



## UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS International General Certificate of Secondary Education

CANDIDATE NAME					
CENTRE NUMBER			CANDIDATE NUMBER		

## INFORMATION AND COMMUNICATION TECHNOLOGY

0417/21

Paper 2 Practical Test

May/June 2013

2 hours 30 minutes

Additional Materials: Candidate Source Files

## **READ THESE INSTRUCTIONS FIRST**

Make sure that your **Centre number**, **candidate number** and **name** are written at the top of this page and are clearly visible on every printout, before it is sent to the printer. Printouts with handwritten information will **not** be marked.

DO NOT WRITE IN ANY BARCODES.

Carry out every instruction in each step.

Steps are numbered on the left hand side of the page. On the right hand side of the page for each step, you will find a box which you can tick  $(\checkmark)$  when you have completed it; this will help you track your progress through the test.

At the end of the exam put this **Question Paper** and **all** your printouts into the Assessment Record Folder.

If you have produced rough copies of printouts, these should be neatly crossed through to indicate that they are **not** the copy to be marked.



You work for a company called Hothouse Renewable Energy. You are going to perform some tasks for this company.

		•
1	Open the file JX3EVIDENCE.RTF	П
	Make sure that your name, Centre number and candidate number will appear on every page of this document.	
	Save this evidence document in your work area as <b>JX3EVIDENCE</b> followed by your candidate number. For example: JX3EVIDENCE9999	
	You will need this file later.	
2	Add the following contact details to your email contacts/address book:	П
	FULL NAME EMAIL ADDRESS	_
	Abdul Amar a.amar@cie.org.uk Hussain Syed h.syed@cie.org.uk Oliver Johnson o.johnson@cie.org.uk	
	Place screenshot evidence of only these entries in your evidence document.	
3	Create an email group/distribution list named Energy Team	П
	Add the three contacts entered at step 2 to this group. Save the group.	
	Place screenshot evidence of the group and the three contacts that belong to this group in your evidence document.	
	You will send a message to this group later.	
You a	re now going to edit a report about offshore wind power.	
4	Using a suitable software package, load the file JX3WINDFARMS.RTF	
5	Set the:	П
	• page size to A4	
	Place screenshot evidence of your page size settings in your evidence document.	
	orientation to landscape	
	top and bottom margins to 2 centimetres	
	left and right margins to 2.5 centimetres.	
	Place screenshot evidence of your margin and page orientation settings in your evidence document.	
6	Save the document, with a new name, in your work area.	
7	Place in the header: <ul><li>your Centre number left aligned</li><li>the automated file name right aligned.</li></ul>	
	Place in the footer:  today's date left aligned  your name and candidate number right aligned.	
	Make sure that all the alignments match the page margins.  Make sure that headers and footers are displayed on all pages.	

9	At the start of the document enter the title Offshore Wind Energy  Make the title:  centre aligned  font size 26 point  bold and underlined  Below the title, add a subtitle:  Report by: and add your name.  Set the title and subtitle to a sans-serif font.	
10 E 11 S 12 F 13 A 13 A 15 C 15	<ul> <li>centre aligned</li> <li>font size 26 point</li> <li>bold and underlined</li> <li>Below the title, add a subtitle:</li> <li>Report by: and add your name.</li> </ul>	
11 S 12 F 4	Report by: and add your name.	
11 S		
12 1	Set the title and subtitle to a sans-serif font	
13	oct the title and subtitle to a sains som fortt.	
(	Make the subtitle:  • right aligned  • font size 18 point  • italic and bold	
14 5	After the subtitle format the rest of the document as body text into three equally spaced columns, with <b>1.5</b> centimetre spacing between the columns.	
•	Set all of the body text to:  • be fully justified  • font size 12 point  • a serif font  • single line spacing	
15	Make sure there is a single blank line after each paragraph of the body text.	
	In the left column, before the first paragraph of the document, enter the subheading:  A Global Power Source	
•	Identify all the subheadings in the document and make them all:  centre aligned  bold  underlined  sans-serif  14 point	
1	Make sure there is one line space below each subheading.	
	Insert a table with two columns and eleven rows after the text: The 9 European countries with offshore wind power capacity in 2010 were:	
19	Merge the cells in the top row of the table.	

Offshore wind power in Europe				
Country	Capacity (MW)			
UK	1341			
Denmark	854			
Netherlands	249			
Belgium	195			
Sweden	164			
Germany	92			
Finland	26			
Ireland	25			
Norway	2.3			

Make sure the table fits within the column, there is a single line space above and below the table and the text is formatted as body text.

21	For	mat only the text in the top row of the table to be:	
	•	bold	

- centre aligned
- Apply light grey shading (20 40%) to only the top two rows of the table.
- 23 Find a clipart image of a wind turbine or windmill.

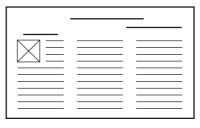
Re-size the image to a height of **3.5 cm** and maintain the aspect ratio.

Place this image:

- on the first page
- below the subheading A Global Power Source
- aligned with the top of the first paragraph
- aligned to the left margin

Make sure the text wraps round the image.

It may look like this:



24	Apply square shaped bullets to the list of benefits from:	_
47	Apply square shaped bullets to the list of benefits from.	

Higher wind speeds...

to

...No noise impact

25 Apply 1.5 line spacing to the bulleted list.

26 Save the document.

You are now go	ing to prepare	some reports	for the company.
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27	Using a suitable database package, import the file <b>JX30FFSHORE.CSV</b>
	Use the following field names and data types:

NAME	DATA TYPE	FORMAT
ID	Text	
Country	Text	
Number	Number	Integer
Name	Text	
Distance	Number	1 decimal place
Operational	Boolean/Logical	Yes/No
Capacity	Number	Integer
Depth	Number	Integer
Height	Number	1 decimal place
Diameter	Number	Integer
Sea	Text	

28	Place a screenshot showing the field names and data types used into your evidence	
	document.	_

29	Insert the following three records:	

DI DI	Country	Number	Name	Distance	Operational	Capacity	Depth	Height	Diameter	Sea
BE04	Belgium	36	Eldepasco	37.0	Yes	216	20	130.0	90	North Sea
IE01	Ireland	7	Arklow Bank	10.0	Yes	25	30	129.0	111	Irish Sea
NR01	Norway	1	Hywind	10.5	Yes	2	22	106.2	82	North Sea

31 Save the data.

		✓			
32	Produce a report from all the data which:	П			
	<ul> <li>contains a new field called Turbine_Capacity which is calculated at run-time. This field will calculate the Capacity divided by the Number of turbines</li> </ul>				
	<ul> <li>has the Turbine_Capacity field displayed to 1 decimal place</li> </ul>				
	<ul> <li>shows only the records where the Sea is North Sea or Irish Sea and Operational is Yes</li> </ul>				
	<ul> <li>shows only the fields Country, ID, Name, Number, Distance, Operational, Capacity, Height, Sea and Turbine_Capacity in this order with their labels in full</li> </ul>				
	• sorts the data into ascending order of Country and then ascending order of Name				
	fits on a single page wide				
	has a page orientation of landscape				
	• calculates the total <i>Number</i> of turbines and places it at the bottom of the report				
	<ul> <li>has a label to the left of this number Total turbines in operation</li> </ul>				
	• includes the heading <b>Power from North and Irish Seas</b> at the top of the page				
	<ul> <li>has your name, Centre number and candidate number on the right in the footer.</li> </ul>				
33	Save and print this report.				
34	Produce an extract from all the data which:	П			
	selects only those locations	ш			
	in the United Kingdom				
	in the North Sea				
	<ul> <li>with a capacity of 90 or more megawatts (MW)</li> </ul>				
	which are operational				
	<ul> <li>shows only the fields Name, Sea, Capacity in this order</li> </ul>				
	sorts the Capacity in descending order (largest to smallest)				
35	Save this data in a form which can be imported into the document that you saved in step 26.				
36	Import this data into your document as a table after the paragraph which ends: Offshore wind farms in the UK producing 90 MW or more of power are:				
	Make sure that all required fields and their labels are fully visible and that there is one blank line above and one below the extract.				
37	Spell-check and proof-read the document.				
	Place page breaks, if necessary, to make sure that:	ш			
	tables do not overlap two columns or pages				
	bulleted lists do not overlap two columns or pages				
	there are no widows				
	there are no orphans				
	there are no blank pages.				
	Make sure all formatting is consistent throughout your document.				
38	Save the document.				
	Print the document.				

are now going to create a short presentation.	
	✓
Import the file <b>JX3PRES.RTF</b> placing the text as slides in your presentation software.	
Remove any blank slides.	_
(This should provide six slides, each containing a title and some bullet points.)	
The master slide must have:	П
a white background	_
• the image <b>LOGO.JPG</b> placed in the top right corner; the height of the image should be 2.5 cm and the aspect ratio should be maintained	
<ul> <li>your Centre number, candidate number and name in a 10 point black serif font in the bottom right corner</li> </ul>	
automatic slide numbers in the bottom left corner	
<ul> <li>a horizontal black line, 3 points wide, across the slide below the image</li> </ul>	
<ul> <li>the text Renewable Energy in a black 72 point serif font above the line, left aligned; make sure the text does not wrap.</li> </ul>	
No master slide elements, text or images should overlap on any slides.	
Apply all master slide elements to all slides.	
Insert a new slide before slide 1. Use a layout with a title and subtitle for the new slide.	
Enter the text <b>Wind Power in Europe</b> as the title.	П
Enter the text <b>Progress since 1 January 2009</b> as a subtitle.	
Delete the slide with the title EUROPEAN TARGETS.	
Move the slide with the title <i>PRODUCTION</i> so that it becomes slide 3.	
Create a vertical bar chart using the table in <b>JX3CAPACITY</b> to show the predicted growth in global wind power capacity between 2010 and 2015.	
Label the chart with	
the title Global Wind Power Capacity	ш
category series labels displayed in full	
<ul> <li>axis titles as Region and Wind Power Capacity (MW)</li> </ul>	
Place the chart to the left of the bullet points on the slide with the title <i>GROWTH PREDICTIONS</i> .	
Save the presentation.	
Print the presentation with six slides to the page.	ш
Print the slide with the title GROWTH PREDICTIONS as a full slide.	
	Import the file JX3PRES.RTF placing the text as slides in your presentation software. Remove any blank slides.  (This should provide six slides, each containing a title and some bullet points.)  The master slide must have:  • a white background  • the image LOGO.JPG placed in the top right corner; the height of the image should be 2.5 cm and the aspect ratio should be maintained  • your Centre number, candidate number and name in a 10 point black serif font in the bottom right corner  • automatic slide numbers in the bottom left corner  • a horizontal black line, 3 points wide, across the slide below the image  • the text Renewable Energy in a black 72 point serif font above the line, left aligned; make sure the text does not wrap.  No master slide elements, text or images should overlap on any slides.  Apply all master slide elements to all slides.  Insert a new slide before slide 1. Use a layout with a title and subtitle for the new slide.  Enter the text Wind Power in Europe as the title.  Enter the text Progress since 1 January 2009 as a subtitle.  Delete the slide with the title EUROPEAN TARGETS.  Move the slide with the title PRODUCTION so that it becomes slide 3.  Create a vertical bar chart using the table in JX3CAPACITY to show the predicted growth in global wind power capacity between 2010 and 2015.  Label the chart with  • the title Global Wind Power Capacity  • category series labels displayed in full  • axis titles as Region and Wind Power Capacity (MW)  Place the chart to the left of the bullet points on the slide with the title GROWTH PREDICTIONS.  Save the presentation.  Print the presentation with six slides to the page.

49	Prepare an email message:  to be sent to the group called Energy Team (from your address book)  copied to design.h@cie.org.uk  with the subject line Offshore wind farms	
	<ul> <li>The body text of the message should include:</li> <li>your name</li> <li>your Centre number</li> <li>your candidate number</li> <li>the text: The annual report is attached for your information.</li> </ul>	
50	Attach to your email the document which you saved at step 38.	
51	Take a screenshot of this email, showing clearly that the attachment is present, and place it in your evidence document.	
	Send the email.	
52	Save and print the evidence document.	
Write	e today's date in the box below.	
Date		

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