

# Class 4 · Computer Science Olympiad

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|-----------------------|-------------------|--------------------|--------------------------|
| Total questions<br>35 | Total marks<br>40 | Time<br>60 minutes | Negative marking<br>None |
|-----------------------|-------------------|--------------------|--------------------------|

Each question has four options, of which only one is correct. Mark your answer on the answer sheet. The Achievers Section carries higher marks per question. The answer key with full solutions is at the end of this paper.

This is original practice material written to the Level 1 pattern. It is not a past paper and is not affiliated with SOF or any official olympiad body.

## Logical Reasoning

5 questions · 1 mark each · 5 marks

Q1. Count forward in 2s: 10, 12, 14, 16, \_\_\_\_

- (A) 19                      (B) 18                      (C) 17                      (D) 20

Q2. Which letter comes next? C, E, H, L, \_\_\_\_

- (A) R                      (B) P                      (C) O                      (D) Q

Q3. In the first row the numbers are 2, 4 and 9. In the second row they are 3, 6 and 12. In the third row they are 2, 3 and \_\_\_\_ . The same rule applies to every row.

- (A) 7                      (B) 9                      (C) 10                      (D) 8

Q4. Which word would come FIRST in a dictionary?

- (A) mother                      (B) marble                      (C) maple                      (D) matter

Q5. In a certain code TIN is written as XMR. How is SUN written in that code?

- (A) OQJ                      (B) XZS                      (C) RYW                      (D) WYR

## Computer Science

20 questions · 1 mark each · 20 marks

Q6. What must we do when we finish using a computer?

- (A) Throw it away                      (B) Pull all the wires  
(C) Leave it in the rain                      (D) Switch it off properly

Q7. Which key is used to make a space between two words?

- (A) Enter                      (B) Delete                      (C) Spacebar                      (D) Shift

Q8. Which of these files is most likely a picture?

- (A) photo.jpg                      (B) notes.txt                      (C) song.mp3                      (D) movie.mp4

Q9. Which of these is a part you can touch — the hardware?

- (A) A website                      (B) The keyboard  
(C) A game program                      (D) A song file

Q10. Which key has the biggest size on a keyboard?

- (A) The Z key                      (B) The 1 key                      (C) The A key                      (D) The spacebar

Q11. Which of these stores data permanently?

- (A) Clipboard                      (B) RAM                      (C) Hard disk                      (D) Cache

- Q12. Which of these is an example of hardware?
- (A) An operating system (B) A printer  
(C) A web page (D) A song file
- Q13. How many main buttons does a simple mouse usually have?
- (A) One (B) Five (C) Ten (D) Two
- Q14. Where do we usually keep a desktop computer?
- (A) Inside a fridge (B) Under the rain  
(C) In a bucket of water (D) On a table
- Q15. Which program is best for adding up a column of numbers automatically?
- (A) A music player (B) A spreadsheet  
(C) A word processor (D) A paint program
- Q16. Which shortcut is normally used to save your work?
- (A) Ctrl + N (B) Ctrl + S (C) Ctrl + O (D) Ctrl + P
- Q17. Which key do we press to start a new line while typing?
- (A) Esc (B) Tab (C) Enter (D) Shift
- Q18. A calculator helps us to:
- (A) Wash dishes (B) Sweep the floor  
(C) Cook food (D) Do sums quickly
- Q19. What is the brain of the computer called?
- (A) Keyboard (B) Monitor (C) CPU (D) Printer
- Q20. Which of these is a storage device?
- (A) Hard disk (B) Monitor (C) Mouse (D) Speaker
- Q21. Which part of the computer has letters and numbers on it?
- (A) Speaker (B) Monitor (C) CPU (D) Keyboard
- Q22. On which part of the computer do we see pictures and words?
- (A) The wires (B) The table (C) The screen (D) The keyboard
- Q23. What is a computer virus?
- (A) A germ that makes the user ill (B) A type of printer  
(C) A harmful program that can damage files (D) A broken wire inside the computer
- Q24. Which of these is used to switch a computer on?
- (A) The power button (B) The mouse wheel  
(C) The spacebar (D) The screen
- Q25. Which of these is used to draw pictures on a computer?
- (A) A password (B) A paint program  
(C) A calculator (D) A printer driver

Q26. Which device stores photos taken on a phone?

- (A) The phone's memory (B) The phone's screen  
(C) The phone's charger (D) The phone's speaker

Q27. Which machine keeps our food cold?

- (A) A refrigerator (B) An iron  
(C) A toaster (D) A heater

Q28. Which of these is an example of a robot being useful in a factory?

- (A) Sleeping at night (B) Assembling parts on a production line  
(C) Dreaming about work (D) Eating lunch with workers

Q29. Which of these lets you talk to someone far away using the internet?

- (A) A keyboard (B) A printer (C) A scanner (D) A video call

Q30. Who should you ask before using the internet at home?

- (A) A stranger (B) A pet  
(C) Nobody (D) A parent or elder

**Achievers Section**

5 questions · 2 marks each · 10 marks

Q31. Find the next number: 4, 6, 10, 16, 24, \_\_\_\_

- (A) 32 (B) 35 (C) 34 (D) 36

Q32. There are 5 boxes with 8 samosas in each box. If 34 samosas are eaten, how many are left?

- (A) 40 (B) 6 (C) 9 (D) 3

Q33.  $223 + \underline{\quad} = 307$

- (A) 84 (B) 74 (C) 94 (D) 307

Q34. Using each of the digits 6, 9, 5, 0 exactly once, what is the smallest 4-digit number that can be formed?

- (A) 9650 (B) 5069 (C) 5078 (D) 0569

Q35. Choose the correct form: "The \_\_\_\_ playing in the park." (use the plural of 'baby')

- (A) baby are (B) babies are (C) babies is (D) babys are

**Answer Key**

|          |          |          |          |          |          |          |          |          |          |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 1        | 2        | 3        | 4        | 5        | 6        | 7        | 8        | 9        | 10       |
| <b>B</b> | <b>D</b> | <b>D</b> | <b>C</b> | <b>D</b> | <b>D</b> | <b>C</b> | <b>A</b> | <b>B</b> | <b>D</b> |
| 11       | 12       | 13       | 14       | 15       | 16       | 17       | 18       | 19       | 20       |
| <b>C</b> | <b>B</b> | <b>D</b> | <b>D</b> | <b>B</b> | <b>B</b> | <b>C</b> | <b>D</b> | <b>C</b> | <b>A</b> |
| 21       | 22       | 23       | 24       | 25       | 26       | 27       | 28       | 29       | 30       |
| <b>D</b> | <b>C</b> | <b>C</b> | <b>A</b> | <b>B</b> | <b>A</b> | <b>A</b> | <b>B</b> | <b>D</b> | <b>D</b> |

|          |          |          |          |          |  |  |  |  |  |
|----------|----------|----------|----------|----------|--|--|--|--|--|
| 31       | 32       | 33       | 34       | 35       |  |  |  |  |  |
| <b>C</b> | <b>B</b> | <b>A</b> | <b>B</b> | <b>B</b> |  |  |  |  |  |

## Solutions

- Q1. (B) Adding 2 to 16 gives 18.
- Q2. (D) The gaps grow by one each time (+2, +3, +4, +5), so after L the next letter is Q.
- Q3. (D) The rule is: add the two numbers, then add 3. Check: 2, 4 gives 9 and 3, 6 gives 12; so 2, 3 gives 8.
- Q4. (C) In alphabetical order the words run maple, marble, matter, mother, so maple comes first.
- Q5. (D) Each letter moves 4 place(s) forward in the alphabet, so SUN becomes WYR.
- Q6. (D) We should switch the computer off properly when we finish. The answer is Switch it off properly.
- Q7. (C) The spacebar is the long key at the bottom that inserts a space.
- Q8. (A) A .jpg file is an image; .txt is text, .mp3 is audio and .mp4 is video. The answer is photo.jpg.
- Q9. (B) Hardware is the physical part you can touch, like the keyboard.
- Q10. (D) The spacebar is the longest key on the keyboard.
- Q11. (C) A hard disk keeps data even when the computer is switched off; RAM does not.
- Q12. (B) Hardware is a physical part, like a printer.
- Q13. (D) A simple mouse has a left and a right button. The answer is Two.
- Q14. (D) A computer is kept on a table in a dry place.
- Q15. (B) A spreadsheet arranges data in rows and columns and can calculate totals.
- Q16. (B) Ctrl + S saves the current file.
- Q17. (C) The Enter key moves the cursor to a new line.
- Q18. (D) A calculator does sums quickly. The answer is Do sums quickly.
- Q19. (C) The Central Processing Unit (CPU) carries out the instructions, so it is called the brain of the computer.
- Q20. (A) A hard disk stores data.
- Q21. (D) The keyboard has keys with letters and numbers.
- Q22. (C) We see pictures and words on the screen.
- Q23. (C) A virus is a malicious program; it cannot make a person ill. The answer is A harmful program that can damage files.
- Q24. (A) The power button switches the computer on and off.
- Q25. (B) A paint program lets you draw and colour on the computer.
- Q26. (A) Photos are saved in the phone's memory or storage.
- Q27. (A) A refrigerator keeps food cold.
- Q28. (B) Robots do repetitive, precise tasks such as assembling parts. The answer is Assembling parts on a production line.
- Q29. (D) A video call carries picture and sound over the internet.
- Q30. (D) Always ask a parent or elder before going online.
- Q31. (C) The gaps grow 2, 4, 6, 8, so the next gap is 10 and  $24 + 10 = 34$ .
- Q32. (B)  $5 \times 8 = 40$  samosas in all, and  $40 - 34 = 6$  are left.
- Q33. (A) The missing number is  $307 - 223 = 84$ .
- Q34. (B) A 4-digit number cannot begin with 0, so the smallest possible first digit is 5. The remaining digits are then placed in increasing order: 5069.
- Q35. (B) The plural of 'baby' is 'babies', and a plural subject takes 'are', so the answer is "babies are".

