OCR

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GCSE INFORMATION AND COMMUNICATION TECHNOLOGY

B063/02/PRE   ICT in Context

PRE-RELEASE MATERIAL

JUNE 2014

INSTRUCTIONS TO CANDIDATES

*   This pre-release material may be given to candidates at any time after receipt by the Centre.

INFORMATION FOR CANDIDATES

*   You may make yourself familiar with the pre-release material before you take the examination.
*   You must **not** take notes into the examination.
*   **A clean copy of this pre-release material will be given to you with the question paper.**
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*   This document consists of **2** pages. Any blank pages are indicated.

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Turn over

TechMed2014 is a modern health care provider. It has opened four new hospitals in different parts of the UK. Each hospital has a number of consulting rooms, four wards where in-patients stay and an operating theatre. Each hospital also has offices for administration.

Technology is used extensively throughout the hospitals in the diagnosis and treatment of patients and to support the day-to-day running of the hospital business.

A computer network is installed throughout each hospital. Some staff access information using hand-held devices and wireless technology. All the hospitals are able to share information using Wide Area Networking technology.

A website using Web 2.0 technologies is used to communicate with patients and members of the public.

TechMed2014 stores patients' medical records electronically. The medical team can access these records using a number of different devices. Expert systems can also be accessed by the medical team.

A patient-monitoring system is installed on each hospital bed. This system has a number of sensors which can take medical readings that are uploaded automatically to the patient's medical record. A bedside patient entertainment system is also provided.

In the future, doctors will be able to use telepresence technologies, including remote surgery, to work between hospitals.

Electronic signs and large screen displays are used in each hospital to give information about the hospital and its services.

Some administration staff from the hospitals are able to work from home.

TechMed2014 strives to be a paper-free organisation.

You need to research the following in relation to a medical environment:

- ICT hardware and software used in hospitals
- hardware and software needed to allow staff to work from home
- the uses of wireless technologies and hand-held devices
- security methods and devices, including biometrics
- advantages and disadvantages of storing patients' records electronically
- sensors and their uses in hospitals
- uses of expert systems
- methods of making websites accessible to people with disabilities
- telepresence technologies and their uses, including remote surgery
- entertainment technologies.