

Candidate forename		Candidate surname	
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Centre number						Candidate number				
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**OXFORD CAMBRIDGE AND RSA EXAMINATIONS  
ADVANCED SUBSIDIARY GCE**

**G061**

**INFORMATION AND COMMUNICATION  
TECHNOLOGY**

**Information, Systems and Applications**

**FRIDAY 27 MAY 2011: Morning**

**DURATION: 2 hours**

**SUITABLE FOR VISUALLY IMPAIRED CANDIDATES**

**Candidates answer on the question paper.**

**OCR SUPPLIED MATERIALS:**

**None**

**OTHER MATERIALS REQUIRED:**

**None**

**READ INSTRUCTIONS OVERLEAF**

## **INSTRUCTIONS TO CANDIDATES**

- **Write your name, centre number and candidate number in the boxes on the first page. Please write clearly and in capital letters.**
- **Use black ink. Pencil may be used for graphs and diagrams only.**
- **Read each question carefully. Make sure you know what you have to do before starting your answer.**
- **Write your answer to each question in the space provided. Additional paper may be used if necessary but you must clearly show your candidate number, centre number and question number(s).**
- **Answer ALL the questions.**

## **INFORMATION FOR CANDIDATES**

- **The number of marks is given in brackets [ ] at the end of each question or part question.**
- **The total number of marks for this paper is 120, of which marks are allocated to the assessment of the quality of written communication where an answer requires a piece of extended writing.**

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**Progressville is a small village and is trying to raise money by hiring out its village hall. They have set up a committee to oversee the project.**

**1 The committee needs to let people know that the hall is available for hire.**

**(a) One method they could use to convey information is text.**

**Identify and give an advantage of TWO other methods they could use to convey information.**

**1** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**2** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**[4]**



**2 The committee will need a computer to organise the bookings.**

**(a) The computer will need to have applications software such as spreadsheet, database, word processor and desktop publisher installed.**

**Identify TWO other different types of software that could be installed and for each, give an example of its use by the committee.**

**1** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**2** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ **[4]**

**(b) The committee has graphics software installed on its computer.**

**Identify TWO tasks that the graphics software could be used to complete.**

**1** \_\_\_\_\_  
\_\_\_\_\_

**2** \_\_\_\_\_  
\_\_\_\_\_ **[2]**

**(c) The committee wants to produce a leaflet advertising the hall.**

**Describe, using examples, how the following can affect the quality of information included in the leaflet.**

**Completeness** \_\_\_\_\_

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**Presentation** \_\_\_\_\_

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**Relevance** \_\_\_\_\_

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**[6]**

**(d) The leaflet will contain headers, sections and frames.**

**Describe the characteristics of headers, sections and frames.**

**Headers** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Sections** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Frames** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_ **[6]**



**(e) The committee needs to transfer the leaflet between its members' computers so they can all help create it. The leaflet, including photographs, will be no more than 900MB.**

**(i) Identify an appropriate storage device that could be used to transfer the leaflet between different computers.**

\_\_\_\_\_ [1]  
\_\_\_\_\_

**(ii) Justify your choice of device.**

\_\_\_\_\_ [1]  
\_\_\_\_\_

**3 The committee has asked a company to create a database that it can use to store details about the hire of the hall.**

**(a) Describe, using examples, the role of referential integrity and attributes in databases.**

**(i) Referential Integrity**

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**[2]**

**(ii) Attributes**

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**[2]**

**(b) The data has been normalised.**

**(i) Give TWO characteristics of data in first normal form (1NF).**

1 \_\_\_\_\_

\_\_\_\_\_

2 \_\_\_\_\_

\_\_\_\_\_ [2]

**(ii) Give TWO characteristics of data in third normal form (3NF).**

1 \_\_\_\_\_

\_\_\_\_\_

2 \_\_\_\_\_

\_\_\_\_\_ [2]

**(c) Select the most appropriate data type for the following fields from the database and give a reason for your choice:**

**House Number**

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**Price Per Hour**

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**HireID**

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**[6]**

**(d) Data entered into the database needs to be verified and validated.**

**(i) What is the purpose of verification?**

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[1]

**(ii) Describe TWO different VALIDATION methods suitable for a telephone number.**

**1** \_\_\_\_\_

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**2** \_\_\_\_\_

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[4]

**(e) The database can have different styles of user interface.**

**Describe the following styles of user interface and for each give an example of how it could be used in the database.**

**Command based** \_\_\_\_\_

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**Menus** \_\_\_\_\_

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**[4]**

**(f) The database will have a tailored data entry screen.**

**One of the design considerations for the tailored data entry screen is colour.**

**Describe THREE other design considerations for the tailored data entry screen.**

**1** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**2** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**3** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**[6]**





**5 The committee want to create a model to predict income from the hire of the hall over the next three years.**

**(a) Explain THREE advantages of using a spreadsheet to create the model.**

**1** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**2** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**3** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_ **[6]**

**(b) Explain, using examples, how functions and formulae could be used when creating the spreadsheet model.**

**Functions** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Formulae** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_ **[4]**

**6 The committee has set up a website that can be used to give information about the village hall and be used to book the hall.**

**(a) The website uses static and dynamic queries.**

**Describe the difference between a static and a dynamic query.**

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[2]

**(b) Potential visitors could use a search engine to find the village hall website.**

**(i) Give an example of a SIMPLE query that could be typed into a search engine to find the village hall website.**

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[1]

**(ii) Give an example of a COMPLEX query that could be typed into a search engine to find the village hall website.**

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[1]

**7 The committee wants to produce a letter to be sent to every household in the village letting them know about the new website.**

**Mail merge is to be used to personalise the letter for each recipient.**

**(a) A wizard is going to be used to create the mail merge.**

**Describe TWO advantages of using the wizard to create the mail merge.**

**1** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**2** \_\_\_\_\_

\_\_\_\_\_

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\_\_\_\_\_ **[4]**

**(b) Identify the steps that must be completed to create the mail merge.**

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**[4]**



**(b) The presentation can be hierarchical or non linear.**

**(i) Describe the term non linear presentation.**

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[2]

**(ii) Give TWO advantages of the presentation being non linear.**

**1** \_\_\_\_\_

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**2** \_\_\_\_\_

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[2]

**(c) The presentation could use automatic or manual transition.**

**Describe TWO advantages of using manual transition for the village hall presentation.**

**1** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**2** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**[4]**



**9 The data stored on the committee's computer has been stolen.**

**(a) The Computer Misuse Act (1990) (CMA) can be used to prosecute the thief.**

**Identify THREE provisions of the CMA and for each, give an example of an action that could be prosecuted under that provision.**

**1** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**2** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**3** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_ **[6]**

**(b) Describe TWO security methods the committee could implement to prevent data being stolen from its computer in the future.**

**1** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**2** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_ **[4]**

**10 Identify TWO safety problems relating to the use of ICT.**

**For each safety problem give an appropriate different solution.**

**1** \_\_\_\_\_  
\_\_\_\_\_

**Solution** \_\_\_\_\_  
\_\_\_\_\_

**2** \_\_\_\_\_  
\_\_\_\_\_

**Solution** \_\_\_\_\_  
\_\_\_\_\_

**[4]**







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