

## Mark Scheme for January 2011

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This mark scheme is published as an aid to teachers and students, to indicate the requirements of the examination. It shows the basis on which marks were awarded by Examiners. It does not indicate the details of the discussions which took place at an Examiners' meeting before marking commenced.

All Examiners are instructed that alternative correct answers and unexpected approaches in candidates' scripts must be given marks that fairly reflect the relevant knowledge and skills demonstrated.

Mark schemes should be read in conjunction with the published question papers and the Report on the Examination.

OCR will not enter into any discussion or correspondence in connection with this mark scheme.

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By nature of the assessment criteria and the type of questions a definitive marking scheme is not available.

### Question One

- (a) **“Please identify an engineering achievement that you have researched.”**
- (b) **“Explain any social effects that have resulted from this engineering achievement.”**

Band 1 Limited explanation – award one mark for identifying an engineering achievement and up to a further two marks for relevant points about social effects that have resulted from this achievement.

Band 2 Adequate explanation – award one mark for identifying an engineering achievement and up to a further five marks for including depth or breadth regarding the social effects that have resulted from this achievement.

Band 3 Detailed explanation – award one mark for identifying an engineering achievement and up to a further nine marks for including clear and logical examples of the social effects that have resulted from this achievement.

Depth: Expansion of a single social effect.

Breadth: Expansion involving multiple social effects.

[1]

[9]

[Total: 10]

### Question Two

**“Please tell me about any human issues which may have driven the development of the engineering achievement you have researched.”**

Band 1 Limited explanation – award one mark for identifying a single human issue and up to a further two marks for relevant points.

Band 2 Adequate explanation – award up to six marks for a response that considers at least two human issues in depth or breadth.

Band 3 Detailed explanation – award up to six marks for a response that considers at least two human issues and up to a further four marks for including logical and relevant supporting evidence that demonstrates both depth and breadth.

Depth: Expansion of a single human issue.

Breadth: Expansion involving the linking of human issues with other issues e.g. political, social and economic.

[10]

**Question Three**

**“Please tell me what you have found out about a specific engineering professional body”.**

Band 1 Limited information – award one mark for identifying an appropriate professional body and up to a further two marks for relevant points about the professional body.

Band 2 Adequate information – award one mark for identifying an appropriate professional body and up to a further five marks for explaining the work it does.

Band 3 Detailed information – award one mark for identifying an appropriate professional body and up to a further nine marks for explaining the work it does and outlining the merits of membership including logical and relevant supporting evidence.

[10]

**Question Four**

**(a) “Now, please tell me the two engineering sectors you have studied.”**

**(b) “Describe the job of a craft person within one of these engineering sectors”.**

Band 1 Limited information – award one mark for stating each sector and a further mark for a relevant point relating to a craft job.

Band 2 Adequate information – award one mark for stating each sector and up to a further four marks for a response with depth or breadth about a craft job.

Band 3 Detailed information – award one mark for stating each sector and up to a further eight marks for a response with depth and breadth about a craft job including logical and relevant supporting evidence.

Depth: Focussing on a single job role in the sectors.

Breadth: Multiple job roles in the sectors.

[2]

[8]

[Total: 10]

**Question Five**

**For the two sectors you have studied tell me about an environmental effect and its cause. You need to give one example for each sector.**

Band 1 Limited information – award up to three marks for explaining the environmental effect and its cause for one sector.

Band 2 Adequate explanation – award up to six marks for explaining the environmental effect and its cause for two sectors in depth or breadth.

Band 3 Detailed explanation – award up to six marks for explaining the environmental effect and its cause for two sectors and up to a further four marks for a response with breadth and depth including logical and relevant supporting evidence.

Depth: Focussing on a single effect and its cause for each sector.

Breadth: Focussing on a single effect for each sector, showing multiple causes.

[10]

**Question Six**

**“Finally, 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).**

**Harry, aged 17, has just started work in an engineering workshop. The pay roll manager has told him that he will be paid £3.00 per hour and have one week’s holiday per year. Harry has read a booklet about pay and holiday entitlement and is worried that these conditions are not conforming to national standards.**

**“Now I am going to ask you a question about the workplace scenario”.**

**“What would you in these circumstances advise Harry about his rights as an employee”.**

Band 1 Limited explanation – award one mark for a basic definition of the rights of an employee, and up to a further two marks for a response making reference to legal responsibilities.

Band 2 Adequate explanation – award one mark for a basic definition of the rights of an employee, and up to a further two marks for a response making reference to legal responsibilities and up to a further three marks for a response which includes relevant examples that demonstrates depth or breadth.

Band 3 Detailed explanation – award one mark for a basic definition of the rights of an employee, and up to a further two marks for a response making reference to legal responsibilities and up to a further seven marks for a response which includes logical and relevant supporting evidence that demonstrates both depth and breadth.

Depth: Focusing on a single right as an employee.

Breadth: Covering a range of employee rights

**[10]**

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