OCR
RECOGNISING ACHIEVEMENT

16–20 January 2012

PRINCIPAL LEARNING LEVEL 2
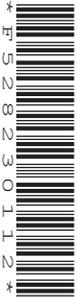## ENGINEERING

F548/01   The Engineered World

Candidates answer on the Question Paper.

OCR supplied materials:
* Workplace scenario (inserted)

Other materials required:
* Digital recorder

Candidate forename		Candidate surname	

Centre number						Candidate number				

INSTRUCTIONS TO CANDIDATES

* The Insert will be found in the centre of this document.
* Write your name, centre number and candidate number in the boxes above. Please write clearly and in capital letters.

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**.
* This document consists of **8** pages. Any blank pages are indicated.

OCR is an exempt Charity

Turn over

Format for viva-voce examination of OCR Diploma in Engineering F548 Level 2 Unit 1
The engineered world

The viva-voce should be conducted in a quiet location where there will be no interruptions and the learner has no distractions, external contacts or access to unauthorised materials.

The centre is required to provide a digital recorder that can store up to 15 minutes of video of the viva-voce. The profiles of the learner and presenter should be clearly visible on camera. An independent invigilator must also be present.

Additionally the presenter has the opportunity to record, using **brief** notes if necessary, the key points raised by the learner, using the pages provided in this booklet.

- Before the viva-voce starts the learner should be asked to complete the front cover of this booklet.
- The presenter should check that the learner has their personal workbook compiled for this unit.
- The presenter should check with the learner which engineer, engineering achievement and sectors they are going to talk about.

Before recording the viva-voce the presenter should:

1. Ask the learner to be seated.

2. Explain the format of the viva-voce to the learner by reading to them the following information:

   - Your viva-voce will last for 15 minutes.
   - Firstly I will ask you to state your name, centre number and candidate number as soon as we start.
   - I will be asking you six questions, which you must try to answer.
   - You will be talking about some aspects of the research you have undertaken.
   - You may refer to your personal workbook if you feel it would help.
   - You must remember to speak clearly and confidently.
   - While you are speaking I might be making brief notes of what you say in this booklet.

3. Ask the learner if they are ready to begin.

The presenter will then say:

"You have a maximum of 15 minutes to answer the questions. After 15 minutes you will have to stop and the recording will finish. I will let you know when there are 2 minutes left".

The camera will then be switched on and an indication will be given to the learner and presenter that the viva-voce has started.

The presenter will then say:

"Please tell me your name, centre number and candidate number and please remember to speak clearly".

"Thank you, your fifteen minutes start now."

1   (a) "Please identify an engineering achievement that you have researched".

[1]

(b) "Explain how people's lives have changed as a result of this engineering achievement (these are known as human effects)".

[9]

[Total: 10]

2   "Please tell me about any political issues which may have driven the development of the engineering achievement you have researched".

[10]

3   "Choose an engineering professional body and explain the nature of the work they do".

[10]

4 (a) "Please name two engineering sectors you have studied".

[2]

(b) "Describe the job role of **a professional person** within any engineering sector".

[8]

[Total: 10]

5 (a) "What is the difference between renewable and non renewable resources"?

[2]

(b) "Now, please tell me about recycling of materials in the engineering industry".
You need to give examples of recycling in your answer.

[8]

[Total: 10]

6 "Now I am going to give you a workplace scenario".

(The presenter gives the learner a printed copy of the workplace scenario and also reads the scenario out).

Martin, aged 17, has just started work in an engineering workshop. The supervisor tells him that he will be shown how to operate a cutting machine. During initial training, Martin was told about young persons using machinery and is worried that he should not be using this equipment.

"Now I am going to ask you a question about the workplace scenario".

"What can you tell Martin about his responsibilities as a young person using a machine and the responsibilities of his employer?"

[10]

....

If there is time after all of the questions have been answered the presenter may repeat any questions and give the learner the opportunity to add to their earlier answers.

When the learner indicates they have finished all questions and the learner has finished speaking, the presenter then says:
"The viva-voce is over and the camera will now be switched off".

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At no time should the centre staff enter into any discussion about learner performance.

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