

Advance Information for Summer 2022

AS Level

Computer Science

H046

We have produced this advance information to help support teachers and students with revision for the Summer 2022 examinations.

Information

- This notice covers all examined components.
- There are no restrictions on who can use this notice.
- You are **not** permitted to take this notice into the exam.
- This document has **3** pages.

Advice

- It is advised that teaching and learning should still cover the entire subject content in the specification.
- Students and teachers can discuss this notice.
- Students can ask their teachers for advice.

If you have any queries about this notice, please call our Customer Support Centre on **01223 553998** or email <u>general.qualifications@ocr.org.uk</u>.

Guidance

- The following areas of content are suggested as key areas of focus for revision and final preparation.
- It is important to note that advance information is NOT being provided for every question. Students are advised that some questions will be on content not listed.
- Some questions may be answerable using more than one area of the specified content, including ones not listed.
- The aim should still be to cover all specification content in teaching and learning.
- The information is presented in specification order and not in question order.

H046/01

Specification reference	Name of topic	Sub part of topic directly assessed in some form
1.1.1	Structure and function of the processor	(d) Von Neumann, Harvard and contemporary processor architecture
1.2.1	Operating Systems	(f) BIOS
1.2.2	Applications generation	(b) Utilities (c) Open source vs closed source
1.3.2	Networks	(b) Internet structure:The TCP/IP stackProtocol layering
1.4.1	Data Types	(c) Use of sign and magnitude and two'scomplement to represent negative numbers in binary(e) Represent positive integers in hexadecimal
1.4.3	Boolean Algebra	 (a) Define problems using Boolean logic. See appendix 5d (b) Manipulate Boolean expressions, including the use of Karnaugh maps to simplify Boolean expressions

H046/02

Specification reference	Name of topic	Sub part of topic directly assessed in some form
2.1.2	Thinking ahead	(c) The need for reusable program components
2.1.3	Thinking procedurally	(a) Identify the components of a problem(d) Identify sub-procedures necessary to solve a problem
2.1.4	Thinking logically	(a) Identify the points in a solution where a decision has to be taken
2.2.1	Programming techniques	 (a) Programming constructs: sequence, iteration, branching (c) Modularity, functions and procedures, parameter passing by value and reference
2.2.2	Software Development	 (a) Understand the waterfall lifecycle, agile methodologies, extreme programming, the spiral model and rapid application development (d) Different test strategies, including black and white box testing and alpha and beta testing

END OF ADVANCE INFORMATION



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