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.

Name and candidate number

Centre number

Company information release

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

Details presented by: Candidate

SKKDSA is an engineering company specialis... ...hemical
engineering. It is a multi-disciplinary co...

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

The company offers...

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

...of Economic and Feasibility Studies

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 a... ...Detailed Design
- Equipment Specifica...
- Equipment and ...
- Environmental ...
- Start-up Assista...
- Project and Construction Cost Estimating
- Construction Management
- Inspection/QA/QC
- Operator Training

Staff expertise

The company has, at pres... ...staff of over 75 engineers,
designers and draftsm... ...heir civil/structural,
process/mechanical, ele...

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

designers and draughts...
construction management departments are experienced in all
aspects of industrial facility design and construction.

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

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...
as diverse as oil re...
aboard ships.

Body text
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

07/10/2015
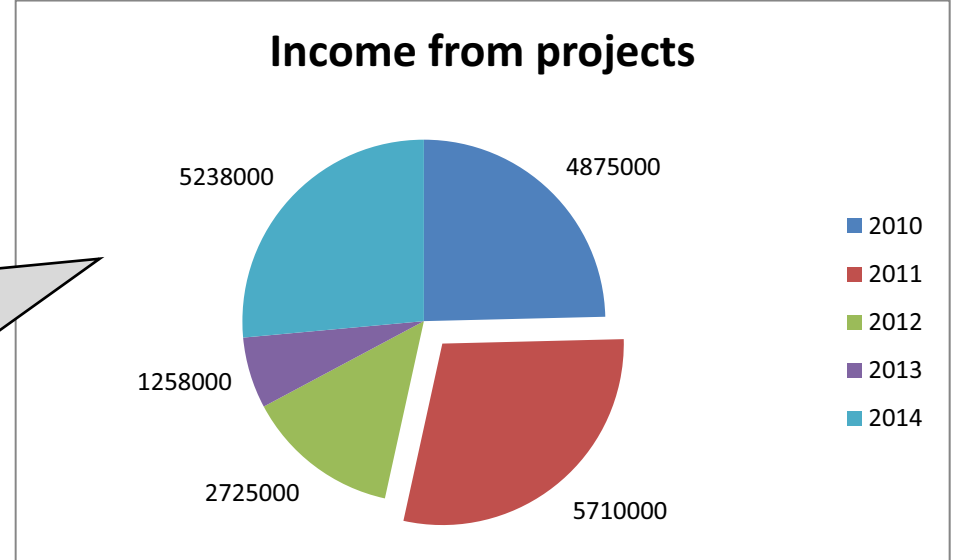
C:\Full File Path\examdocXXXX.doc

Name and candidate number   Centre number

Instrumentation and Electrical Departments

Their instrumentation and electrical departments, which they

Two spelling errors corrected   1 mark

st and most technically

proficient groups, have specialised in solving the problems of industrial clients such

Text added as stated   1 mark
Correct year 2011 identified   1 mark

companies from drilling

gas processing. They are deeply involved in attending to clients' "emergency codes" as well as continuing their

attenti

Many

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

instru

backg

servi

Engi

in-ho

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.

Income from projects

5238000
4875000
1258000
2725000
5710000

- 2010
- 2011
- 2012
- 2013
- 2014

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

Report title as stated   1 mark

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

On-going projects

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	3			No
Spain	SKA110	DJM	Cartagena	RO	5			No

Search *Completed* is *No*   1 mark

Three new records added as stated   3 marks

Candidate details

Current projects   10

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

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		
SKA				2010		
SKA				2010	Yes	€234,000.00
SKA				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
S			RO	2011	Yes	78,000.00
S			RO	2011	Yes	78,000.00
SKA103	HVP	Mexico	RO	2011	Yes	30,000.00
SKA109	NCDP	Egypt	MVC	2012	Yes	3,400.00
SKA108	Community	Germany		2012	Yes	7,800.00
SKA119	Meyer Shipyard	Germany	MED Steam	2012	Yes	9,000.00
SKA111	DAB	Spain				
SKA120	Meyer Shipyard	Germa				
SKA113	Cubiglas	Sp				
SKA114	DAB		RO	2013	Yes	€1,300.00
SKA116	AED	n	RO	2013	Yes	€15,600.00

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

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

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

Some technical terms
Presentation by: name etc.

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

M.S.F

• Multistage Flash Distillation
• for Seawater Desalination

M.E.D

• Multi-Effect Desalination

Four slides imported as title and bullets   1 mark

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Printed layout three slides per page   1 mark

Transitions applied to all slides   1 mark

Page layout
A4 Landscape (screenshot)   1 mark
Margins all 2 cms (screenshot)   1 mark
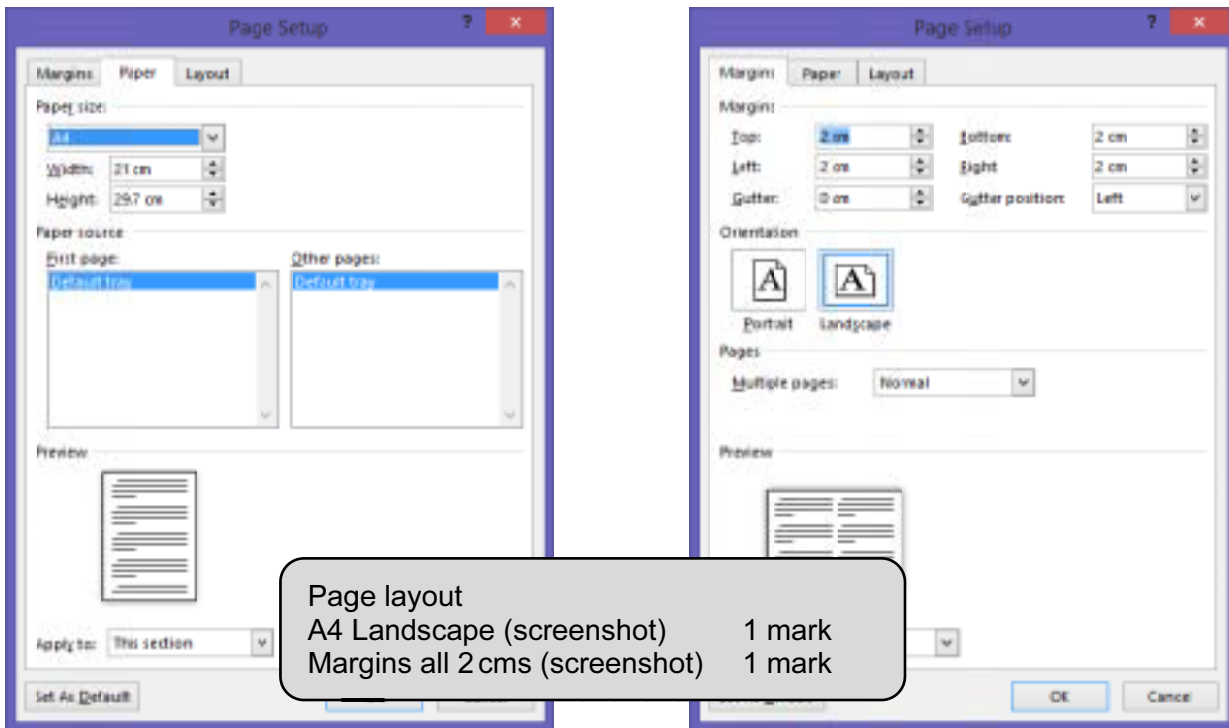
New contact
Maryam Sayed m.sayed@cie.org.uk   1 mark
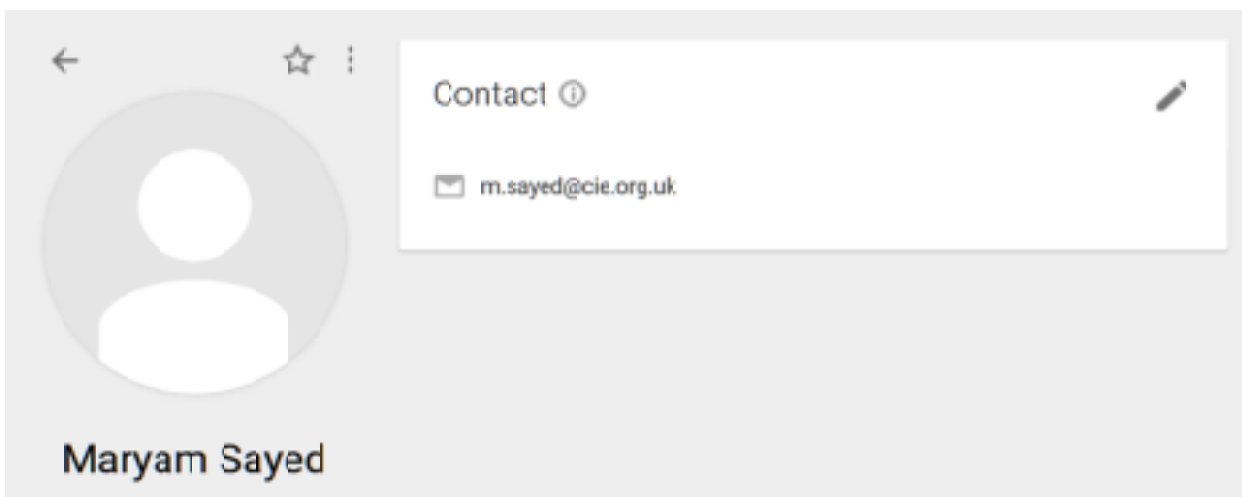
Database structure
Fields with specified data types (*Capacity* not numeric)   1 mark
Cost is currency & displayed as Euros with 2dp in report   1 mark
Completed is logical   1 mark
displayed as Yes/No or checkbox in reports   1 mark

Count records   1 mark

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