

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.

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Page 2	Mark Scheme	Syllabus	Paper
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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

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

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

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

attenti

Many

instru

backg

servic

Engin

in-hot

engineering firms.

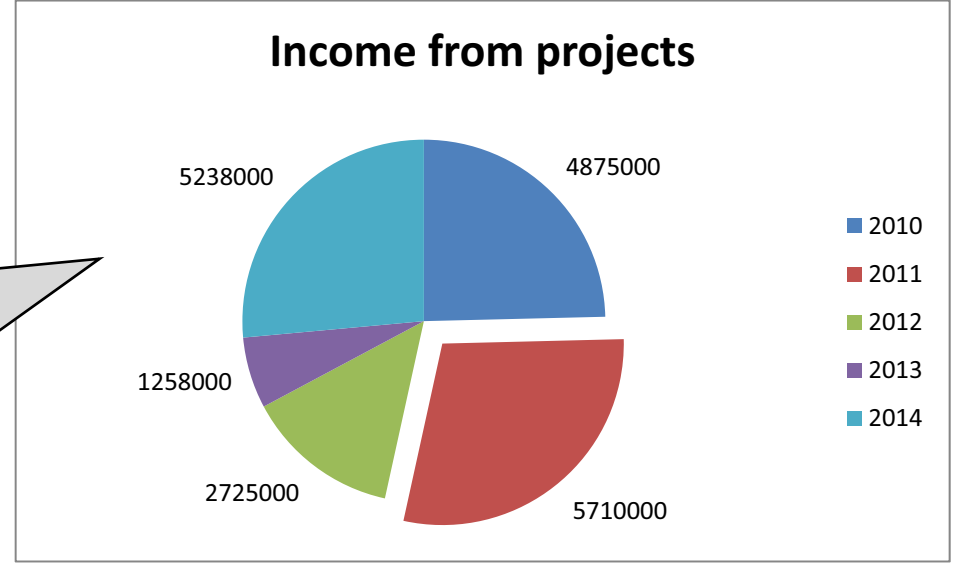
The chart shows income generated from projects (and includes projected income from on-going work): The chart

shows that the best year was 2011.

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 within column; not distorted 1 mark



Proof reading
No widows / orphans, no split lists 1 mark
Consistent paragraph spacing 1 mark
Document complete, with no blank pages 1 mark

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

Label 100% accurate 1 mark

Current projects 10

Report title as stated 1 mark

Projects since 2010

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

Commission earned from projects €1,469,900.00

Orientation portrait 1 mark

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
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Master slide items on all slides with no overlap on any slide 1 mark
 One horizontal line approx. 2cm from top 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

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Grading scale

M.V.C.

- Mechanical Vapour Compression
- for Seawater Desalination

Printed layout three slides per page 1 mark

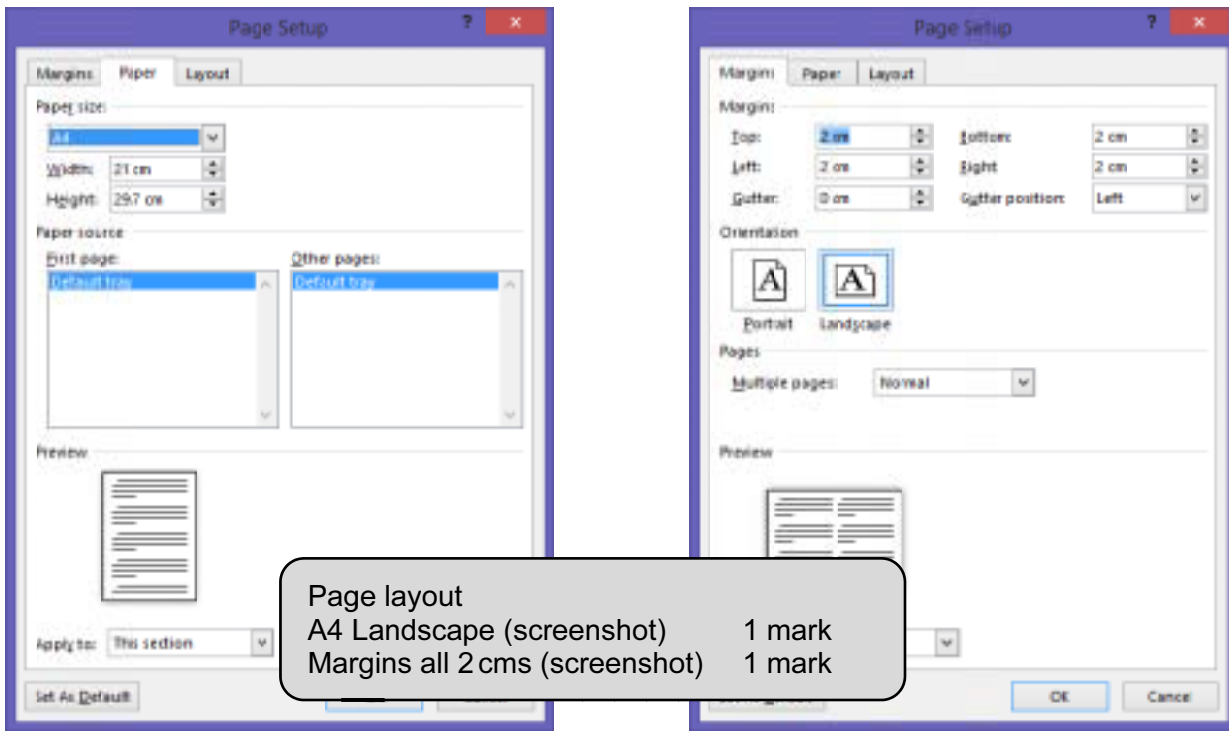
Grading scale

T.C.D.

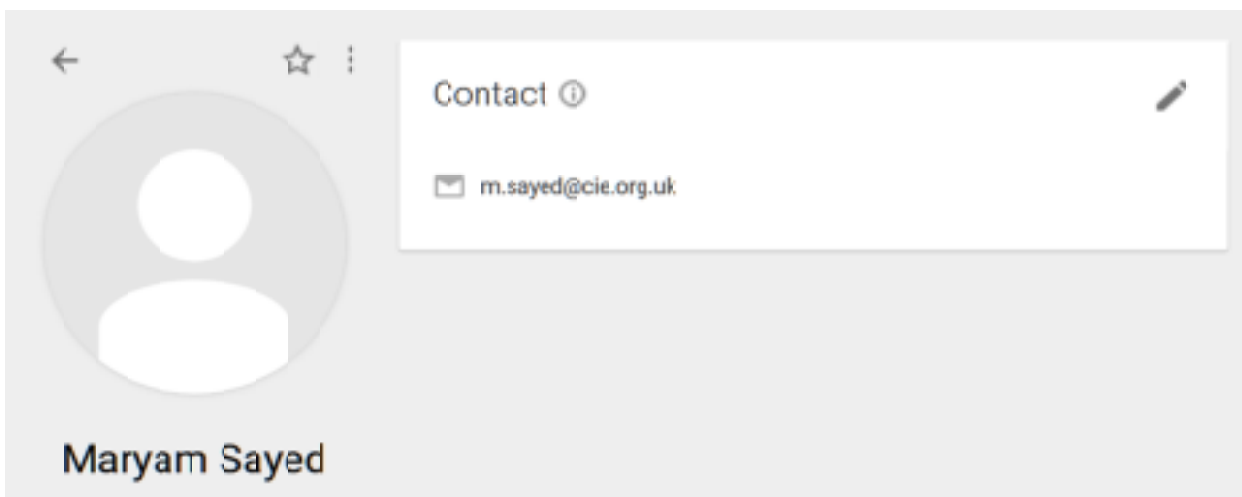
- Thermal compression Desalination for Seawater

The image shows a sequence of five presentation slides. The first slide is titled 'Some technical terms' and is highlighted with a red border. The subsequent four slides show transitions between different technical terms: 'M.V.C.', 'M.V.C.', 'M.V.C.', and 'T.C.D.'. Each slide has a consistent layout with a title and a list of bullet points.

Transitions applied to all slides 1 mark



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



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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

On-going projects									
Page Header									
Country	Code	Client	Location	Process	Capacity	Year	Completed		
Detail									
Country	Code	Client	Location	Process	Capacity	Year	Complete		
Page Footer									
[Flow]						Page * & [Page] & * of * & [Pages]			
Report Footer									
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