

Class 3 | Cyber Olympiad

Instructions: Each question has one correct answer. Choose the best option (A/B/C/D). Answer key is provided at the end. This paper is for practice only — not an official exam paper. Recommended time: **45 minutes**.

Q1. What does 'CPU' stand for?

A. Central Power Unit

B. Computer Processing Unit

C. Central Processing Unit

D. Core Processor Utility

Q2. Convert the decimal number 13 to binary:

A. 1010

B. 1101

C. 1011

D. 1100

Q3. In Python, what does 'print("Hello")' do?

A. saves the text Hello to a file

B. displays Hello on the screen

C. stores Hello in a variable

D. creates a new program

Q4. What is the output of: `x = 5; y = 3; print(x + y)`?

A. 53

B. xy

C. 8

D. 2

Q5. In Python, which symbol is used for comments (text the computer ignores)?

A. //

B. /*

C. #

D. --

Q6. Which data type stores whole numbers in Python?

A. float

B. string

C. bool

D. int

Q7. What does 'GUI' stand for in computing?

A. General User Interface

B. Graphical User Interface

C. Generic Utility Interface

D. Global User Integration

Q8. In a spreadsheet formula, =SUM(A1:A5) calculates:

A. the average of cells A1 to A5

B. the total of cells A1 to A5

C. the largest value in A1 to A5

D. the count of cells A1 to A5

Q9. What is the purpose of the 'Tab' key on a keyboard?

A. delete text

B. move cursor to the next tab stop or indent text

C. enter a new line

D. select all text

Q10. What does 'ISP' stand for?

A. Internet Service Provider

B. Internal System Protocol

C. Integrated Software Platform

D. Internet Security Program

Q11. In Python, what is the correct way to create a variable storing the number 7?

A. variable = 7

B. x == 7

C. x = 7

D. let x = 7

Q12. In a database, a 'primary key' is:

A. the most important column in a table

B. a unique identifier for each record

C. the password for the database

D. a type of index file

Q13. Which of the following is a high-level programming language?

A. machine code

B. binary code

C. assembly language

D. Python

Q14. What does 'bandwidth' refer to in networking?

A. the physical width of a cable

B. the number of computers in a network

C. the amount of data that can be transmitted per second

D. the distance between two routers

Q15. In HTML, the tag

is used for:

A. inserting a hyperlink

B. the largest heading

C. creating a list

D. inserting an image

Q16. In Python, what does 'len("hello")' return?

A. hello

B. 4

C. 5

D. 6

Q17. What is a 'local area network' (LAN)?

A. a network connecting computers across countries

B. a network connecting computers in a small area like a school or office

C. a wireless Internet connection

D. a connection to a single computer

Q18. In a spreadsheet, what does the formula =AVERAGE(B1:B4) calculate?

A. the sum of B1 to B4

B. the number of items in B1 to B4

C. the arithmetic mean of cells B1 to B4

D. the maximum of B1 to B4

Q19. What does the 'F5' key do in most web browsers?

A. saves the page

B. opens a new tab

C. refreshes (reloads) the page

D. closes the browser

Q20. In Python, which of these correctly creates a list?

A. mylist = (1, 2, 3)

B. mylist = {1, 2, 3}

C. mylist = [1, 2, 3]

D. mylist = <1, 2, 3>

Q21. What is the purpose of a 'compiler'?

A. it scans documents

B. it translates high-level code into machine-readable code

C. it connects computers to the Internet

D. it runs antivirus scans

Q22. In HTML, the [tag creates:](#)

A. [an image](#)

B. [a heading](#)

C. [a paragraph](#)

D. [a hyperlink](#)

Q23.

[Which of the following is a text editor used to write code?](#)

A. [Microsoft PowerPoint](#)

B. [Adobe Photoshop](#)

C. [Notepad or VS Code](#)

D. [Windows Media Player](#)

Q24.

In Python, 'for i in range(5):' will loop:

[A. 5 times \(i = 0, 1, 2, 3, 4\).](#)

[B. 4 times \(i = 1, 2, 3, 4\).](#)

[C. 6 times \(i = 0, 1, 2, 3, 4, 5\).](#)

[D. infinitely.](#)

Q25.

The hexadecimal colour #FF0000 represents:

[A. blue](#)

[B. green](#)

[C. red](#)

[D. white](#)

Q26.

What is 'malware'?

[A. a type of programming language](#)

[B. any software designed to damage or disrupt a computer system](#)

[C. a computer hardware component](#)

[D. a tool to speed up networks](#)

Q27.

In Python, what does the 'while' loop do?

[A. loops a fixed number of times](#)

[B. stops the program](#)

[C. continues looping as long as a condition is True](#)

[D. creates a function](#)

Q28.

What does '1 MB' (megabyte) equal?

[A. 1000 KB](#)

[B. 1024 KB](#)

[C. 1000 bytes](#)

[D. 1024 bytes](#)

Q29.

In a database, 'SQL' is used for:

[A. sending emails](#)

[B. creating graphics](#)

[C. querying and manipulating data](#)

[D. connecting to Wi-Fi](#)

Q30.

What is 'open source' software?

[A. software that costs a lot to buy.](#)

[B. software whose source code is freely available for anyone to use and modify.](#)

[C. software that only works on one computer](#)

[D. software made only by large companies](#)

Q31.

What is the decimal value of the binary number 11111111?

[A. 128](#)

[B. 127](#)

[C. 255](#)

[D. 256](#)

Q32.

In Python, 'if 5 > 3:' is an example of:

[A. a loop](#)

[B. a function definition](#)

[C. a conditional statement](#)

[D. a variable assignment](#)

Q33.

What is the purpose of CSS in web development?

[A. it defines the structure of a web page](#)

[B. it handles server-side logic](#)

[C. it makes web pages interactive](#)

[D. it controls the visual styling and layout of web pages](#)

Q34.

Which protocol is used to transfer files across the Internet?

[A. HTTP](#)

[B. FTP \(File Transfer Protocol\)](#)

[C. DNS](#)

[D. SMTP](#)

Q35.

A 'flowchart' in programming is used to:

[A. display colours used in a program](#)

[B. show the speed of a computer](#)

[C. visually represent the logic or steps of an algorithm](#)

[D. list all variables in a program](#)

Q36.

What is the function of 'DNS' (Domain Name System)?

[A. encrypt internet traffic](#)

[B. assign IP addresses to routers](#)

[C. translate domain names \(like www.google.com\) into IP addresses](#)

[D. block spam emails](#)

Q37.

In Python, what does the function 'input()' do?

[A. prints output to screen](#)

[B. reads data entered by the user](#)

[C. creates a new variable](#)

[D. ends the program](#)

Q38.

Which of these correctly describes 'abstraction' in computer science?

[A. writing code in many languages at once](#)

[B. hiding complex details and showing only what is necessary](#)

[C. copying code from one program to another](#)

[D. using loops to simplify repetition](#)

Q39.

What does 'RAM' do that is different from a hard drive?

[A. RAM is permanent storage; hard drive is temporary.](#)

[B. RAM stores data temporarily while programs run; hard drive stores data permanently.](#)

[C. RAM is slower than a hard drive](#)

[D. RAM is only used for video files](#)

Q40.

In Python, to define a function, you use:

[A. function myFunc\(\);](#)

[B. def myFunc\(\);](#)

[C. void myFunc\(\);](#)

[D. create myFunc\(\);](#)

Answer Key

[Q1: C](#) [Q2: B](#) [Q3: B](#) [Q4: C](#) [Q5: C](#) [Q6: D](#) [Q7: B](#) [Q8: B](#) [Q9: B](#) [Q10: A](#)
[Q11: C](#) [Q12: B](#) [Q13: D](#) [Q14: C](#) [Q15: B](#) [Q16: C](#) [Q17: B](#) [Q18: C](#) [Q19: C](#)
[Q20: C](#) [Q21: B](#) [Q22: D](#) [Q23: C](#) [Q24: A](#) [Q25: C](#) [Q26: B](#) [Q27: C](#) [Q28: B](#)
[Q29: C](#) [Q30: B](#) [Q31: C](#) [Q32: C](#) [Q33: D](#) [Q34: B](#) [Q35: C](#) [Q36: C](#) [Q37: B](#)
[Q38: B](#) [Q39: B](#) [Q40: B](#)