



# Bishop Challoner

## Computer Science Department

### GCSE Computer Science – Timed Assessment Guidance

- 1 – Timed assessment overview
- 2 – Revision guidance
- 3 – Topic list
- 4 – How to revise GCSE computer science

## 1 – Time Assessment Overview

### Assessment Details

- Each assessment will be done in lesson time.
- The assessments will last 45 minutes.
- Each assessment is worth a total of 40 marks.

### Assessment Dates

#### **Set 1**

Paper 1 – Thursday 22<sup>nd</sup> April  
Paper 2 – Monday 26<sup>th</sup> April

#### **Set 2**

Paper 1 – Thursday 6<sup>th</sup> May  
Paper 2 – Monday 10<sup>th</sup> May

#### **Set 3**

Paper 1 – Thursday 20<sup>th</sup> May  
Paper 2 – Monday 24<sup>th</sup> May

## 2 – Revision Guidance

### Revision Materials

All students have access to a CGP computer science revision guide as well as a CGP practice question guide.

All students have been issued with past paper packs previously.

All students have been provided a topic list for these assessments this topic list can be found on the next page.

### 3 – Topic List

#### Year 11 Computer Science Timed Assessments Topic List

1. Topics not assessed
  - i. 1.8 Ethical, legal, cultural and environmental concerns – the contents of which is documented on page 8 of the course specification - <https://www.ocr.org.uk/images/225975-specification-accredited-gcse-computer-science-j276.pdf>

Combined Papers 1	Combined Papers 2	Combined Papers 3
<b>Thursday 22<sup>nd</sup> April P4 – C5</b>	<b>Thursday 6<sup>th</sup> May P4 – C5</b>	<b>Thursday 20<sup>th</sup> May P4 – C5</b>
<u>Topics on this paper (Paper 1)</u> <ul style="list-style-type: none"> <li>• Data Threats</li> <li>• CPU and system architecture</li> <li>• Operating System</li> <li>• Utility Software</li> <li>• RAM and ROM</li> <li>• Data Representation (converting between KB, MB, and GB)</li> </ul>	<u>Topics on this paper (Paper 1)</u> <ul style="list-style-type: none"> <li>• Networks – LAN and WAN</li> <li>• Topology</li> <li>• Protocols – Packets and DNS</li> <li>• Storage Devices</li> <li>• Backing up Data</li> </ul>	<u>Topics on this paper (Paper 1)</u> <ul style="list-style-type: none"> <li>• Factors affecting the performance of a CPU</li> <li>• RAM and ROM</li> <li>• Storage devices</li> <li>• Wired vs Wireless Networks</li> <li>• Network Hardware</li> <li>• Packet Switching</li> </ul>
<b>Monday 26<sup>th</sup> April P5 – C5</b>	<b>Monday 10<sup>th</sup> May P5 – C5</b>	<b>Monday 24<sup>th</sup> May P5 – C5</b>
<u>Topics on this paper (Paper 2)</u> <ul style="list-style-type: none"> <li>• Key term definitions</li> <li>• Programming skills</li> <li>• High level language vs assembler</li> <li>• Data representation - Character sets</li> <li>• Data representation – binary and hexadecimal conversion / shift</li> <li>• Logic Gates and Truth Tables</li> <li>• Searching Algorithms</li> <li>• Pseudocode Design</li> </ul>	<u>Topics on this paper (Paper 2)</u> <ul style="list-style-type: none"> <li>• Testing of software</li> <li>• Bitmap Images and Metadata</li> <li>• Algorithm interpretation</li> <li>• Algorithm Design (Pseudocode)</li> <li>• Functions vs Procedures</li> <li>• Benefits of sub-routines</li> <li>• Sorting algorithms</li> </ul>	<u>Topics on this paper (Paper 2)</u> <ul style="list-style-type: none"> <li>• Programming constructs</li> <li>• Data Types</li> <li>• SQL and Databases</li> <li>• Algorithm Interpretation and Design</li> <li>• Data representation – binary and hexadecimal conversion / shift</li> </ul>

## 4 - How to revise GCSE Computer Science

Practice questions from past papers are one of the best methods of revising topics from the course. This approach, accompanied by creating notes and reading the revision guide as a source for information, has proven successful for many of our previous students.

### **How to revise a particular topic**

*this is generic and by no means a one size fits all approach*

1. On a single sheet of A4, write down everything you currently know about the topic. Do this prior to reading the revision guide or seeking help from previous notes.
2. Now consult the revision guide for the topic and add to this sheet, anything you did not know that is necessary – once complete, highlight these points – these are the areas you need to learn.
3. Locate questions based around this topic in the past paper pack and attempt to answer them.
4. Confirm with the mark scheme as to your success in answering the question.

The end goal of this approach would be that you are comfortably able to produce a piece of A4 for each topic of the course and then apply this information to the past paper questions.

### **Obtaining feedback for answers**

The students who succeed in computer science are those who seek constant feedback from teachers, not just in the scope of a lesson. Any work you produce out of lesson such as past paper question answers or programming challenges, you should want to seek feedback for.

This can be achieved by:

1. Taking work to a teacher during school time.
2. Emailing a teacher your answers, questions etc.

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**As your teachers we want to give you feedback!**