

**INFORMATION AND COMMUNICATION
TECHNOLOGY**

ICT in Today's World

WEDNESDAY 17 MAY 2017:

Morning

DURATION: 1 hour

plus your additional time allowance

MODIFIED ENLARGED 24pt

Candidate forename		Candidate surname	
Centre number		Candidate number	

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. HB pencil may be used for graphs and diagrams only.

Answer ALL the questions.

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).

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 60.

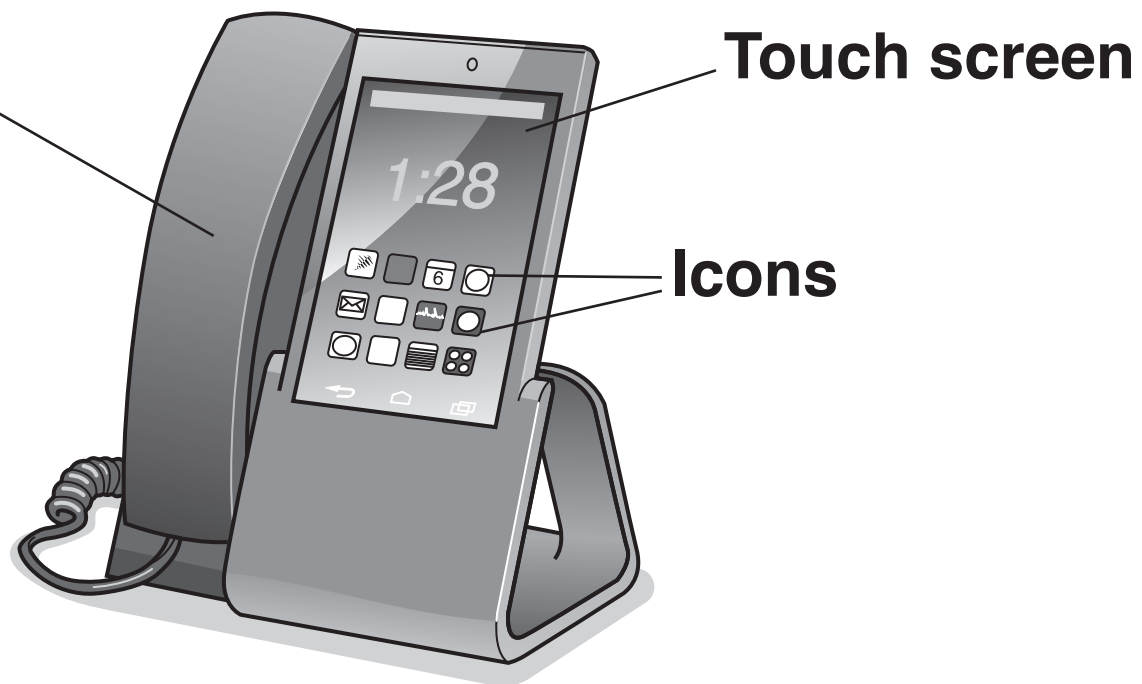
Quality of Written Communication will be assessed in questions marked with an asterisk (*).

Any blank pages are indicated.

- 1 A multi-national company has a Voice-over-IP (VoIP) telephone system for use by its employees. FIG. 1 shows a VoIP telephone unit.

FIG. 1

Handset with microphone and speaker



- (a) Explain why each of the following hardware devices is included as part of the VoIP telephone unit:

(i) Microphone _____

_____ [2]

(ii) Speaker _____

_____ [2]

(iii) Touch screen _____

_____ **[2]**

(b) What is the purpose of an icon?

_____ **[2]**

(c) Describe how a VoIP system sends a voice message from one telephone to another.

_____ **[3]**

(d) (i) Describe TWO advantages to the COMPANY of its employees using a VoIP telephone system.

1 _____

2 _____

[4]

(ii) Explain ONE disadvantage to the EMPLOYEES of using a VoIP telephone system.

[2]

2 A manufacturing company employs 100 engineers to make parts for machines. Each engineer is required to write down details of each job on a paper job sheet. A database has been created to store the information gathered from the job sheets.

(a) Data can be stored in the database in any of the following data types:

integer;

real number;

date;

Boolean;

text.

Complete the table below to identify the MOST appropriate data type for each field in the database. [6]

Field name	Example data	Data type
Job_number	10998012	
Engineer_family_name	Broonell	
Engineer_first_name	Robert	
Part_ID	PNX299R	
Hours_worked	5.5	
Date_job_completed	22/10/2016	

***3 Many homes have high-speed access to the internet. A home-based local area network (LAN) enables users to make good use of the high-speed internet access.**

Discuss the benefits and drawbacks of having a LAN in a home. [8]

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

- 4 Hilda is a new student and is setting up folders for her files in her storage area on the school network.**

Explain how Hilda should organise and name her folders to ensure the efficient storage and retrieval of her files.

[illegible]

5 Malicious software, such as key logging software, can cause problems for users.

(a) Explain how key logging software is used to commit fraud.

[4]

(b) Describe ONE way a user could reduce the risks from key logging software on their computer.

[2]

6 Prolonged use of computers can cause health problems such as repetitive strain injury (RSI) and eye strain. Taking regular breaks away from the computer is one way that computer users can try to prevent these problems.

(a) State ONE other way, apart from taking regular breaks, that a computer user can try to avoid getting RSI.

_____ **[1]**

(b) State TWO other ways, apart from taking regular breaks, that a computer user can try to avoid getting EYE STRAIN.

1 _____

2 _____

_____ **[2]**

***7 There are billions of digital devices in use around the world. These devices affect the environment in a range of ways.**

Discuss the environmental impact of digital devices. [8]

[illegible]

END OF QUESTION PAPER

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