

**MARK SCHEME for the May/June 2011 question paper**  
**for the guidance of teachers**

**0417 INFORMATION AND COMMUNICATION  
TECHNOLOGY**

**0417/21**

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 must be read in conjunction with the question papers and the report on the examination.

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# Dock facilities at Port Peparad

Report by: a name

*A major regional port*



The port is the largest in the north western region of the country. It has a long coast line with a total length of over two thousand kilometres and is one of the busiest existing ports in the country with forty locations. Many of these are traditional harbours which have been converted to the large container ships or bulk carriers. New sites have been found for development and the massive port has been built. One such port has been built in this region. The port has been built to handle the export of our new range of cars. These have been built to meet national and world demands for small, economical and environmentally friendly, family transport.

## Development

Port Peparad, a successful public – private enterprise, is emerging as an important gateway port on the south eastern coast for containers, bulk and liquid cargo. With less than ten hours steaming time from the region's largest city, Port Peparad provides excellent access to the main trade lines in the north western region. Its handling facilities are developed to manage the efficient transport of our cars.

Port Peparad is operated by one of the largest container terminal operators in the world. APM Terminals has operations spread over more than 50 terminals in 31 countries, on 5 continents. With a 54% stake, APM Terminals is the largest shareholder.

## Hinterland

Port Peparad has an on-dock rail facility with dedicated sidings to handle containers, bulk and break-bulk cargo. It also offers a range of services including infrastructure including bridges and dedicated rail sidings.

## Port Connectivity

Port Peparad is well connected by road and rail to the rest of the country. It is directly connected by the broad gauge rail network of the National Railways. Port Peparad is well connected by road and rail to the rest of the country. It is directly connected by the broad gauge rail network of the National Railways. Port Peparad is well connected by road and rail to the rest of the country. It is directly connected by the broad gauge rail network of the National Railways.

Port Peparad has a new manufacturing plant.

Port Peparad has built an 11 kilometre long four-lane expressway connecting the port to the national highway. The Government has undertaken a project to construct a central spine road, extending up to Port Peparad.

Port Peparad has the most competitive rail freight rates coupled with excellent transit times as compared to other gateway ports on the West Coast. Port Peparad is now connected to its hinterland by the broad gauge rail network of the National Railways and is now connected by rail to all the major Inland container depots in the North West. The broad gauge rail connectivity project has been undertaken by Peparad Rail Corporation Limited (PRCL) promoted by Peparad.

Title data entry, format and alignment 2 marks  
 Subtitle data entry, format and alignment 2 marks

Section break placed correctly continuous same page 1 mark

Appropriate image found and placed correctly 1 mark  
 Resized to 3 cm high with aspect ratio maintained 1 mark  
 Text wrap set 1 mark

New subhead text entered OK 1 mark  
 Subheads identified +formatted, font, italic, 12pt sans-serif 1 mark

Body text 10 point serif, fully justified, 1.5 linespace 2 marks  
 Two columns 1 cm gap 1 mark

Footer File name left Date right 1 mark

Name and candidate number

Centre number

Port Limited and the Ministry of Railways. Port Peparad has an equal stake of 38.8% in PRCL. The Port can handle incoming and outgoing trains simultaneously and can handle up to 22 trains per day on an average 2

Header  
Name and cand no left  
Centre no right aligned 1 mark

personal transport that is easily afforded by families of modest incomes.

*Car exports*

We have come through some difficult years for manufacturing and show here how our planned exports of cars were actually met through the recent years of world economic downturn. It will be seen that we came through that and are meeting export targets again as world trade has picked up.

Port Peparad is the first port in this country to receive double stacked container trains (March 2006), which have a capacity of carrying 180TEUs as against 90TEUs carried in a single stack train. At present, the double stack container trains run to the inland railhead.

*Oceanographic Conditions*

Port Peparad is protected by two islands, which act as a natural breakwater making the port safe in all weather conditions. The presence of these islands also leads to the tranquillity of the water in the harbour. It also ensures the wave height is less than 0.5m most of the time. Port Peparad has now increased the draft to 14.5 metres from 12.5 metres. The water currents are between 2.5 to 3 knots during peak tidal conditions.

These favourable oceanographic conditions at Port Peparad ensure easy and safe navigation of ships round the year. Thanks to the twin islands, Port Peparad can offer its services throughout the year, even during the monsoons, which provides an added advantage to its customers.

*Storage Developments*

One of the unique features of Port Peparad is the availability of large tracts of land. This is attractive to several customers who wish to set up tank farms or warehouse facilities on site. A car storage facility is built here to hold cars while awaiting shipping. Cars are brought in by rail and loaded into containers in a newly developed container storage facility. This was developed in preparation for the launch of the new Micro range of cars which we believe will meet world wide requirements for environmentally friendly,

Cars exported through Port Peparad				
Year	2007	2008	2009	2010
Planned	43000	50000	50000	55500
Actual	45500	39500	45500	56000

Table  
Found and placed 1 mark  
Cells merged 1 mark  
Format top row text only to centred and underlined 1 mark  
Shading applied 1 mark  
Font matches body 1 mark  
All borders visible 1 mark

Page layout  
A4 Portrait 1 mark  
Margins all 2 cm 1 mark  
No widows / orphans 1 mark  
Consistent para spacing 1 mark  
Document complete 1 mark

Name and candidate number

Centre number

2/8/2011

New slide as first slide 1 mark  
Title and subtitle correct 1 mark

Port ~~Pe~~ard dock facilities 

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**New port facilities**


Car export docks reviewed

Port Peard dock facilities 

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*Port Handling Facilities*

- Container port
- Bulk fertilisers
- Bulk liquids

Port Peard dock facilities 

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*Port Infrastructure*

- Warehousing facilities
- Open stack yards
- Weigh bridges
- Rectified rail sidings

Port Peard dock facilities 

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*Inland links*

- Rail to regional distribution centres
- New highway constructed


Import  
Five slides 1 mark

Port Peard dock facilities 

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*New Car Terminal*

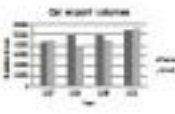
- Rail head with RDC links
- Storage awaiting export
- Container loading

Port Peard dock facilities 

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*Car exports*

- Exports hit by world trade downturn
- Slow back to normal levels



Print  
Handout slides 1 mark

Move slide to slide 3  
Port Infrastructure 1 mark


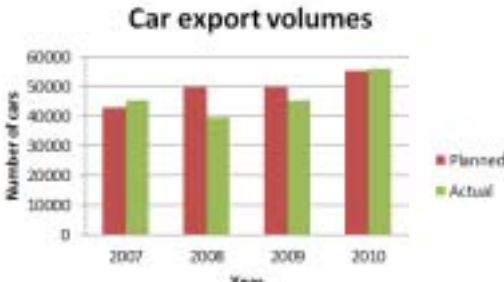
1

## Port Pepard dock facilities

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### Car exports

- Exports hit by world trade downturn
- Now back to planned levels

6
Centre no, candidate no and name

Master slide

All items created and appear on all slides

- |  |        |
|--|--------|
| Correct image placed top right                 | 1 mark |
| Thick horizontal line across slide below image | 1 mark |
| Text <b>Port Pepard dock facilities</b> serif  | 1 mark |
| 36 point black above line on left              | 1 mark |
| Name bottom right 12 point serif font          | 1 mark |
| Slide no bottom left                           | 1 mark |
| No overlaps any text/image any slide           | 1 mark |

- |  |        |
|--|--------|
| Chart source identified  | 1 mark |
| Comparative vertical bar chart                                     | 1 mark |
| Chart titles created correctly and series labels displayed in full | 1 mark |
| Chart placed correctly   | 1 mark |

Print  
Single slide    1 mark

Name and candidate number

Centre number

## Dispatch manifest (port: Brest)

VIN	Model	Power	Engine Size	Cost Price	Colour	Port	Distributor	Delivered Price
365B15423017	MicroZed	D	1200	€1,100.00	Red	Brest	FMD SA	€1,300.00
365C15423016	MicroSE	H	900	€1,200.00	Red	Brest	FMD SA	€1,400.00
365C15423020	MicroZed	D	1200	€1,100.00	Red	Brest	FMD SA	€1,300.00
366A15423008	MicroSE	D	1200	€1,200.00	White	Brest	FMD SA	€1,400.00
366B15423013	MicroZed	D	1200	€1,100.00	White	Brest	FMD SA	€1,300.00
366B15423017	Micro	G	600	€850.00	Gold	Brest	FMD SA	€1,050.00
366C15423014	MicroSE	H	900	€1,200.00	Gold	Brest	FMD SA	€1,400.00
367A15423013	MicroZed	D	1200	€1,100.00	Blue	Brest	FMD SA	€1,300.00
367B15423005	Micro	G	600	€850.00	Red	Brest	FMD SA	€1,050.00
367C15423005	MicroSE	H	900	€1,200.00	White	Brest	FMD SA	€1,400.00
371A15423015	MicroSE	H	900	€1,200.00	Green	Brest	FMD SA	€1,400.00
371A15423018	Micro	G	600	€850.00	White	Brest	FMD SA	€1,050.00
371A15423020	MicroZed	D	1200	€1,100.00	Green	Brest	FMD SA	€1,300.00
371B15423013	MicroB	G	500	€750.00	White	Brest	FMD SA	€950.00
371B15423014	MicroSE	H	900	€1,200.00	Silver	Brest	FMD SA	€1,400.00
371C15423008	MicroZed	D	1200	€1,100.00	Green	Brest	FMD SA	€1,300.00
371C15423011	MicroB	G	500	€750.00	Gold	Brest	FMD SA	€950.00
372A15423006	MicroEco	E	N/A	€1,300.00	Silver	Brest	FMD SA	€1,500.00
372A15423012	MicroEco	E	N/A	€1,300.00	White	Brest	FMD SA	€1,500.00
372A15423018	MicroEco	E	N/A	€1,300.00	Red	Brest	FMD SA	€1,500.00
372B15423001	MicroSE	H	900	€1,200.00	Silver	Brest	FMD SA	€1,400.00
372B15423014	MicroSE	H	900	€1,200.00	Gold	Brest	FMD SA	€1,400.00
372B15423016	MicroZed	D	1200	€1,100.00	Blue	Brest	FMD SA	€1,300.00

Title – correct 1 mark

Calculated field and format currency euro +2dp 2 marks  
1 mark

Specified fields only with all data and labels visible 1 mark  
Page orientation is landscape 1 mark  
1 page wide 1 mark

Search = france (Brest) 1 mark  
Dispatched = No 1 mark

Name and candidate number

Centre number

Page 1 of 2

13 January 2010

VIN	Model	Power	Engine Size	Cost Price	Colour	Port	Distributor	Delivered Price
372B15423017	MicroEco	E	N/A	€1,300.00	Gold	Brest	FMD SA	€1,500.00
372C15423009	MicroSE	H	900	€1,200.00	Blue	Brest	FMD SA	€1,400.00
372C15423011	MicroZed	D	1200	€1,100.00	Gold	Brest	FMD SA	€1,300.00
372C15423016	MicroZed	D	1200	€1,100.00	Red	Brest	FMD SA	€1,300.00
373A15423006	MicroEco	E	N/A	€1,300.00	Silver	Brest	FMD SA	€1,500.00
373B15423017	MicroEco	E	N/A	€1,300.00	Green	Brest	FMD SA	€1,500.00
374A15423002	Micro	G	600	€850.00	Blue	Brest	FMD SA	€1,050.00
374A15423006	MicroZed	D	1200	€1,100.00	Blue	Brest	FMD SA	€1,300.00
374A15423014	MicroSE	H	900	€1,200.00	White	Brest	FMD SA	€1,400.00
374B15423006	Micro	G	600	€850.00	Green	Brest	FMD SA	€1,050.00
374B15423015	MicroSE	H	900	€1,200.00	Silver	Brest	FMD SA	€1,400.00
374C15423011	MicroEco	E	N/A	€1,300.00	Silver	Brest	FMD SA	€1,500.00
375A15423003	MicroZed	D	1200	€1,100.00	Gold	Brest	FMD SA	€1,300.00
375B15423003	Micro	G	600	€850.00	Red	Brest	FMD SA	€1,050.00
375B15423019	MicroZed	D	1200	€1,100.00	Silver	Brest	FMD SA	€1,300.00
375C15423009	MicroSE	H	900	€1,200.00	White	Brest	FMD SA	€1,400.00
376B15423015	MicroB	G	500	€750.00	White	Brest	FMD SA	€950.00
376C15423002	MicroZed	D	1200	€1,100.00	Blue	Brest	FMD SA	€1,300.00
376C15423010	MicroSE	H	900	€1,200.00	Red	Brest	FMD SA	€1,400.00
377C15423010	Micro	G	600	€850.00	Red	Brest	FMD SA	€1,050.00

Name, cand no, Centre no

Total cars for France

43

13 January 2010

Records sorted (VIN) ascending 1 mark  
3 records added  
3 marks

Count records (43) 1 mark  
label 1 mark  
Candidate details on left 1 mark

0417\_s11\_ms\_21

02/08/2011

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Name and candidate number

Centre number

**Warning**

Check charge voltage before delivery  
 VIN: 371C15423016  
 Model: MicroEco  
 Port:Vigo  
 Distributor: EMD SA  
 Name, centre no, cand no

**Warning**

Check charge voltage before delivery  
 VIN: 372A15423009  
 Model: MicroEco  
 Port:Vigo  
 Distributor: EMD SA  
 Name, centre no, cand no

**Warning**

Check charge voltage before delivery  
 VIN: 372B15423009  
 Model: MicroEco  
 Port:Vigo  
 Distributor: EMD SA  
 Name, centre no, cand no

**Warning**

Check charge voltage before delivery  
 VIN: 372C15423019  
 Model: MicroEco  
 Port:Vigo  
 Distributor: EMD SA  
 Name, centre no, cand no

**Warning**

Check charge voltage before delivery  
 VIN: 374A15423005  
 Model: MicroEco  
 Port:Vigo  
 Distributor: EMD SA  
 Name, centre no, cand no

**Warning**

Check charge voltage before delivery  
 VIN: 374A15423012  
 Model: MicroEco  
 Port:Vigo  
 Distributor: EMD SA  
 Name, centre no, cand no

Record selection criteria  
 VIN = 37\*  
 Country = Spain (Vigo)  
 Power = E (MicroEco) 3 marks  
 (eight records)  
 Labels 2 side by side 1 mark

**Warning**

Check charge voltage before delivery  
 VIN: 376B15423016  
 Model: MicroEco  
 Port:Vigo  
 Distributor: EMD SA  
 Name, centre no, cand no

**Warning**

Check charge voltage before delivery  
 VIN: 377A15423010  
 Model: MicroEco  
 Port:Vigo  
 Distributor: EMD SA  
 Name, centre no, cand no

Heading text and  
 format larger font 2 marks  
 Field selection 2 marks  
 Field labels 1 mark  
 Own details 1 mark



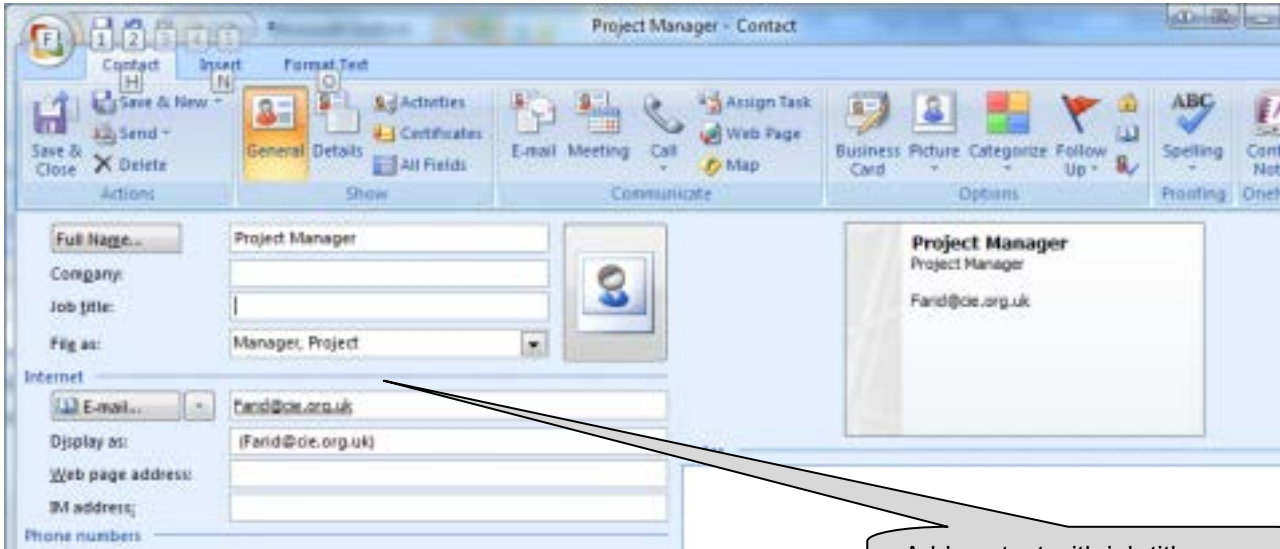
<b>Page 9</b>	<b>Mark Scheme: Teachers' version</b>	<b>Syllabus</b>	<b>Paper</b>
	<b>IGCSE – May/June 2011</b>	<b>0417</b>	<b>21</b>

Name and candidate number

Centre number

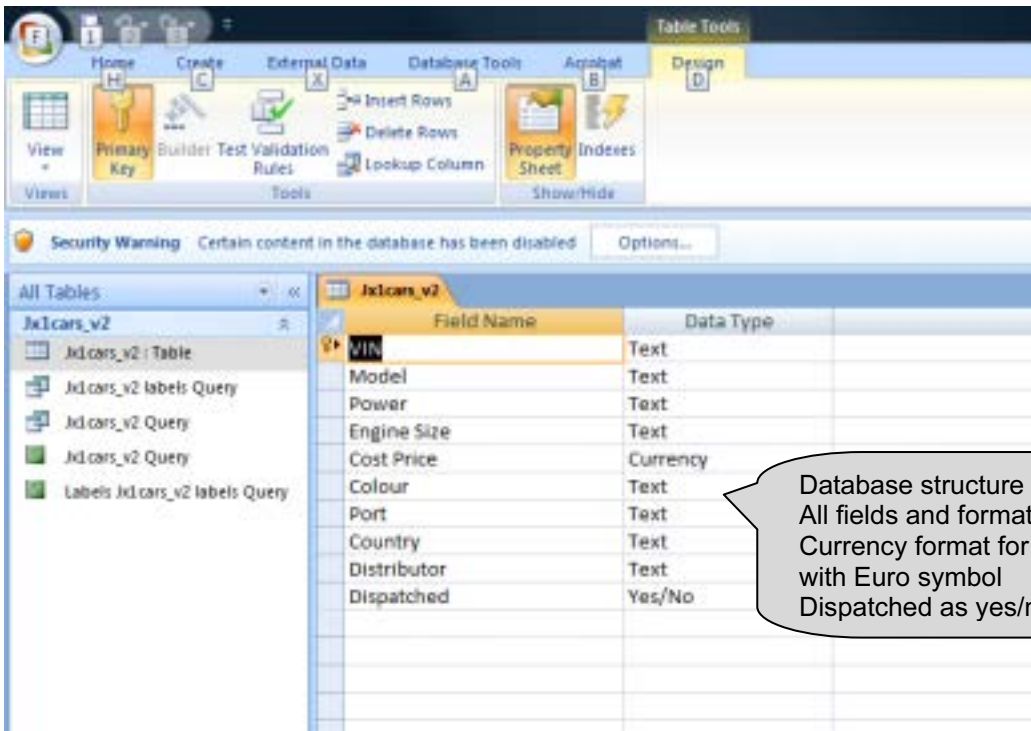
Candidate name	
Centre number	
Candidate number	

Step 2 Contact entry



Add contact with job title  
2 marks

Step 43 Database field structure screenshot here:



Database structure  
All fields and formats OK 1 mark  
Currency format for price field with Euro symbol 1 mark  
Dispatched as yes/no field 2 marks

Step 52 Email details

Correct addresses  
To [design.h@cie.org.uk](mailto:design.h@cie.org.uk) 1 mark  
Cc Project Manager 1 mark  
Correct subject and content 1 mark  
Document attached 1 mark