OCR GCSE (J277)

Module R: Exam technique

Workbooklet · 3 parts · 62 marks

R2 and R6 are IGCSE (Cambridge) only and not on J277.

Contents

Part	Topic	Marks
R1	How OCR J277 Paper 1 and Paper 2 are structured	22
R3	Command words and what they are asking for	20
R4	Answering 8-mark extended response questions	20
	Total	**62**

MODULE R EXAM TECHNIQUE · R1

How OCR J277 Paper 1 and Paper 2 are structured

Original practice questions · 22 marks · ~25 minutes · OCR J277 specification sections 2a, 3a, 3b, 3i, 3j, 3n

Name _____ Date _____

Instructions. Answer all questions in the spaces provided. The marks for each part are shown in brackets [ ]. The total for this worksheet is **22 marks**. Facts are from the OCR J277 specification, version 3.1, as at November 2026.

1

Total: 3 marks

(a) Tick (✓) **one** box in each row to show whether each statement about the J277 exams is true or false. **[3]**

Statement	True	False
A calculator may be used in Paper 2 (J277/02)		
Every question on both papers must be answered		
Someone retaking the GCSE can choose to retake only the paper they scored lower on		

2

Total: 5 marks

(a) Complete the description of the two papers using words or numbers from the list. Not all of them are used. **[5]**

8	15	30	50	75	80
a high-level language		flowcharts		OCR Exam Reference Language	

Paper 1 (J277/01), Computer systems, is worth ..... marks. Most of its questions are short or medium answer, but it also has one .....-mark extended response question.

Paper 2 (J277/02) has two sections. Section A is worth ..... marks and Section B is worth ..... marks.

Any program code printed in the question papers is shown in ..... .

3 Total: 4 marks

(a) Tick (✓) **one** box in each row to show which paper each task would be assessed on. **[4]**

Task	Paper 1 (J277/01)	Paper 2 (J277/02)
Converting a binary number to hexadecimal		
Completing a logic diagram that uses AND, OR and NOT gates		
Describing the differences between a compiler and an interpreter		
Describing how a firewall helps to protect a network		

4 Total: 5 marks

A question in **Section B** of Paper 2 says: "Write a program that asks for the price of a ticket and outputs the price after a 10% discount."
Three different responses to this question are described below.

(a) Tick (✓) **one** box in each row to show whether each response **can** or **cannot** be awarded marks. **[3]**

Response	Can be awarded marks	Cannot be awarded marks

Response P: a correct program written in a high-level language, with one closing bracket missing
`price = float(input("Price: ")`
`print(price * 0.9)`		

Response Q: three numbered steps written in plain English		
Response R: a correct flowchart with an input box, a process box and an output box		

(b) Response Q could be awarded marks if the same task were set in **Section A** of Paper 2. **[2]**
Explain why.

5 **Total: 2 marks**

An adult taking the GCSE at an evening class scores 58 marks on Paper 1 and 54 marks on Paper 2. Their overall grade is worked out from the total of their marks on the two papers.

(a) Calculate their total mark as a percentage of the total marks available for the GCSE. **[2]**
Show your working.

Answer: ..... %

6 **Total: 3 marks**

(a) A revision website says: "Paper 2 is a programming exam, so the only way to revise for it is to practise writing code."
Explain why this advice is **not** correct. **[3]**

Total for this worksheet: 22 marks

MODULE R EXAM TECHNIQUE · R3

Command words and what they are asking for

Original practice questions · 20 marks · ~25 minutes · OCR J277 spec section 3d (command words), 1.1.1, 1.2.2, 1.2.3, 1.2.5, 1.3.1, 1.3.2, 2.1.3

Name _____ Date _____

Instructions. Answer all questions in the spaces provided. The marks for each part are shown in brackets [ ]. Before you write, find the command word in each question and ask yourself what kind of answer it wants. The total for this worksheet is **20 marks**.

1

Total: 4 marks

Here are five meanings of command words used in OCR exams.

A. Give a detailed account that includes reasons or causes.
B. Give a specific name, value or other brief answer, without explanation.
C. Give a brief account or summary.
D. Give a detailed account of a situation, event, pattern or process.
E. Make more efficient, improve, modify or edit.

Write the letter (**A** to **E**) of the meaning that matches each command word. Each letter may be used once or not at all. **[4]**

Command word	Letter
State	
Describe	
Explain	
Refine	

2 **Total: 4 marks**

You do **not** need to answer the four exam questions below. Read each one, find its command word, and decide what kind of answer it is asking for.

Tick (✓) **one** box in each row. **[4]**

Exam question	A short answer: a name, value or fact, with no explanation	A detailed account of what happens (reasons not needed)	An account that gives reasons (why)
Describe how a linear search looks for an item in a list.			
Identify the network topology in which every device connects to one central switch.			
Explain why a smartphone is likely to use solid state storage.			
State the purpose of the program counter (PC).			

3 **Total: 4 marks**

A furniture maker's website shows a photo of every item for sale. Parts (a) and (b) are on the same topic. Notice how the command word changes what you need to write.

(a) Describe what happens to an image file when lossy compression is applied to it. **[2]**

(b) Explain why the furniture maker might use lossy compression on the photos on the website. **[2]**

4 **Total: 3 marks**

An exam question says: **"Compare wired and wireless connections for the computers in an office."** This answer was written for it:

> *"Wireless connections let staff move their laptops around the office. They are also quick to set up because no cables need to be laid."*

(a) State why this answer does not do what the command word **Compare** asks for. **[1]**

(b) Write **two** further points that would improve the answer. Each point must refer to **both** wired and wireless connections. **[2]**

1

2

5 **Total: 3 marks**

An architecture firm backs up 2 TB of drawings every Friday. The office manager then takes the backup device home for the weekend, so it travels in a bag every week.

(a) Identify the most suitable type of secondary storage for this backup. **[1]**

(b) Justify your choice. **[2]**

6 **Total: 2 marks**

A voice recorder samples sound at 8,000 Hz with a bit depth of 16 bits.

Calculate the file size, in kilobytes, of a 10-second recording. Show your working. **[2]**

Answer: ..... KB

Total for this worksheet: 20 marks

MODULE R EXAM TECHNIQUE · R4

Answering 8-mark extended response questions

Original practice questions · 20 marks · ~25 minutes · OCR J277 spec 3a, 3d, 3k and 1.6.1

Name _____ Date _____

Instructions. Answer all questions in the spaces provided. The marks for each part are shown in brackets [ ]. The total for this worksheet is **20 marks**. Questions 3 to 5 use the same scenario. Question 5* is marked on the quality of your extended response: aim to spend about 12 minutes on it.

1

Total: 3 marks

J277/01 has one 8-mark extended response question. **[3]**

Tick (✓) **one** box in each row to show whether each statement about how this question is marked is true or false.

Statement	True	False
The whole answer is placed in a mark band (level) by the quality of its reasoning; marks are not given one per point listed.		
An answer that describes only drawbacks can still reach the top mark band (6 to 8 marks).		
Points written about the topic in general, with no link to the scenario in the question, are enough for the top mark band.		

2

Total: 2 marks

The 8-mark question often uses the command word **Discuss**. **[2]**

State **two** things that an answer to a "Discuss" question must include.

1 _____

2 _____

Scenario for Questions 3 to 5. A chain of 30 cafés plans to:

- stop accepting cash in all of its cafés
- make customers pay by bank card or through the chain's own mobile app
- use the app to record every purchase each customer makes, and send each customer personalised offers based on what they buy.

3 **Total: 3 marks**

A first draft of an answer about this plan contains this point: **[3]**
"Some customers will not be able to pay any more."
Develop this point so that it would earn credit in an 8-mark answer. Explain **why** this could happen and the **impact** it would have on the customers and on the café chain.

4 **Total: 4 marks**

Each statement below is about the café chain's plan. Complete the table by writing the type of issue that each statement is **mainly** about. **[4]**
Choose from the words in the box. Each word may be used once or not at all.

cultural · environmental · ethical · legal · privacy

Statement	Type of issue
The app keeps a record of every drink each customer buys, and when and at which café they buy it.	
The chain must tell customers what data the app collects, use it only for that purpose and keep it secure, or it could be fined.	
Customers who have no bank card and no smartphone can no longer buy anything at the cafés.	
The cafés stop printing paper receipts; each receipt appears in the app instead.	

5*

Total: 8 marks

Discuss whether the café chain should go ahead with its plan. **[8]**

In your answer you should consider:

- the impact on the customers and on the café chain
- ethical issues
- privacy issues
- legal issues.

You may use your answers to Questions 3 and 4.

Total for this worksheet: 20 marks