

Level 3 Cambridge Technical Extended Diploma in Applied Science

Scheme number - 05874

Unit 22 Global Scientific Information

Sample Assessment Material

PRE-RELEASE MATERIAL

INSTRUCTIONS TO TUTORS

- This material must be issued 6 weeks prior to the published examination date.

INSTRUCTIONS TO CANDIDATES

- This is a clean copy of the pre-release material which you may have already seen.
- You may **not** take your previous copy of the pre-release material into the examination.
- You may **not** take notes into the examination.

INSTRUCTIONS TO EXAMS OFFICER/INVIGILATOR

- Do not send this pre-release for marking; it should be retained in the centre or recycled.
- Please contact OCR Copyright should you wish to re-use this document.

INFORMATION

- This pre-release material contains research sources on a common theme, upon which examination questions will be based.
- The Question Paper will require learners to respond to questions which are directly about the sources in the pre-release material and others which are associated with the theme of the pre-release but not directly about the sources provided.
- Learners also need to conduct research of their own linked to the pre-release material during the 5 weeks they have access to the document.
- Part of the Question Paper will be based upon the research each learner has undertaken.
- This document consists of 5 pages.

Pre-release research brief

You should carry out your own research on the themes given in this research brief. Your research will help you prepare for your examination.

Your research is only for your own use. You must not bring your notes into the examination. A clean copy of this research brief will be provided in the examination.

In your research you should consider the following themes.

- legislation and regulation relating to information security and data protection in the UK and overseas
- different information formats used to store the findings of scientific research
- quality of information and how it can affect organisations
- principles of information security
- operation of scientific organisations in terms of legislation and regulation
- access issues affecting the sharing of data across the globe
- relevance of online libraries.

The questions in Part A of the examination will require you to draw on the knowledge and understanding which you have gained while researching these themes.

Instructions:

Read the following two pages of information.

Carry out your own research on the themes given above.

Information technology and a growing scientific organisation.

Organisational profile

Mid-Cheshire Scientific Research (MCSciR) is an independent research company which accesses funding through grant applications. MCSciR provides specific research support to large drug companies.



MCSciR currently carries out:

- scientific analysis of its own research activities and those of the companies for which it provides support
- microbiological research
- drug development.

It has built a reputation for innovative research and careful analysis of findings and is highly regarded within the scientific community.

MCSciR's Senior Researcher has suggested that the company should expand into genetic research. This will allow the organisation to access additional funding and to build on its current strong research base. She argues that genetic research has become essential in the difficult fields of diagnosis and treatment of not only genetic disorders but also infectious diseases and non-communicable diseases. The following areas are currently being considered for future development:

- genetic testing
- gene therapy
- genetic databanks for pharmacogenomics.

MCSiR already has a library of resources for its current range of interests, which include paper and digital resources related to its own research. These are held in its headquarters in Winwich but can also be accessed from its other locations in Eastwich, Westwich and Southwich, all within a ten-mile radius. Additionally, it has purchased access to several online libraries including universities in the UK, USA and Europe to support future developments.

The library also includes a list of all funding bodies which support the company's areas of research, together with current funding, new funding opportunities, copies of the policies and documentation related to how to put a funding bid together.

All research data are held in the research database. The data include, funding details, nature of the research, research activities, raw data arising from the activities and analysed results ready for publication.

This database holds a range of patient data and research data which has been created and owned by MCSiR. The research data created by MCSiR and also on behalf of or in partnerships with other collaborating institutions. MCSiR shares research data with the wider public and other institutions as a free resource.

MCSiR has a Data Protection Officer and an Information Security Officer. They are responsible for ensuring that all data and information systems are secure and meet the requirements of relevant legislation and regulations.