

#### **Cambridge Assessment International Education**

Cambridge International General Certificate of Secondary Education

#### INFORMATION AND COMMUNICATION TECHNOLOGY

0417/02

Paper 2 Practical Test A

October/November 2019

MARK SCHEME
Maximum Mark: 80

#### **Published**

This mark scheme is published as an aid to teachers and candidates, to indicate the requirements of the examination. It shows the basis on which Examiners were instructed to award marks. It does not indicate the details of the discussions that took place at an Examiners' meeting before marking began, which would have considered the acceptability of alternative answers.

Mark schemes should be read in conjunction with the question paper and the Principal Examiner Report for Teachers.

Cambridge International will not enter into discussions about these mark schemes.

Cambridge International is publishing the mark schemes for the October/November 2019 series for most Cambridge IGCSE™, Cambridge International A and AS Level components and some Cambridge O Level components.

#### **Generic Marking Principles**

These general marking principles must be applied by all examiners when marking candidate answers. They should be applied alongside the specific content of the mark scheme or generic level descriptors for a question. Each question paper and mark scheme will also comply with these marking principles.

#### GENERIC MARKING PRINCIPLE 1:

Marks must be awarded in line with:

- the specific content of the mark scheme or the generic level descriptors for the question
- the specific skills defined in the mark scheme or in the generic level descriptors for the question
- the standard of response required by a candidate as exemplified by the standardisation scripts.

#### **GENERIC MARKING PRINCIPLE 2:**

Marks awarded are always **whole marks** (not half marks, or other fractions).

#### **GENERIC MARKING PRINCIPLE 3:**

#### Marks must be awarded **positively**:

- marks are awarded for correct/valid answers, as defined in the mark scheme. However, credit
  is given for valid answers which go beyond the scope of the syllabus and mark scheme,
  referring to your Team Leader as appropriate
- · marks are awarded when candidates clearly demonstrate what they know and can do
- marks are not deducted for errors
- marks are not deducted for omissions
- answers should only be judged on the quality of spelling, punctuation and grammar when these
  features are specifically assessed by the question as indicated by the mark scheme. The
  meaning, however, should be unambiguous.

#### **GENERIC MARKING PRINCIPLE 4:**

Rules must be applied consistently e.g. in situations where candidates have not followed instructions or in the application of generic level descriptors.

#### **GENERIC MARKING PRINCIPLE 5:**

Marks should be awarded using the full range of marks defined in the mark scheme for the question (however; the use of the full mark range may be limited according to the quality of the candidate responses seen).

#### **GENERIC MARKING PRINCIPLE 6:**

Marks awarded are based solely on the requirements as defined in the mark scheme. Marks should not be awarded with grade thresholds or grade descriptors in mind.

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October/November 2019

Header Automated page numbers left aligned, automated date field right aligned 1 mark

<del>-</del>02/12/2019

# The World of Digital Books

DB-Title modification correct in EV3 with attributes applied - sans-serif 32pt, centre aligned, bold, underline, 6pt after (0pt before)

1 mark

Report by: Candidate name

of our reading culture/ ver recent years, ma/

d changed the publishing to increased content

An e-reader is a mobile electronic devi Subtitle entered accurately with candidate name digital magazines. It is small and portabl publication made available in digital form electronic version of a printed book but

DB-Subtitle seen in EV4 list and applied (sans-serif, 16pt, italic, right aligned, 0pt before and after

and 1 mark is a

1 mark

e an ut a

printed equivalent.

### HISTORY OF DIGITAL BOOKS

The first electronic book document was produced in 1971 by Michael S. Hart who is tho ught by the inventor of the electronic book. He ma\ adantA Voited States Declaration

#### **Columns**

Section break, correct position, applied to correct text

2 columns, 1 cm column spacing

1 mark 1 mark

format, for the education of as many people as possible. He planned to establish an electronic public library of 10,000 books (this goal was reached in October 2003) created using plain text to make them as easy as possible to download and view on devices. He has devoted his entire life to this project.

#### Subheadings (7)

DB-Subhead style matches style defined in EV2, applied consistently to all 1 mark

Online publishing became a cheaper option than printed books for educational, academic and scientific publications. It also enabled regular updates to include the latest information without waiting for a new printed edition. Some universities began to create their own textbooks online with papers and comments from professors.

### **DIGITAL READING**

The emerging market of online bookstores selling only digital books took off in 2003. It took a while to convince publishers that books should be simultaneously published as a print book and a ligital book For the first time last year publishers

1 mark

igital book sales than from

#### **Table**

Complete table imported in correct position, no changes to data Maxi Reader row deleted Sorted ascending on Year New row in correct position (above *Knook*) Correct data entry – Tawara Phablet | Digital Tawara | 2007 Top row merged, centred Top row text bold, light grey shading applied All fits within column, data on one line, gridlines printed DB-table style seen in EV4 list, applied to complete table (serif, 11pt, italic, left, no space after each row)

ading e-books was not a activity. E-books were g read on desktop computer ed in an office environment. 8 when small, dedicated vices were launched. These pensive and had a limited lailable. As a result growth esponses were mixed with there was a marketplace for

The following table shows the release of -reader devices over the years:

Gutenberg nad 1,000 e-books with an average output of 36 books per month. Ten years later it had over 20,000 e-books in 50 languages with a production rate of 340 new books each month, 40 mirror sites worldwide, and tens of thousands of books being downloaded every day.

The first electronic versions of print newspapers and magazines began to appear in 1996 with partial or full versions of the latest issues available freely or through subscription. Online versions provided a wealth of additional information to help readers understand the issues with links to maps, political and economic data, photographs, and

e-Readers						
Reader	Company	Year				
RockICT e-book	DecoMedia	1998				
CloseBook	CloseBook	1999				
Pearlstar e-book	Pearlstar	2000				
Litre 1500-EP	Sonny	2004				
Sonny Reader	Sonny	2006				
Tawara Phablet	Digital Tawara	2007				

Name, centre number, candidate number right aligned

1 mark

Knook	Bambi Publishing	2009
Cabbage Notepad	Cabbage	2010
Hobo e-reader	Rasputen Hobo	2010

Following the successive failures of first generation e-readers, the devices were expected to disappear from the market. However, the advent of E-ink technology transformed the quality of the reading screens. New generation e-readers were released with improved E-ink technology screens which provided a reading experience similar to the traditional printed book. With the price of reading devices and e-books significantly reduced, more content available and better retail distribution, the e-reader was given a new lease of life.

In 2007 Tawara launched a dedicated e-reader called the Phablet which became the most successful electronic reading device transformed this digital market. The Phablet had long battery life, built-in memory and an SD card providing plenty of book storage, a screen using the E-ink technology, and page-turning buttons Unlike the Sonny Reader there was no nee Image computer as books were purchased onlin downloaded via a 3G wireless connection. The Phablet release sold out in less than six hou the sales of e-books doubled between 200 Resized to 3 cm wide, aspect ratio maintained 2008.

READING DEVICES

Commercially produced and sold e-books are usually intended to be read on a dedicated ereader device. However many people now read ebooks on their mobile devices preferring multifunctional devices over dedicated e-reader brands. In 2016 surveys showed that mobile phones and tablets overtook e-readers as the most common electronic reading devices. Depending on the format of the book, almost any computer device that features a controllable viewing

can be used to read e-books including:

dedicated Sonny, Knook, Hobo

- netbooks and laptops
- personal computers
- smartphones
- tablet computers including the Notepad

There are many e-reader applications freely available which allow the reading of e-books on mobile devices independently of a dedicated ebook device.

#### **DIGITAL BOOK FORMATS**

for all e-books so that a wide range of reading devices could display the same publication.

#### THE EPUB FORMAT

In September 1999 the first version of Open ebook (OeB) was released with the aim of providing a single source document which all book-reading software and hardware platforms could handle. In April 2005 OeB format was replaced with ePub (electronic publication format). The ePub format makes the text adapt to the screen size so it is easier for a range of devices to display readable text. Books in e-pub format can be downloaded to a computer, phone, tablet, e-reader or read in a web browser and is becoming the publishing industry standard format for e-books.

#### PDF FORMAT

PDF (Portable Document Format) was launched in June 1993 and became the global standard for the distribution and viewing of documents. A free reader was needed to read these files. Until

Image inserted in correct position (below subhead) Image flipped so e-reader on right

Aligned to top of text, left margin, text wrapped

1 mark 1 mark 1 mark

1 mark

ectronic documents but is no longer format for e-books.

#### THE FUTURE



Square shaped bullets applied to correct text

Bullets indented 1 cm from left margin, single line space

Many consumers have embraced digital reading but e-reader market changing and is set to face fierce competition from tablets and smartphones. Evidence suggests that

genie or tablet basea books are released multimedia and hypermedia content. Research does suggest that older readers will continue with e-readers, whilst younger readers are increasingly using tablets. However laptops, tablets and phones do not replicate any of the unique selling points of the e-reader which include very long battery life, the ability to read in bright light, and no eye strain when reading for prolonged periods.

In recent years Tawara has released one of the thinnest e-readers in the world which comes with a

Page layout

DB-Body style seen in EV4 list and applied consistently

(sans-serif, 10pt, justified, single line, 0pt before, 6pt space after)

Doc complete/paras intact, A4, portrait, no large gaps, columns aligned at top, no widows/orphans, split lists/tables, no blank pages, 6pt after bullet list, 6pt after table

1 mark

1 mark

1 mark

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developments in technology to take e-readers to a next level.

Future advances could include a new processer which enables animations and videos to be played. It is expected that more companies will produce waterproof e-readers and a high resolution colour E-ink reader display is also on the horizon. Some companies believe bigger screens are the way forward and are bucking the six inch trend.

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Title

1 mark Correct, 100% accurate

Specified fields (5), correct order, 1 mark Sort descending order of Price 1 mark Portrait, all fields present, no truncation, fits single page 1 mark

2019

### Book Releases 2014/2015

Title	Author	Price	Release_Year	Available
Locked On Control of the Locked On Control	Tom Clancy	£37.54	2015	Yes
Steve Jobs \	Walter Isaacson	£25.01	2015	Yes
Notes From 👌 Small Island	Bill Bryson	£24.98	2015	Yes
Desolation Isla 👌	Patrick OBrian	£22.98	2015	Yes
Shadowfever \	Karen Marie Moning	£22.53	2015	Yes
Never Let Me d	Kazuo Ishiguro	£19.99	2014	Yes
Night Road \	Kristin Hannah	£18.78	2015	Yes
Obamas A Missid Varriage	Jodi Kantor	£18.78	2014	Yes
Island Of The Blue ins	Scott OBasil	£18.36	2015	Yes
Unbroken \	Laura Hillenbrand	£17.99	2014	Yes
Stay Close \	Harlan Coben	£17.50	2014	Yes
Angels And Demons	Dan Brown	£16.99	2014	Yes
Scotland Highlands A	Neil Wilson	£10.49	2015	Yes
Chile And Easter Islan vide	Carolyn McCarthy	£10.35	2015	Yes
Harry Potter And Chan rets Book 2	J K Rowling	£9.99	2014	Yes
Now You See Her	James Patterson	£9.39	2014	Yes
Harry Potter New record Wolf Gift added accu	rately and		2014	Yes
Harry Potter 1st record Locked On, £37.54 still		ark	2014	Yes
Butterfly Isla	<del></del>		2015	Yes
Defending Jacob	William Landay	£8.75	2015	Yes
Wolf Gift	Anne Rice	£8.49	2015	Yes
Harry Potter And Order Of Phoenix Book 5	J K Rowling	£7.99	2014	Yes
1105 Yakima Street	Debbie Macomber	£7.99	2014	Yes
No Time For Goodbye	Linwood Barclay	£7.99	2015	Yes
Home Front	Kristin Hannah	£7.99	2014	Yes
Camel Creek Demons	Patsy Fletcher	£7.85	2014	Yes
Harry Potter And Philosophers Stone Book 1	J K Rowling	£6.99	2014	Yes
Spider Bones	Kathy Reichs	£6.67	2015	Yes
An Engagement In Seattle	Debbie Macomber	£6.50	2015	Yes
Inner Circle	Brad Meltzer	£6.25	2015	Yes
The Island Of Adventure	Eni d Blyton	£5.94	2014	Yes
Redwood Bend	Ron Carr	£5.39	2015	Yes
Killing Tide	P J Alderman	£5.10	2014	Yes
Invisible Roses	Rita Sams	£5.00	2014	Yes
Harry Potter And The Deathly Hallows Book 7	J K Rowling	£5.00	2015	Yes

Name, centre number, candidate number

Average book price £12.53

Calculates correct average Price 1 mark Average under Price column, accurate label entered to left 1 mark Average and Price display same currency symbol, 2dp, Available displays Yes/No 1 mark

1 mark

Name, centre number, candidate number displays at bottom, no page number displayed.

Select records (35):

Release\_year is 2014 or 2015 1 mark Price is >=£5.00, Available is Yes 1 mark

© UCLES 2019 Page 6 of 15 **Digital Publishing** 

1 mark

#### **PUBLISHED**

#### Title Correct, 100% accurate 1 mark

Calculated field

Heading Book\_Tax 100% accurate Price plus 10% calculated - correct values Same currency symbol and 2dp as Price field

1 mark 1 mark 1 mark

Book_Ref	Publisher	Title	Author	Book_Type	Release_Year	Price	Book_Tax
A0010	Digital Tawara	Tales Of Talskiddy Treacle Mine	Benson McChris	Audio	2018	£7.99	£8.79
A0177	Digital Tawara	Dunes Of Dreams	Margery Vadson	Audio	2017	£6.23	£6.85
A0144	Digital Tawara	Long Beach	Maria Mathson	Audio	2016	£4.99	£5.49
A0068	Digital Tawara	Silken Valley	Joceline Redington	Audio	2016	£5.49	£6.04
A0183	Digital Tawara	Honeycomb Village	Maria Mathson	Audio	2015	£6.45	£7.10
A0182	Digital Tawara	Camel Creek Demons	Patsy Fletcher	Audio	2014	£7.85	£8.64
A0120	Digital Tawara	Invisible Roses	Rita Sams	Audio	2014	£5.00	£5.50
A0086	Digital Tawara	Mutant Blue	Jeffrey Reeves	Audio	2014	£4.49	£4.94
A0024	Millen Digital Audio	Bridget Jones Edge Of Reason	Helen Fielding	Audio	2013	£11.22	£12.34
A0112	Millen Digital Audio	Room	Emma Donoghue	Audio	2012	£18.98	£20.88
A0023	Millen Digital Audio	Bridget Jones Diary	Helen Fielding	Audio	2012	£13.27	£14.60
E0504	Harley Quinn Digital	Glass Castle	Jeannette Walls	eBook	2016	£4.99	£5.49
E0727	Digital Press	Killing Tide	P J Alderman	eBook	2015	£1.99	£2.19
E0252	Antique Digital	Spider Bones	Kathy Reichs	eBook	2015	£6.67	£7.34
E0062	Digital Tawara	Rebels Of Power	Stevie Hilliard	eBook	2015	£4.50	£4.95
E0047	Harley Quinn Digital	Chasing Fire	Nora Roberts	eBook	2015	£3.99	£4.39
E0236	Transformation Digital	Digital Fortress	Dan Brown	eBook	2014	£4.93	£5.42
E0239	LLSB Digital	Something Blue	Emily Giffin	eBook	2013	£3.96	£4.36
E0607	Antique Digital	Why Me	Sarah Burleton	eBook	2013	£1.92	£2.11
E0658	Digital Tawara	Night Battleship	Charlie Dawson	eBook	2013	£12.55	£13.81
E0144	Digital Tawara	The Liliac Sky	Gregory Brooklin	eBook	2013	£8.99	£9.89
E0412	Quoin Digital	Fate Of The Jedi Apocalypse	Troy Denning	eBook	2012	£15.85	£17.44
Select reco Publisher co Release_Ye	ontains Digital 1 mai		Specified fields (7 base fields), correct order Sort ascending on <i>Book_Type</i> , descending <i>Release_Year</i> Landscape, one page wide, all base fields present, data fully visible			1 mark 1 mark 1 mark	

Name, centre number, candidate number -

Name, centre number, candidate number displays in report footer, on every page

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Book_Ref	Publisher	Title	Author	Book_Type	Release_Year	Price	Book_Tax
E0885	Quoin Digital	Once Upon A Secret	Mimi Alford	eBook	2012	£9.99	£10.99
E0934	Quoin Digital	Private Games	James Patterson	eBook	2012	£9.99	£10.99
E0933	Quoin Digital	Private 1 Suspect	James Patterson	eBook	2012	£9.49	£10.44
E0924	Quoin Digital	Power Of Habit	Charles Duhigg	eBook	2012	£10.85	£11.94
E0126	Digital Tawara	Legacy Of The Androids	Sam Fernleigh	eBook	2012	£9.99	£10.99
E0326	Quoin Digital	Drop Dead Healthy	A J Jacobs	eBook	2012	£10.85	£11.94
E0579	Ebony Digital	Welcome To Your Brain	Sandra Aamodt	eBook	2012	£10.85	£11.94
E0631	Antique Digital	Wolf Gift	Anne Rice	eBook	2012	£9.99	£10.99
E0043	Harley Quinn Digital	Celebrity In Death	J D Robb	eBook	2012	£8.99	£9.89
E0625	Harley Quinn Digital	Witness	Nora Roberts	eBook	2012	£9.49	£10.44
E0816	Harley Quinn Digital	Mill River Recluse	Darcie Chan	eBook	2012	£1.99	£2.19
E0409	HMI Digital	Boy In Striped Pyjamas	John Boyne	eBook	2012	£4.99	£5.49
E0179	Transformation Digital	Deception Point	Dan Brown	eBook	2012	£5.49	£6.04
E0424	Transformation Digital	Brick Lane	Monica Ali	eBook	2012	£5.49	£6.04
E0654	Transformation Digital	I Got Your Number	Sophie Kinsella	eBook	2012	£9.99	£10.99
E0927	Transformation Digital	Prayer For Owen Meany	John Irving	eBook	2012	£6.49	£7.14
E0947	Digital Tawara	Dragons Of Sorcerers	Christian Jennings	eBook	2012	£6.99	£7.69

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#### Task 4 - Mail merge

Merge Fields inserted (<text> correctly replaced)

«Group» | «Month» | «Book», | «Author». correct position, spacing & punctuation retained 1 mark «Day», «Date» | «Time» correct position, spacing, punctuation and centre alignment retained 1 mark «Venue». | «Month» | «Notes». correct position, spacing, punctuation retained 1 mark

MM Master.docx

#### Tawara Book Club

C/o Community Library 120 Gonville Square CAMBRIDGE CB1 3JC

25-Oct-19

Dear «Group» Book Club Member

#### Tawara Book Club - Winter Reading

Tawara Book Club is pleased to confirm details of the reading material selected for the coming quarter. These books have been chosen based on reviews from newspapers and magazines, recommendations from other reading clubs and prize-winning book lists. If you wish to nominate a book for the group to read in the future, please bring your suggestions to the meeting.

The book chosen for \*Month\* is \*Book\*, by \*Author\*. I hope you will find this a stimulating and enjoyable read. You may find it useful to make short notes on a postcard, or use post-it notes to identify sections of the book you think are worthy of group discussion. If you are reading on an e-book, use the highlighter or note function to record your thoughts to share with the group.

Our next meeting is arranged for:

«Day», «Date» at «Time» hours.

The meeting will be held at . Venues. Please try to finish the . Months book before we meet.

Other meeting business: «Notes»

Name replaces Candidate Name centre no & candidate no in the footer 1 mark

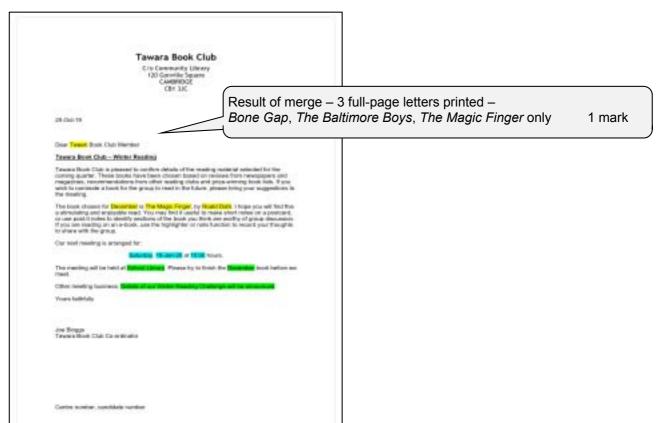
Joe Bloggs
Tawara Book Club Co-ordinator

Centre number, candidate number

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#### Task 5 - Presentation

6 slides imported, title and bullet layout, no changes, no blank slides, no overlap of items Slide 1 changed to title layout with title/subtitle centred middle of slide, name entered after colon Master slide used for name, centre number, candidate number, slide numbers appear consistently on all slides, same position and size

1 mark

1 mark

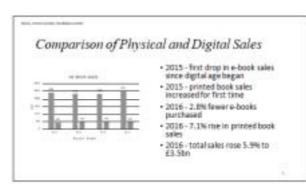
1 mark



### UK Overview of 2016

- + Record breaking year for the publishing industry
- + Total sales of physical and digital books rose 5.9% to £3.6bn
- . Sales of printed books had the largest growth in a decade
- + Digital book sales decreased by 2.8%
- UK consumers spent an extra 6%, or £100m, on books

## Printed Book Sales Increase . 2016 saw a 7.1% rise in physical book sales from £2.7bn to £2.9bn - Online sales up 5% to £1,169m + Store sales up 7% to £1,130m Younger readers fuelled growth - children's books surged by 16%



#### Decline in Digital Book Sales

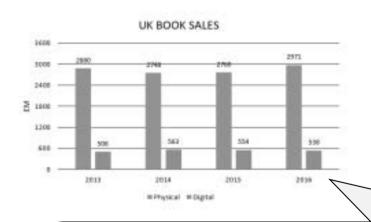
- · Younger generation prefer physical books to e-readers
- Digital screen fatigue fuels rise in printed book sales with people limiting their screen time
- Changes in e-book pricing made it cheaper to buy aphysical copy of a new trile than an e-book

#### Rise in Printed Book Sales

- . Cookery books, humour and biographies sell better in printed format
- · Adult colouring books have been a highrend
- · People prefer to read printed books with children
- + Less prone to theft than an electronic device
- · A light-emitting e-book can interfere with sleep
- + Digital detox books used as a break from electronic devices or social

© UCLES 2019 Page 11 of 15 Name, Centre number, Candidate number

# Comparison of Physical and Digital Sales



- 2015 first drop in e-book sales since digital age began
- 2015 printed book sales increased for first time
- 2016 2.8% fewer e-books purchased
- 2016 7.1% rise in printed book sales

otal sales rose 5.9% to

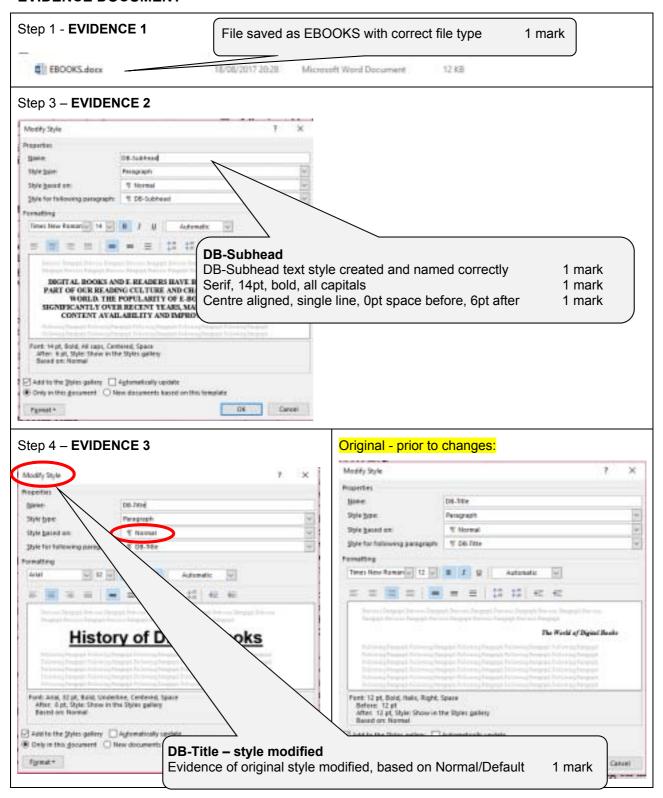
Vertical comparative bar chart created using correct data, year labels present
Chart on correct slide, left of bullets, all data fully visible
Chart title **UK BOOK SALES** and value axis title **£M** entered accurately
1 mark
Value data labels display on each bar and correct legend for data
1 mark
Value axis displays minimum 0, maximum 3600
1 mark
Value axis increments set at 600
1 mark
Print 6 slides to page as a handout and full page, single, landscape slide with title
Comparison of Physical and Digital Sales
1 mark

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0.0

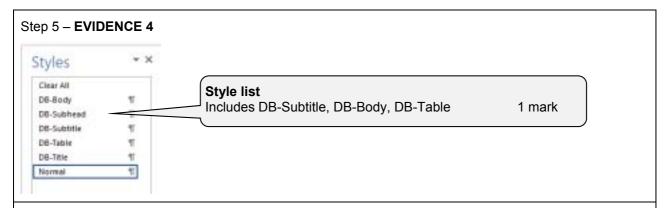
## Cambridge IGCSE – Mark Scheme PUBLISHED

#### **EVIDENCE DOCUMENT**



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### Cambridge IGCSE – Mark Scheme PUBLISHED



Step 22 - **EVIDENCE 5 –** <u>Discuss</u> the advantages and disadvantages <u>to customers</u> of buying books through internet shopping.

#### Advantages to customers

Customers can buy anytime/can shop when shops are closed

Customers can buy from any location where there is internet access

Wider range of books available to customers

Customer can benefit from lower/cheaper prices when compared to shop prices

Customer does not have to waste time travelling/queuing

Customer does not have to spend money on travelling to shops

Easier to search and find what the customer is looking for

Online reviews of books help the customer with making choices

Websites may recommend books that match the customer's search history

#### Disadvantages to customers

Hackers may intercept data and defraud the customer

The customer may find it difficult/expensive to return books purchased online

The customer must know how to use the computer/device to buy the book

The customer must have access to a (internet) connection

The customer cannot physically hold books

The customer needs a payment card/online payment method/cannot pay by cash

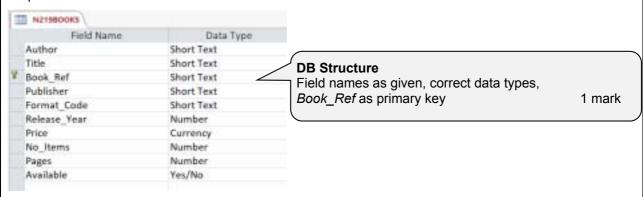
Goods take time to be delivered/sometimes don't arrive/may be delivered to wrong address/can be damaged in transit

There may be shipping/extra charges

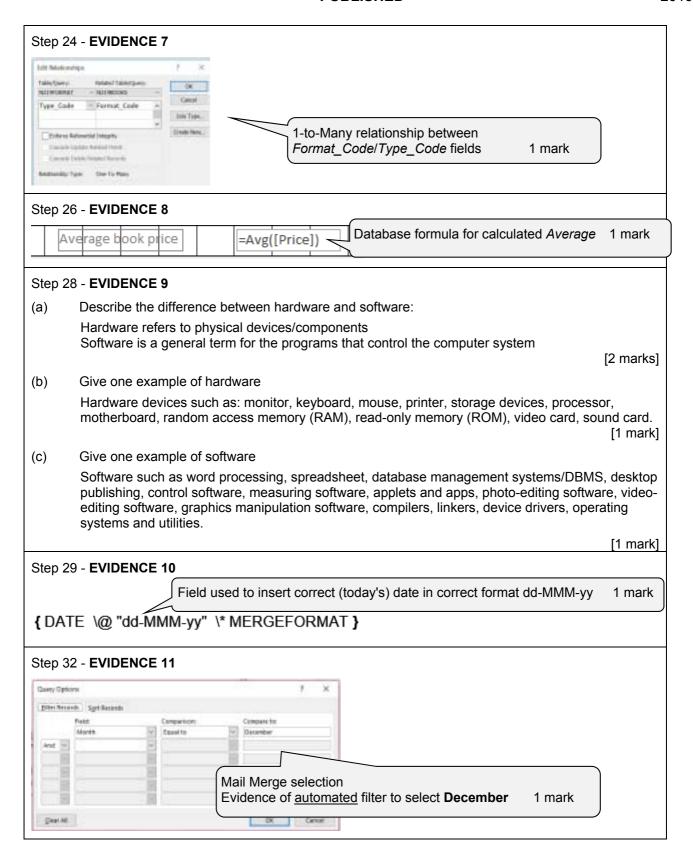
Must have at least one advantage and one disadvantage to get full marks Allow 1 mark for a detailed reasoned conclusion

[4 marks]





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