus 00010000 in binary?**

A 00011000

B 00101000

C 01000000

D 00100000

Understand It with Pulse | Flag a mistake

26 **What is IMAP used for?**

A To send emails to another computer

B To read emails stored on a server

C To transfer files between computers

D To encrypt emails sent over a network

Understand It with Pulse | Flag a mistake

27 **Which flowchart symbol shows data going into or out of an algorithm?**

A The input output symbol

B The terminator symbol

C The decision symbol

D The process symbol used for calculations

Understand It with Pulse | Flag a mistake

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

A 3

B 40

C 5

D 4

Understand It with Pulse | Flag a mistake

29 **What is the denary value of the binary number 1010?**

A 100

B 10

C 11

D 9

Understand It with Pulse | Flag a mistake

30 **A file is 25 MB in size. How many megabits is this?**

A 400

B 200

C 100

D 2,000

Understand It with Pulse | Flag a mistake

31 **A tablet sorts a list of 5 lap times with a bubble sort. How many passes does it need at most?**

- A 3
- B 4
- C 40
- D 5

Understand It with Pulse | Flag a mistake

32 **A games console runs a program that stores high scores in a file. Why must the file be closed after it is used?**

- A So the file takes up less storage space, which can happen in some cases
- B So the data is saved and the file is free for other programs
- C So the file is deleted from the console
- D So the file can never be opened again

Understand It with Pulse | Flag a mistake

33 **What is a stored program?**

A A program that can never be changed or updated

B A program held in memory that the CPU can run

C A program that runs without using any memory at all

D A program saved on paper for the user to read

Understand It with Pulse | Flag a mistake

34 **What is system software?**

A Software that runs and manages the computer system

B Software that a user runs to do a task such as writing

C Software that can only run on one computer

D Software that is free for anyone to change

Understand It with Pulse | Flag a mistake

35

What is e-waste?

A Data deleted from a computer by mistake

B Files that are too large to store

C Emails that are sent to the wrong person

D Discarded electronic devices and parts

Understand It with Pulse | Flag a mistake

36

What does a presence check do?

A It checks that text is in the right format

B It checks that data is the right type

C It checks that data has been entered and is not left blank

D It checks a number is within an allowed range, in some situations

Understand It with Pulse | Flag a mistake

37 **What is the binary value of denary 240? Give 8 bits.**

- A 11101000
- B 01100000
- C 11110000
- D 11111000

Understand It with Pulse | Flag a mistake

38 **What is a brute force attack?**

- A Trying many passwords in turn until one works
- B Copying data from a computer without being seen
- C Sending too many requests so a server stops working
- D Tricking a user into opening a fake email

Understand It with Pulse | Flag a mistake

39 **A smartphone app breaks a journey into smaller steps to plan a route. What is this called?**

- A Pattern recognition
- B Compression of the route data
- C Abstraction
- D Decomposition

Understand It with Pulse | Flag a mistake

40 **A robot program repeats a task until its battery is low. Which loop checks its condition after each repeat?**

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

Understand It with Pulse | Flag a mistake

41 **What is the binary value of denary 160? Give 8 bits.**

- A 10101000
- B 10100000
- C 10011000
- D 01000000

Understand It with Pulse | Flag a mistake

42 **Why is a wired connection often faster than a wireless connection?**

- A It needs no cable to send data at all
- B It can only connect two computers at once
- C It uses radio waves to send data
- D It is less affected by interference

Understand It with Pulse | Flag a mistake

43 **A bubble sort sorts a list of 6 items. How many passes does it need at most?**

A 5

B 4

C 6

D 50

Understand It with Pulse | Flag a mistake

44 **What is the output of False OR False?**

A Not a Boolean value at all

B False

C True

D Both true and false at once

Understand It with Pulse | Flag a mistake

45 **What is the hexadecimal value of denary 122? Give 2 digits.**

- **A** 6A
- **B** 7A
- **C** 8A
- **D** C4

Understand It with Pulse | Flag a mistake

46 **What does a switch do?**

- **A** It connects computers on a LAN and sends data to the right computer
- **B** It connects a network to the internet
- **C** It stores files for all the users
- **D** It gives each computer a new IP address, which can happen in some cases

Understand It with Pulse | Flag a mistake

47 **A program sets count to 0 then adds 1 three times. What is count at the end?**

- A 0
- B 1
- C 3
- D 30

Understand It with Pulse | Flag a mistake

48 **What is validation?**

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

Understand It with Pulse | Flag a mistake

49 **The binary number 01101000 is shifted 1 place to the right. What is the denary value of the result?**

- A 208
- B 520
- C 52
- D 26

Understand It with Pulse | Flag a mistake

50 **A file is downloaded at a rate of 16 megabits per second for 40 seconds. What is the size of the file in MB?**

- A 80 MB
- B 800 MB
- C 40 MB
- D 160 MB

Understand It with Pulse | Flag a mistake

ANSWER KEY

1. C
2. B
3. B
4. C
5. C
6. D
7. D
8. C
9. A
10. B
11. A
12. B
13. C
14. D
15. A
16. D
17. C
18. A
19. D
20. A
21. D
22. C
23. B
24. D
25. D
26. B
27. A
28. D
29. B
30. B
31. B
32. B
33. B
34. A
35. D
36. C
37. C
38. A
39. D
40. C
41. B
42. D
43. A
44. B
45. B
46. A
47. C
48. A
49. C
50. A

© 2026 Brett Robbins. All Rights Reserved.