

PEARSON EDEXCEL INTERNATIONAL GCSE (9–1)

Information and Communication Technology

Welcome to Pearson: Module 2

Event code: 4IT1 20IO2

First teaching in 2017, first assessment in 2019.



Session agenda

- About Pearson and the International GCSE
- How questions give cues to students
- Mark schemes
- Types of question
- Setting questions
- Marking exercises
- Support and training materials



Aims and Objectives

To arrive at a shared understanding of the:

- assessment objectives for the qualification
- question types for the qualification
- mark schemes for the qualification.

To practise setting questions and using mark schemes with exemplar student work.



About Pearson Edexcel

- As the UK's largest awarding organisation, we are best placed to provide qualifications that are most closely aligned to the British educational system.
- We are the most reliable awarding organisation in the UK, recognised and trusted by educators, learners and employers to provide high quality qualifications.
- By helping you to realise student potential, you can prepare and empower all your students to progress to further education, university and employment.
- Our technology capability allows us to provide you with more advanced support services, tools and resources to make life easier for school leaders, teachers and students.
- Pearson Edexcel are leading the way, challenging thinking and creating new ideas so you can be confident our qualifications will always be world-class



9–1 Grading Scale

Awarding

- The grading system is changing, but our commitment to awarding grades that accurately reflect learner exam performance remains the same.
- We set new grade boundaries (minimum number of marks needed to achieve each grade) for each assessment of each qualification.

Benefits

- Greater differentiation across levels of attainment, e.g. 2 grades where the current C grade is.
- Rewards truly outstanding achievement with the grade 9.
- Provides more information about student attainment to help progression to A Level.
- Same scale for Pearson Edexcel GCSE and International GCSE allows for clear comparison with English standards, unlike old A* to G grading.



[Understanding GCSE \(9 - 1\)](#) [Setting grade boundaries](#)

What are the assessment objectives?

Paper 1	Paper 2
Worth 50% of the total mark.	Worth 50% of the total mark.
Marked out of 100	Marked out of 100
AO1 Demonstrate knowledge and understanding 20–23%	AO1 5–6%
AO2 Apply knowledge, understanding and skills to produce ICT based solutions 14–16%	AO2 34–36%
AO3 Analyse, evaluate, make reasoned judgements and present Conclusions 13–14%	AO3 10–11%



How do students know what is being assessed?

Command words

- **Give/State/Name** Recall one or more pieces of information.
- **Identify** Choose key details from information given in the question.
- **Complete** Add values to a table or diagram.
- **Describe** Give an account of something, or link facts, information, events or processes in a logical order.
- **Explain** Say how or why something happens; 'because' may be an important part of the answer.
- **Discuss** Pick out the situation or argument in the question, explore all aspects of it, investigate it and come to a conclusion.



How do students know what is being assessed?

Text cues

- State **two** types of...
Bold used to show **how many** responses are needed.
- State **two other** types of...
Bold used to show **how many** responses are needed and that the example given in the question should not be used as an answer.
- Describe **one risk to John...**
Bold used to show **how many** responses are needed and that the response must be in the **context of what John is doing** in the question.
- Discuss the factors that John should consider before doing X and doing Y. The underlined words would not be underlined in the question. They indicate what the answer should include.



How is the exam paper marked?

Paper 1 is marked via ePen, using four types of marker:

- computer
- clerical
- graduate
- expert.

Paper 2 is marked from the candidate's printouts and is always marked by expert markers.



What are mark schemes?

Mark schemes contain:

- general marking guidance
- the correct answers
- allocation of marks to marking points
- additional guidance.



What are the different types of mark schemes?

- Multiple choice, where candidates select one of four answers.
- Points-based, where individual marking points are worth independent marks.
- Levels-based, extended writing, where markers allocate marks based on a holistic approach.



Multiple choice questions

Candidates select one of four answers.

(d) Iqbal has decided to set up an account on the *Atzform* website.

(i) He is prompted to set up a user name and password.

Which **one** of these would provide the strongest password?

(1)

- ☐ **A** Iqbal1987s
- ☐ **B** 19SeN#8tM
- ☐ **C** 19IqBal#87
- ☐ **D** IqBal1987



Points-based

Question 1(b)(ii)

(ii) Give **two** advantages to Kiki of using a **wireless** method to connect to the smartphone.

(2)

Mark scheme

Question Number	Answer	Do Not Accept	Additional Guidance	Mark
1bii	Any two from: 1. Can move around (while transferring data) 2. Does not have to waste time finding / connecting cables 3. Cost of cables / cheaper 4. Health and safety / no trailing wires.			(2)



Points-based

Question Number	Answer	Do Not Accept	Additional Guidance	Mark
1bii	Any two from: 1. Can move around (while transferring data) 2. Does not have to waste time finding / connecting cables 3. Cost of cables / cheaper 4. Health and safety / no trailing wires.			(2)

1 Kiki can move anywhere within the range of connectivity

2 ~~Kiki can move anywhere to set up~~ Cheaper: No additional costs for cables.



Points-based

Question 1(h)

(h) Explain **one** benefit of using solid state storage with a smartphone.

(2)

Mark scheme

Question Number	Answer	Do Not Accept	Additional Guidance	Mark
1h	An explanation such as: <ul style="list-style-type: none">• Data (transfer) will not be negatively affected by movement / less risk of damage to the drive (1). because solid state storage does not use moving parts (1) OR <ul style="list-style-type: none">• Smartphones are portable (1) because solid state storage takes up less space / has no moving parts (1) OR <ul style="list-style-type: none">• Longer battery life (1) because solid state storage uses less power (1)			(2)



Points-based

Question Number	Answer	Do Not Accept	Additional Guidance	Mark
1h	<p>An explanation such as:</p> <ul style="list-style-type: none"> Data (transfer) will not be negatively affected by movement / less risk of damage to the drive (1). because solid state storage does not use moving parts (1) <p>OR</p> <ul style="list-style-type: none"> Smartphones are portable (1) because solid state storage takes up less space / has no moving parts (1) <p>OR</p> <ul style="list-style-type: none"> Longer battery life (1) because solid state storage uses less power (1) 			(2)

Solid state storage is durable ~~as~~, it is flash storage, so when it is dropped it does not lose all of its data. This works well with smartphones as people tend to drop their phones a lot.



Levels-based

Discuss the impact of VLEs on learners. (8)

Question Number	Answer
5g	<p>Candidates should compare different points of view, giving evidence for each one. The response does not require a conclusion. The indicative content is not exhaustive/prescriptive and candidates should be credited for other relevant content.</p> <ul style="list-style-type: none"> + Availability of work 24/7/365 + Personalised / adaptive learning + Organised (noticeboard / wall / assignment calendar) + Instant / automatic grading and gradebooks to monitor progress + Revision materials + Can increase contact with teacher beyond class time + Multimedia can be engaging + Accessibility for those who find attendance difficult + Collaboration <ul style="list-style-type: none"> - Could reduce face-to-face teacher contact so cannot ask for clarification as easily - Collaborative tools are not as personal as face-to-face - Limited assessment methods, overreliance on multiple-choice / closed questions - Expectations for engagement are raised so potential for lack of study/life balance - Hosted online so could lead to distractions - Could restrict access (digital divide)

Level	Mark	Descriptor (AO3 – Discuss)
	0	No rewardable material.
1	1-3	<p>A limited number of points will be identified, which may only consider one point of view.</p> <p>At least one point will have evidence to support it.</p> <p>The discussion will have few (if any) links to the scenario.</p> <p>The response will lack clarity and organisation.</p>
2	4-5	<p>A number of points will be identified, which may consider both points of view.</p> <p>Some points will be supported by evidence.</p> <p>The comparisons will include links to the scenario but may include some generic points.</p> <p>The response will show some focus but may not be well organised.</p>
3	6-8	<p>A range of different points that consider both points of view.</p> <p>Most points will be supported by evidence.</p> <p>The majority of the discussion will link to the scenario.</p> <p>The response will show good focus and organisation.</p>



The impact that Virtual Learning Environments have had on students is ~~the~~ mostly positive. This is because it allows these learners to complete their work and do more work from their homes, which is a positive since they can work at their own pace, whenever they can.

For individuals who don't have access to a VLE from their home this could be quite difficult as it could result in them having to go to a local library or to someone's house who does have access to it, which ~~would~~ ^{could} be a hassle to do.

Overall I do believe that it is a positive impact since learners can work through their online assignments from their home, school or wherever, whenever they can which will only benefit them. Also if they have any issues or do not understand something they can use the internet to do some research and ~~learn~~ learn about it.



Points-based practical

Simon wants a list of holidays that:

- are liveaboard
- are 7 days duration
- use Blue Water dive boats.

The list must:

- show only the fields Holiday ID, Area and Country in this order
- be sorted in descending order of Holiday ID.

Create a query on the **DESTINATIONS** table to produce this list.

(5)



Points-based practical

Query:

Holiday ID	Area	Country	Dive boat company	Number of days	Liveaboard or day bo
Destinations	Destinations	Destinations	Destinations	Destinations	Destinations
Descending					
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			Like "**blue water**"	=7	"liveaboard"

Correct 'criteria' row shown in design view

All 3 criteria correct (2)

Two criteria correct (1)

Result of Query:

Holiday ID	Area	Country
MD3	Ari Atoll	Maldives
EG2	Hurghada	Egypt

Correct fields 'shown' – Holiday ID, Area and Country – in any order (1)

Fields displayed in the correct order – Holiday ID, Area and Country (1)

Holiday ID field sorted in descending order (1)



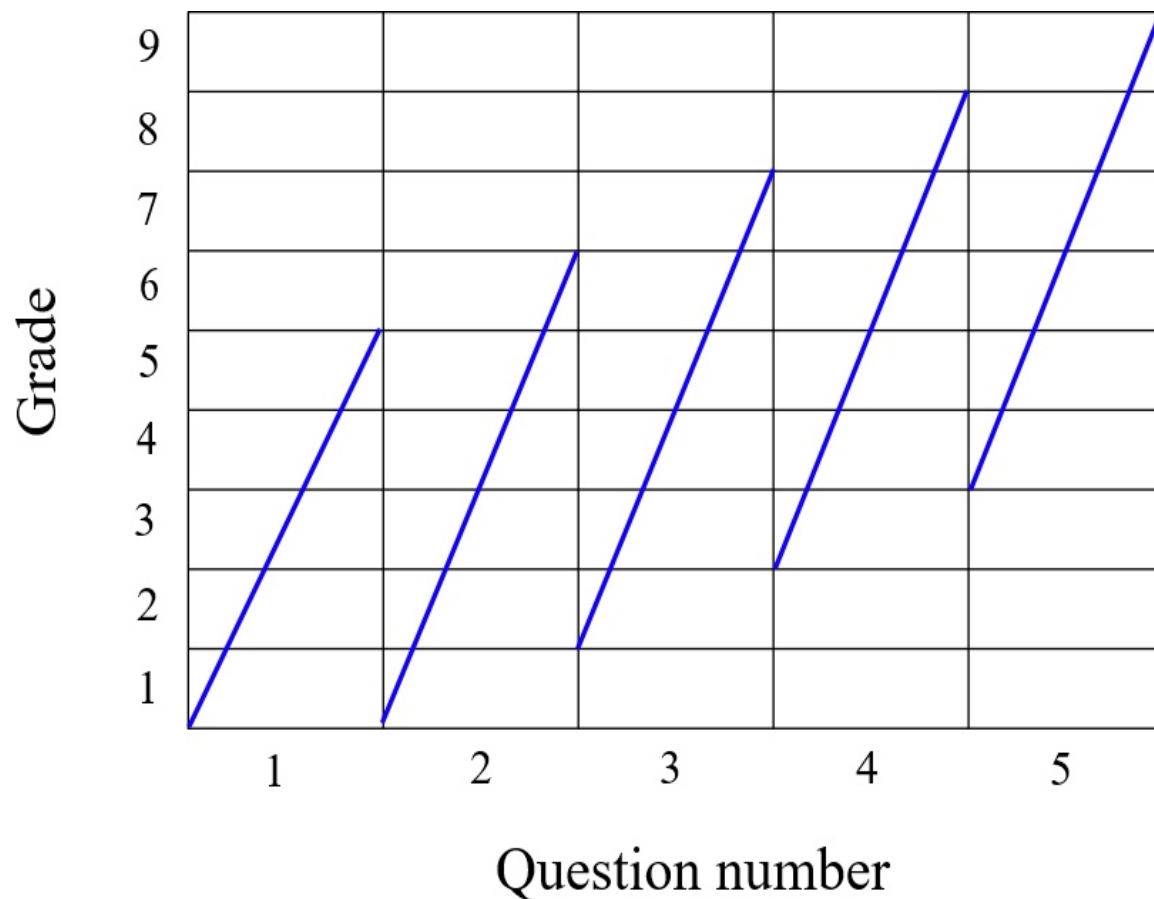
Points-based practical

Field:	Holiday ID	Country	Region	Dive boat company	Number of days	Liveboard or day bo.
Table:	Destinations	Destinations	Destinations	Destinations	Destinations	Destinations
Sort:						
Show:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Criteria:				'Blue Water I' Or 'Blue Water II'	7	'Liveaboard'
or:						

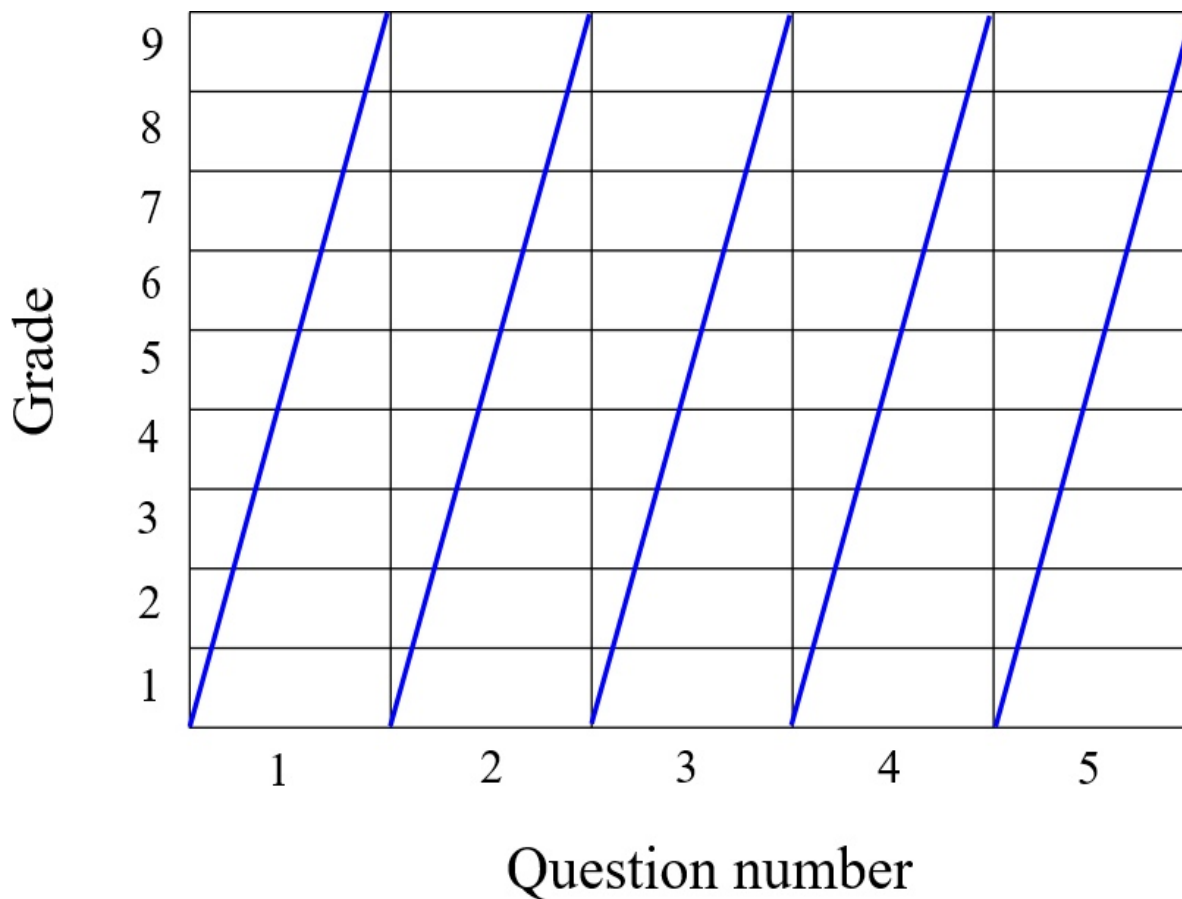
Lieaboard		
Holiday ID	Region	Country
MD3	Ari Atoll	Maldives
EG2	Hurghada	Egypt



Assessment – covering the grades



Assessment – covering the grades



Ramping a question (1)

Three variations of a question on the same topic.

1. Give two features of a strong password. (2)
2. Explain why P\$st4-8x is a strong password. (2)
3. Describe one characteristic of a strong password. (2)



Ramping a question (2)

Three variations of a question on the same topic.

1. Explain why optical disks are not suitable for primary storage. (3)
2. Explain what is meant by primary storage. (3)
3. Explain the difference between primary storage and secondary storage. (3)



Setting a multiple choice question

Distractors:

One wrong but not ridiculous.

Two plausible but not correct.



Setting distractors

Which **one** of these is true?

A SIM card is necessary to connect a smartphone to a:

A mobile network

B

C

D



A marking exercise

(e) Describe how MAC addresses can be used to prevent access to networks.

(3)

Mark scheme

Question Number	Answer	Do Not Accept	Additional Guidance	Mark
4e	A description such as: Every device/NIC has a unique MAC address (1) that can be blacklisted/whitelisted/checked/filtered (1) by a firewall (1).			(3)



A marking exercise

Question Number	Answer	Do Not Accept	Additional Guidance	Mark
4e	A description such as: Every device/NIC has a unique MAC address (1) that can be blacklisted/whitelisted/checked/filtered (1) by a firewall (1).			(3)

MAC addresses are universally unique identifiers so the network administrator can enter the MAC addresses of certain devices into the Firewall during software updates. If the mac addresses are entered into the whitelist of the Firewall, the device will have access to the network, but if the mac address is entered into the blacklist then network will prevent the device entering the network.



A marking exercise

Question Number	Answer	Do Not Accept	Additional Guidance	Mark
4e	A description such as: Every device/NIC has a unique MAC address (1) that can be blacklisted/whitelisted/checked/filtered (1) by a firewall (1).			(3)

The MAC address is ^{universally} unique and so is not allocated by a user or dynamically using servers that run dynamic host control protocol. As it is specific, when the MAC address is stored on the server (authentication server) the server will match the MAC addresses to a database of other MAC addresses. If the particular MAC address is not available ^{in the} ~~the~~ database then the device with that particular MAC address will not be given access to the network.



Marking extended writing

The amount of information available online is growing on a daily basis.

Discuss the positive and negative impacts of the increased availability of information online. (8)



Indicative content

Positives

- Can find answers to a wide range of questions.
- Wide variety of sources – anyone can publish / can add to content published by others. Content can be published by individuals / organisations from around the world.
- May avoid censorship / biased reporting.
- Immediacy of information.
- Information is constantly updated.
- Allows collaboration / discussions with others.
- Tools can be used within online workspaces to help create ideas, model solutions and solve problems.
- The relative importance of information can be decided by the person publishing the information – not by formal editors who may have bias etc.
- Accessible to all who have ICT facilities.

Negatives

- Availability of newspapers / magazine from around the world.
- The amount of information is so vast that it can be overwhelming / difficult to extract key information.
- Users have to spend a time to determine what is relevant / accurate / valid / appropriate / biased / creditable.
- Those without ICT are unable to add to or benefit from the availability of the information – a contribution to the digital divide.
- The information may be blocked / censored / amended in certain countries. False information may gain unwarranted credence.
- Difficulty in processing / extracting key aspects of content.
- Increased collection of personal data leads to extra needs for vigilance.
- Availability of (age) inappropriate or upsetting material.



Examiners' Report June 2019

IGCSE IT 4IT1 01





Resources

We offer a range of free and paid for resources **for International GCSE in ICT**. They have been designed to support teachers to improve learner outcomes.



Support overview for International GCSE in ICT

Getting Started
Guide & Scheme of
Work

Getting Ready to
Teach Events

Subject
interpretation of
transferable skills

Subject Advisor

ResultsPlus

Regional Support
Manager

Curriculum
Matched Publishing

Exemplar Marked
Responses

Lesson Plans





ResultsPlus is the free online results analysis tool for teachers - it provides analysis features that other similar solutions don't.

- Provides a detailed breakdown of student performance in Edexcel exams.
- Helps identify topics where the student can benefit from further learning and allows this knowledge to inform teaching strategies and approaches.
- Provides a comparison of student performance at regional level.
- Allows you to view your school's performance against other Pearson Edexcel schools in your country. You can also find student results analysis from their previous Pearson Edexcel school.
- Mock exam results can also be fed into the system to produce an analysis.
- [ResultsPlus Direct](#) gives your students access to their final grades and performance breakdown, wherever they are.
- Sign up for free ResultsPlus account in just a few quick and easy steps [here](#).
- Access additional video guides here:
- [ResultsPlus - Individual Student Analysis](#)
[ResultsPlus - Cohort Analysis](#)
[ResultsPlus - Mock Analysis](#)
[ResultsPlus - Global Analysis](#)



- A free tool for teachers which helps you make quick homework assignments, topic tests and mock exams.
- Questions tagged against unit, topic and assessment objective or simply choose a whole past paper.
- Use existing mark schemes for accurate marking.
- Use examiner report for insight.
- Most recent exam content available sooner.
- Use the results to understand where students need more support, informing teaching strategies.



Your dedicated Subject Advisor

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Other useful links

1. [Grade Boundaries](#)

This page shows the minimum marks needed to achieve a certain grade for all UK and international examinations. Also refer to the examiners report which is available for download with other documents.

2. [Examination Results Statistics](#)

Results statistics summarise the overall grade outcomes of candidates sitting Pearson Edexcel examinations.

3. [Progress to University](#)

Here you can find information and guidance about how to progress to universities worldwide with Pearson Edexcel qualifications.

4. [Access to scripts](#)

Make an informed enquiry about results (EARs) using our free access to scripts portal.





Any questions?

**Please fill in your
evaluation forms!**

We value your feedback!



ALWAYS LEARNING