

**Modified Enlarged 18pt
OXFORD CAMBRIDGE AND RSA EXAMINATIONS
Monday 10 January 2022 – Morning**

Level 3 Cambridge Technical in IT

05838/05839/05840/05841/05842/05877

Unit 1: Fundamentals of IT

Time allowed: 1 hour 30 minutes plus your additional time allowance

**You must have:
a calculator**

Please write clearly in black ink.

**Centre
number**

--	--	--	--	--

**Candidate
number**

--	--	--	--

First name(s) _____

Last name _____

**Date of
birth**

D	D	M	M	Y	Y	Y	Y
---	---	---	---	---	---	---	---

READ INSTRUCTIONS OVERLEAF

INSTRUCTIONS

Use black ink. You can use an HB pencil, but only for graphs and diagrams.

Write your answer to each question in the space provided. If you need extra space use the lined pages at the end of this booklet. The question numbers must be clearly shown.

Answer ALL the questions.

INFORMATION

The total mark for this paper is 80.

The marks for each question are shown in brackets [].

Quality of extended response will be assessed in questions marked with an asterisk (*).

ADVICE

Read each question carefully before you start your answer.

SECTION A

Answer ALL the questions.

Put a tick (✓) in the box next to the ONE correct answer for each question.

1 Which of the following is a characteristic of an embedded computer system? [1]

A Able to carry out a wide range of tasks

B Can be upgraded by a user

C Contains a complex user interface

D Low power consumption

2 Which hardware is needed to connect a tablet computer to the internet? [1]

A NIC

B Router

C Server

D Wireless Access Point (WAP)

3 Which of the following is a development tool? [1]

A CAD/CAM

B Compiler

C Project Management

D Spreadsheet

4 Which of the following is a benefit of off-the-shelf software? [1]

A Available immediately

B Free

C Has lots of extra features

D Requires an annual fee

5 Which communication method allows real-time internet chat conversations? [1]

A Email

B Instant messaging

C Short Messaging Service

D Voice over Internet Protocol

6 FTP stands for:

A Fast Transfer Protocol

B File Transfer Protocol

C File Translation Protocol

D Final Transistor Position

[1]

7 Which of the following is NOT a form of virtualisation? [1]

A Client

B Cloud

C Hypervisor

D Storage

8 Which connectivity method would be the most suitable to create a secure link between two banks? [1]

A ADSL

B Ethernet

C ISDN

D Leased Line

9 Which communication method would be most affected by a noisy environment? [1]

A Email

B Group discussion

C Letter

D Social networking

10 Identify the personal attribute required to be a network manager. [1]

A Body language

B Can do attitude

C Eye contact

D Planning and organisation skills

11 Which of the following demonstrates that an employee is ready to work? [1]

A Bias

B Personal grooming

C Problem-solving skills

D Respect

12 Which of the following is NOT a purpose of a professional body? [1]

A Gain industry certification

B Organise industrial action

C Provide forums for discussion

D Regulation of standard operating procedures

13 Which operational issue would be implemented if a flood affected a business's computer systems? [1]

A Acceptable use policy

B Change management

C Disaster planning and recovery

D Health and Safety

14 Which of the following is NOT a feature of providing remote access for a business's employees? [1]

A Allows high level of security

B Easily scalable

C Only accessible through one type of device

D User friendly

15 Which digital security method can be linked to user groups when protecting a computer system? [1]

A Anti-spyware

B Biometrics

C Encryption

D Username and password

SECTION B

Answer ALL the questions.

Strange Karga Arts (SKA) is a large computer games development company, specialising in games for mobile platforms. The SKA main office is based in one building in Dundee. The mainframe computer is located on the second floor of this building.

The team members in the main office are responsible for monitoring the development of any new games as well as rendering and publishing the final games.

Developers, who create the games, are based all over the United Kingdom and work from home. The developers are monitored by the team members based in Dundee to ensure that the games are being developed to schedule.

16 The developers work from home creating the digital artwork for the games.

(a) Identify and describe TWO input devices that the developers would use to create the digital artwork for the game.

1 _____

2 _____

[4]

(b) Identify and explain ONE limitation that would need to be considered by the developers when purchasing a desktop computer to use to create the digital artwork.

[3]

19 The main office in Dundee has a LAN network.

(a) Identify and explain TWO advantages to SKA of using a LAN network in its main office.

1 _____

2 _____

(b) The LAN uses a client server topology.

Describe ONE characteristic of a client server topology.

[2]

(c) When the developers have created the digital artwork for the games, the digital artwork files are stored on a database server.

Explain why a database server is suitable for this task.

[3]

(d) The files containing games players' scores can be measured in nibbles.

Explain what is meant by a nibble.

[2]

20 Strange Karga Arts (SKA) use a Management Information System (MIS) to track the development of the games.

Identify and describe TWO advantages and ONE disadvantage of using an MIS. Use examples related to SKA to support your answers. [9]

Advantage 1 _____

Advantage 2 _____

Disadvantage _____

21 SKA have advertised for a new animator to develop a game.

(a) Identify and describe THREE personal attributes that SKA should look for in a new animator.

1 _____

2 _____

3 _____

22 Identify TWO physical protection methods that SKA could implement in the Dundee office to protect their new computer games.

1 _____

2 _____

[2]

END OF QUESTION PAPER



Oxford Cambridge and RSA

Copyright Information:

OCR is committed to seeking permission to reproduce all third-party content that it uses in its assessment materials. OCR has attempted to identify and contact all copyright holders whose work is used in this paper. To avoid the issue of disclosure of answer-related information to candidates, all copyright acknowledgements are reproduced in the OCR Copyright Acknowledgements Booklet. This is produced for each series of examinations and is freely available to download from our public website (www.ocr.org.uk) after the live examination series.

If OCR has unwittingly failed to correctly acknowledge or clear any third-party content in this assessment material OCR will be happy to correct its mistake at the earliest possible opportunity.

For queries or further information please contact the Copyright Team, OCR (Oxford Cambridge and RSA Examinations), The Triangle Building, Shaftesbury Road, Cambridge CB2 8EA.

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