

CAMBRIDGE INTERNATIONAL EXAMINATIONS

Cambridge International General Certificate of Secondary Education

MARK SCHEME for the October/November 2015 series

**0417 INFORMATION AND COMMUNICATION
TECHNOLOGY**

0417/02

Paper 2 (Practical Test A), maximum raw mark 80

This mark scheme is published as an aid to teachers and candidates, to indicate the requirements of the examination. It shows the basis on which Examiners were instructed to award marks. It does not indicate the details of the discussions that took place at an Examiners' meeting before marking began, which would have considered the acceptability of alternative answers.

Mark schemes should be read in conjunction with the question paper and the Principal Examiner Report for Teachers.

Cambridge will not enter into discussions about these mark schemes.

Cambridge is publishing the mark schemes for the October/November 2015 series for most Cambridge IGCSE[®], Cambridge International A and AS Level components and some Cambridge O Level components.

| | | | |
|---------------|--|-----------------|--------------|
| Page 2 | Mark Scheme | Syllabus | Paper |
| | Cambridge IGCSE – October/November 2015 | 0417 | 02 |

Name and candidate number

Centre number

Header – name and candidate number
left aligned, Centre number right aligned 1 mark

Company information release

Details presented by: Candidate

SKKDSA is an engineering company specialising in chemical engineering. The company offers engineering. It is a multi-disciplinary company offering Economic and Feasibility Studies

Title data entry as stated, right aligned 1 mark
24 pt, sans-serif & underlined 1 mark

Subtitle data entry as stated, left aligned 1 mark
18 pt sans-serif & italic 1 mark

Section break placed correctly,
Two columns, continuous same page 1 mark
1 cm column spacing 1 mark

engineering projects.
analysis and design
through to implementation, construction and testing.

- Conceptual and Preliminary Design
- Construction Specifications and Contractor Bid Evaluation
- Conceptual Engineering and Estimating
- Planning and Scheduling
- Preliminary and Detailed Design
- Equipment Specifications
- Equipment and
- Environmental
- Start-up Assistance
- Project and Construction Cost Estimating
- Construction Management
- Inspection/QA/QC
- Operator Training

Bullets applied to list 1 mark
Square shaped bullets 1 mark
Single line space, no space between 1 mark

Staff expertise

The company has, at present, staff of over 75 engineers, designers and draftsmen. Their civil/structural, process/mechanical, electrical, instrumentation, and construction management departments are experienced in all aspects of industrial facility design and construction.

Subheads identified, 14 pt, sans-serif, bold, and centre aligned 1 mark

Project Management

Projects include municipal water and waste treatment facilities, desalination plants for sea and brackish water as well as surface water treatment, handling and



Image placed correctly with text wrapped 1 mark
Aligned top of text and right margin 1 mark
Resized to fill half column with aspect ratio maintained 1 mark

They can design and install desalination plants, water treatment plants, pipeline and pumping stations for potable, irrigation, sewage treatment and industrial effluents. They can also be as diverse as oil refineries and chemical plants. They can also be as diverse as oil refineries and chemical plants. They can also be as diverse as oil refineries and chemical plants.

Body text 1 mark
14 point serif 1 mark
Fully justified, single line space 1 mark

Automated date left aligned 1 mark
New filename in software format right aligned 1 mark
Full file path 1 mark

| | | | |
|--------|---|----------|-------|
| Page 3 | Mark Scheme | Syllabus | Paper |
| | Cambridge IGCSE – October/November 2015 | 0417 | 02 |

Name and candidate number

Centre number

Instrumentation and Electrical Departments

Their instrumentation and electrical departments, which they

most and most technically

proficient groups, have specialised in solving the problems of

industrial clients such

companies from drilling

gas processing. They are deeply involved in attending to

clients' "emergency codes" as well as continuing their

attention.

Many

instru

backg

servic

Engin

in-hot

engineering firms.

Two spelling errors corrected 1 mark

Text added as stated 1 mark

Correct year 2011 identified 1 mark

Chart create from correct data 1 mark

Segments labelled with Commission values only 1 mark

Legend shows years 1 mark

Title correct as stated 1 mark

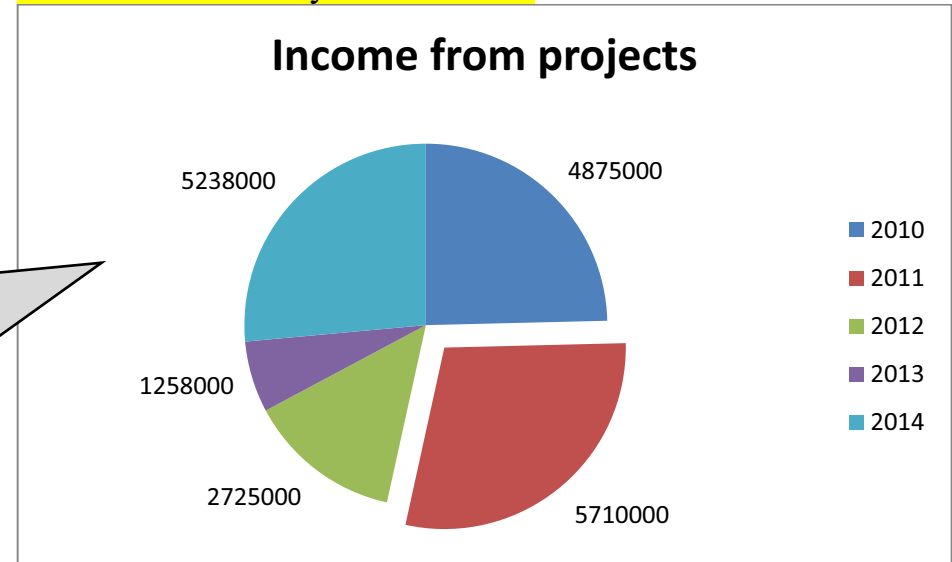
Highest Commission segment withdrawn/emphasised 1 mark

In correct place in document 1 mark

within column; not distorted 1 mark

The chart shows income generated from projects (and includes projected income from on-going work):

The chart shows that the best year was 2011.



Proof reading

No widows / orphans, no split lists 1 mark

Consistent paragraph spacing 1 mark

Document complete, with no blank pages 1 mark

| | | | |
|---------------|--|-----------------|--------------|
| Page 4 | Mark Scheme | Syllabus | Paper |
| | Cambridge IGCSE – October/November 2015 | 0417 | 02 |

On-going projects

Report title as stated 1 mark

All fields displayed, data and labels all fully visible 1 mark

| Country | Code | Client | Location | Process | Capacity | Cost | Year | Completed |
|---------|--------|------------------------|-----------------|--------------------|-----------------------|-------------|------|-----------|
| France | SKA118 | Saint Nazaire Shipyard | Queen Mary II | MED Steam | 3 unit each 650m3/day | €120,000.00 | 2014 | No |
| Germany | SKA122 | EC | Hamburg | WTP | 350 | €455,000.00 | 2014 | No |
| Germany | SKA121 | Meyer Shipyard | Norwegian Dawn | MED Steam | 3 unit each 750m3/day | €135,000.00 | 2014 | No |
| KSA | SKA106 | HM | Jeddah | SWRO | 200 | | | No |
| KSA | SKA105 | MC | Yanbu | Desalination Plant | 750 | | | No |
| Mexico | SKA124 | HVP | Puerto Vallarta | WTP | 500 | €650,000.00 | 2014 | No |
| Spain | SKA123 | JHD | Elche | WTP | 350 | €455,000.00 | 2014 | No |
| Spain | SKA115 | JHD | Elche | WTP | 350 | €455,000.00 | 2013 | No |
| Spain | SKA112 | DJJM | Almeria | WTP | 31 | | | No |
| Spain | SKA110 | DJM | Cartagena | RO | 50 | | | No |

Search Completed is No 1 mark

Three new records added as stated 3 marks

Candidate details

Sorted Country ascending 1 mark

Name, Centre number and candidate number on left below report 1 mark

Orientation landscape Fits one page wide 1 mark

Current projects 10

Label 100% accurate 1 mark

| | | | |
|--------|---|----------|-------|
| Page 5 | Mark Scheme | Syllabus | Paper |
| | Cambridge IGCSE – October/November 2015 | 0417 | 02 |

Projects since 2010

Report title as stated 1 mark

Candidate details

| Code | Client | Country | Process | Year | Completed | Commission |
|--------|----------------|---------|-----------|------|-----------|-------------|
| SKA095 | | Germany | WTP | 2010 | Yes | €91,000.00 |
| SKA096 | | Mexico | RO | 2010 | | |
| SKA097 | | Mexico | RO | 2010 | | |
| SKA098 | | | | 2010 | | |
| SKA099 | | | | 2010 | Yes | €234,000.00 |
| SKA100 | | | | 2010 | Yes | €130,000.00 |
| SKA107 | Community | Germany | MVC | 2011 | Yes | €130,000.00 |
| SKA117 | Meyer Shipyard | Germany | MED Steam | 2011 | Yes | €16,000.00 |
| SKA101 | HLP | | RO | 2011 | Yes | €78,000.00 |
| SKA102 | | | RO | 2011 | Yes | €78,000.00 |
| SKA103 | HVP | Mexico | RO | 2011 | Yes | €80,000.00 |
| SKA109 | NCDP | Egypt | MVC | 2012 | Yes | €23,400.00 |
| SKA108 | Community | Germany | MVC | 2012 | Yes | €17,800.00 |
| SKA119 | Meyer Shipyard | Germany | MED Steam | 2012 | Yes | €9,000.00 |
| SKA111 | DAB | Spain | | | | |
| SKA120 | Meyer Shipyard | Germany | | | | |
| SKA113 | Cubiglas | Spain | | | | |
| SKA114 | DAB | | RO | 2013 | Yes | €1,300.00 |
| SKA116 | AED | | RO | 2013 | Yes | €15,600.00 |

6 original fields displayed in this order 1 mark
 6 original fields, data and labels all visible 1 mark

Name, Centre number and candidate number top right of report 1 mark

Select Completed is Yes 1 mark
 Date is >2009 1 mark

New field **Commission**, positioned on right 1 mark
 Calculated cost * 20% 1 mark
 Formatted Euros with 2dp 1 mark

Sorted Year ascending 1 mark
 Then Country ascending 1 mark

Orientation portrait 1 mark

Commission earned from projects €1,469,900.00
 Calculated value of commission income 1 mark
 Placed below Commission column and formatted as Euros with 2dp 1 mark
 Label 100% accurate and placed to left 1 mark

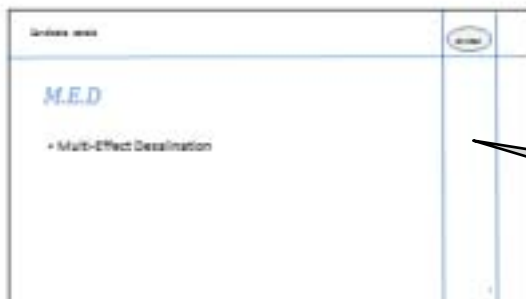
| | | | |
|--------|---|----------|-------|
| Page 6 | Mark Scheme | Syllabus | Paper |
| | Cambridge IGCSE – October/November 2015 | 0417 | 02 |

Master slide items on all slides with no overlap on any slide 1 mark
 One horizontal line approx. 2cm from top 1 mark
 and two vertical lines on right of slide, lines 3pt wide 1 mark
 Oval shape, grey fill 1 mark
 SKKDSA 100% accurate inside shape 1 mark
 Slide number bottom right 1 mark
 Name, Centre number, candidate number top left 1 mark



Slide 1 title and subtitle 1 mark
 Text as given 1 mark
 Alignment - title-left / subtitle-right 1 mark





Four slides imported as title and bullets 1 mark

| | | | |
|--------|---|----------|-------|
| Page 7 | Mark Scheme | Syllabus | Paper |
| | Cambridge IGCSE – October/November 2015 | 0417 | 02 |

Grading scale

M.V.C

- Mechanical Vapour Compression
- for Seawater Desalination

Printed layout three slides per page 1 mark

Grading scale

T.C.D.

- Thermal compression Desalination for Seawater

Transitions applied to all slides 1 mark

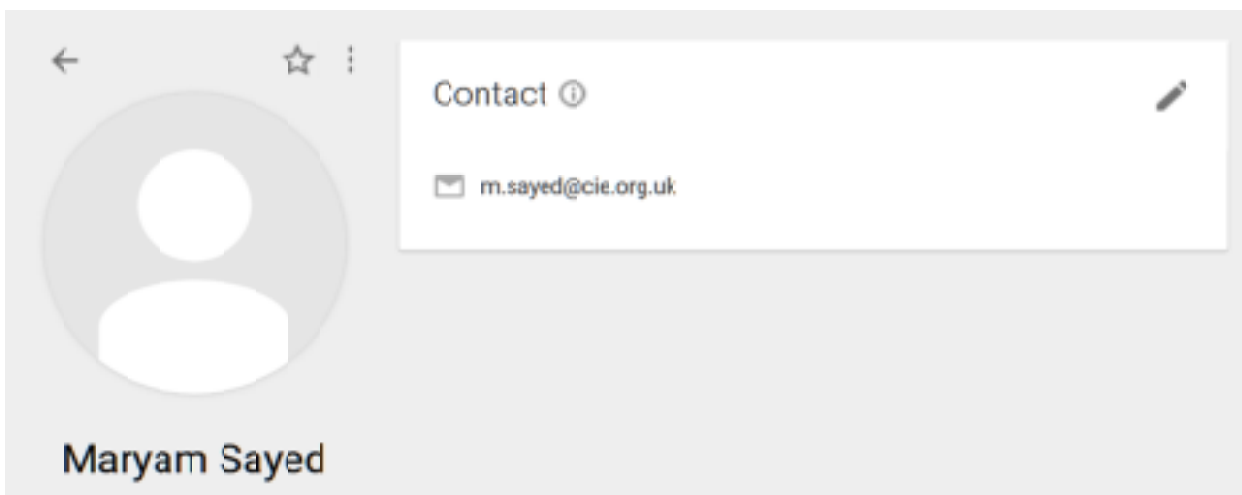
| | | | |
|---------------|--|-----------------|--------------|
| Page 8 | Mark Scheme | Syllabus | Paper |
| | Cambridge IGCSE – October/November 2015 | 0417 | 02 |

31 December 2013

Page 1 of 1

Page layout
 A4 Landscape (screenshot) 1 mark
 Margins all 2 cms (screenshot) 1 mark

New contact
 Maryam Sayed m.sayed@cie.org.uk 1 mark



| | | | |
|--------|---|----------|-------|
| Page 9 | Mark Scheme | Syllabus | Paper |
| | Cambridge IGCSE – October/November 2015 | 0417 | 02 |

| Field Name | Data Type |
|------------|------------|
| Code | Short Text |
| Client | Short Text |
| Location | Short Text |
| Country | Short Text |
| Process | Short Text |
| Capacity | Short Text |
| Cost | Currency |
| Year | Number |
| Completed | Yes/No |

Database structure
 Fields with specified data types (*Capacity* not numeric) 1 mark
Cost is currency & displayed as Euros with 2dp in report 1 mark
Completed is logical 1 mark
 displayed as Yes/No or checkbox in reports 1 mark

| Country | Code | Client | Location | Process | Capacity | Year | Completed |
|-------------------|------|--------|----------|---------|----------|----------------|-----------|
| Candidate details | | | | | | | |
| On-going projects | | | | | | =Count([Code]) | |

Count records 1 mark

To: design.h@cie.org.uk
 CC: Maryam Sayed
 BCC:
 Company profile
 Candidate name
 Centre number
 Candidate number
 Please approve this first draft of the report.

New message
 To: design.h@cie.org.uk and
 CC: Maryam Sayed 1 mark

Subject **Company profile** 1 mark
 Report only attached file 1 mark
 Name, Centre No & candidate no with
Please approve this first draft of the report. 1 mark