

Cambridge International AS & A Level

CANDIDATE NAME					
CENTRE NUMBER			CANDIDATE NUMBER		

4 9 4 9 6 5 4 8 2 0

INFORMATION TECHNOLOGY

9626/33

Paper 3 Advanced Theory

October/November 2021

1 hour 45 minutes

You must answer on the question paper.

No additional materials are needed.

INSTRUCTIONS

- Answer all questions.
- Use a black or dark blue pen.
- Write your name, centre number and candidate number in the boxes at the top of the page.
- Write your answer to each question in the space provided.
- Do **not** use an erasable pen or correction fluid.
- Do not write on any bar codes.
- You may use an HB pencil for any diagrams, graphs or rough working.
- Calculators must not be used in this paper.

INFORMATION

- The total mark for this paper is 90.
- The number of marks for each question or part question is shown in brackets [].

This document has 16 pages. Any blank pages are indicated.

A c	company wants to use an online questionnaire to get feedback from customers about the dicine it makes.
(a)	Describe the features of online questionnaires that make them suitable for gathering feedback from customers.
	[8]

(b)	Describe two drawbacks of using online questionnaires to gather feedback.
	[2]
	codes are two-dimensional bar codes (matrix bar codes) representing information about items hich they are attached. An example of a QR code is shown: Describe the functional elements of a QR code.
	re-

	(b)	Explain why damaged QR codes may still be read while damaged one-dimensional bar codes often cannot be read.
		[3]
3		er-to-peer networking can account for a large percentage of all internet traffic. It is often used to sfer large files.
	(a)	Describe how peer-to-peer networking uses BitTorrent to transfer large data files between several users.
		[6]

© UCLES 2021

(b)	Describe how the use of BitTorrent for peer-to-peer networking can cause security issues to arise.
	[6]

A car manufacturer is using computer-aided design (CAD) to design the engine for its new electric car.
Discuss the benefits and drawbacks of the use of CAD for this process.
ro
[8]

data transfer connection	es and disadvantages c ons.	n using satellite colli	municalion system	s to provide
				[8]

Analyse 1	the effectiv	eness of c	ligital cur	rencies a	as a meth	nod of pa	yment.		

We	b-conferencing is used to enable people to work together to produce documents.	
(a)	Describe, in detail, the hardware that is required for web-conferencing.	
		. [4]
(b)	Describe the features of web-conferencing software.	
		. [6]

A new software application, which consists of many modules, is being developed. Testing is an important stage in the development of new software.
Compare and contrast alpha testing and beta testing.
គេរ

9	Gantt charts are used in project management.
	Describe the features of a Gantt chart.
	[6]

)	JavaScript is an interpreted language that can be used on web pages. Runtime errors, called exceptions, can occur during the execution of JavaScript code.
	Explain how exceptions can be handled during the execution of JavaScript code.
	rea.

			ow augmented reality could be used by firefighters.

BLANK PAGE

BLANK PAGE

BLANK PAGE

Permission to reproduce items where third-party owned material protected by copyright is included has been sought and cleared where possible. Every reasonable effort has been made by the publisher (UCLES) to trace copyright holders, but if any items requiring clearance have unwittingly been included, the publisher will be pleased to make amends at the earliest possible opportunity.

To avoid the issue of disclosure of answer-related information to candidates, all copyright acknowledgements are reproduced online in the Cambridge Assessment International Education Copyright Acknowledgements Booklet. This is produced for each series of examinations and is freely available to download at www.cambridgeinternational.org after the live examination series.

Cambridge Assessment International Education is part of the Cambridge Assessment Group. Cambridge Assessment is the brand name of the University of Cambridge Local Examinations Syndicate (UCLES), which itself is a department of the University of Cambridge.