# MARK SCHEME for the May/June 2014 series

## 0417 INFORMATION AND COMMUNICATION TECHNOLOGY

**0417/31**      Paper 3 (Practical Test B), 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 May/June 2014 series for most IGCSE, GCE Advanced Level and Advanced Subsidiary Level components and some Ordinary Level components.

Candidate name        Centre number       Candidate number

| Body | Background image attached | 1 mark |
|------|---------------------------|--------|

```
body     {background-image:url('J1431bg.jpg')}

h1       {color:#000040;
          font-family:Arial,sans-serif;
          text-align:center;
          font-size:32px}
```

| h1 | color: #000040 | 1 mark |
|----|----------------|--------|
| | font- family:Arial | 1 mark |
| | ,sans-serif | 1 mark |
| | text-align: center | 1 mark |
| | font-size: 32px | 1 mark |

```
h3       {color:#404000;
          font-family:serif;
          text-align:justify;
          font-size:16px;
          padding:8px}
```

| h3 | color: #404000 | 1 mark |
|----|----------------|--------|
| | font- family:serif | 1 mark |
| | text-align: justify | 1 mark |
| | font-size: 16px | 1 mark |

```
p        {color:#000080;
          font-family:sans-serif;
          text-align:justify;
          font-size:12px}
```

| p | color: #000080 | 1 mark |
|---|----------------|--------|
| | font- family:sans-serif | 1 mark |
| | text-align: justify | 1 mark |
| | font-size: 12px | 1 mark |

```
li       {list-style-type:decimal;
          text-align:left}
```

| li | list-style-type:decimal | 1 mark |
|----|-------------------------|--------|
| | text-align: left | 1 mark |

```
table {width:600px;
          height:300px;
          border-collapse:collapse;
          border:3px solid #FFFF00;
          background-color:#6E859F}
```

| table | width:600px | 1 mark |
|-------|-------------|--------|
| | height:300px | 1 mark |
| | Border-collapse:collapse | 1 mark |
| | border:3px | 1 mark |
| | Border solid | 1 mark |
| | Colour is #FFFF00 | 1 mark |
| | background-color: #6E859F | 1 mark |

```
td       {border:1px solid #FFFF00}
```

| table data | border:1px | 1 mark |
|------------|------------|--------|
| | Border solid | 1 mark |
| | Colour is #FFFF00 | 1 mark |

Candidate name                     Centre number                     Candidate number

| Head | Correct stylesheet attached | 1 mark |
|---|---|---|

```
<html>
  <head>
    <link rel="stylesheet" type="text/css" href="tmcp.css">
  </head>
  <body>
    <table>
      <tr>
        <td colspan="2">
          <img src="J1431banner.jpg" alt="top banner">
        </td>
      </tr>
      <tr>
```

| Image | Width 300 and Height 300 | 1 mark |
|---|---|---|
| | alt="Manta image" | 1 mark |

```
        <td>
          <img src="J1431ray.jpg" alt="Manta image" width="300" height="300">
        </td>
        <td>
            <h3>The Manta Ray is one of the ocean's gentle giants. These ocean
wanderers have a declining population due to unregulated fishing. Some experts even
suggest that both species of Manta Ray are getting close to extinction. The two
species are known as Manta birostris and Manta alfredi. Manta alfredi is also known
as the reef manta which is the smaller of the two species. Manta birostris can weigh
up to 3 tons and have a wingspan of 8 metres.</h3>
        </td>
      </tr>
      <tr>
        <td colspan="2">
          <img src="J1431strap.jpg" alt="middle strapline">
        </td>
      </tr>
      <tr>
```

| Anchor | clicking here | 1 mark |
|---|---|---|
| | Correct website | 1 mark |
| | Target = "_manta" | 1 mark |

```
        <td>
          <p>Manta conservation workshops and holidays can be booked through the
Xtreme Adventure Holiday Company or by <a href="http://www.xahc.co.uk"
target="_manta">clicking here</a>.</p>
        </td>
        <td>
```

| Email | Correct text & address | 1 mark |
|---|---|---|
| Click on this link | Correct text & address | 1 mark |
| | ?subject=Donation by Candidate Name | |
| | & Candidate Number" | 1 mark |

```
          <p><a href="mailto:tmcp@cie.org.uk">Email</a> us for details of our Manta
Education Packs or <a href="mailto:tmcp@cie.org.uk?subject=Donation by A.Candidate
9999">click on this link</a> to discover how to donate to help us preserve these
disappearing species.</p>
        </td>
      </tr>
    </table>
  </body>
</html>
```

Candidate name                    Centre number                    Candidate number

Browser view     Screenshot                    1 mark

| Header | **Week 4** - left | 1 mark |
|---|---|---|
| | **Last edited by** & cand name - right | 1 mark |
| Footer | Centre & Cand numbers - left | 1 mark |
| | **Last edited on** & date & **at** & time - right | 1 mark |

| Top row | Merge & centre align cells A1 to E1 | 1 mark |
|---|---|---|
| | White font | 1 mark |
| | Dark grey background | 1 mark |
| | 24 point sans-serif font | 1 mark |

| | | | | |
|---|---|---|---|---|
| 1 | **The Manta Conservation Project** | | | |
| 2 | | Format | Real with 2 dp | 1 mark |
| 3 | Income analysis | | | |
| 4 | Income type | ICode | Total income | Format | 3 decimal places | 1 mark |
| 5 | Donations | D | R$ 2,961.68 | | |
| 6 | Research grants | R | R$ 5,166.30 | | |
| 7 | Education pack sales | E | R$ 643.19 | | |
| 8 | | | | | |
| 9 | Regional analysis | | | | |
| 10 | Region | RCode | Exchange | Currency | Regional income |
| 11 | Africa | AF | 0.242 | Rand | R 65.00 |
| 12 | Asia | AS | 0.317 | Yuan | ¥3,752.5 |
| 13 | Australasia | AU | 2.100 | Dollar | $142.50 |
| 14 | Europe | EU | 2.486 | Euro | €1,076.00 |
| 15 | North America | NA | 2.016 | Dollar | $2,240.50 |
| 16 | South America | SA | 1.000 | Real | R$ 75.75 |
| 17 | | | | | |

| Format | Rand | 2 decimal places | 1 mark |
|---|---|---|---|
| | Yuan | 1 or 2 decimal places | 1 mark |
| | Dollars | 2 decimal places | 1 mark |
| | Euro | 2 decimal places | 1 mark |
| | Dollars | 2 decimal places | 1 mark |
| | Real | 2 decimal places | 1 mark |

| | | | | | Income (Real) |
|---|---|---|---|---|---|
| 18 | | | | | |
| 19 | | | | 15 | R$ 3.63 |
| 20 | | | | 150 | R$ 47.54 |
| 21 | | | | 2000 | R$ 4,031.20 |
| 22 | | | | 25 | Format | Real with 2 dp | 1 mark |
| 23 | 21/01/2014 | E | NA | 120.5 | R$ |
| 24 | 21/01/2014 | D | SA | 50 | R$ 0 |
| 25 | 21/01/2014 | E | AF | 50 | R$ 1.11 |
| 26 | 21/01/2014 | E | AS | 25 | R$ 7.92 |
| 27 | 21/01/2014 | E | EU | 15 | R$ 37.29 |
| 28 | 22/01/2014 | E | AU | 140 | R$ 294.00 |
| 29 | 22/01/2014 | D | EU | 1000 | R$ 2,486.15 |
| 30 | 22/01/2014 | D | NA | 20 | R$ 40.31 |
| 31 | 23/01/2014 | R | SA | 25.75 | R$ 25.75 |
| 32 | 23/01/2014 | E | EU | 16 | R$ 39.78 |
| 33 | 23/01/2014 | D | NA | 100 | R$ 201.56 |
| 34 | 23/01/2014 | D | AS | 55 | R$ 17.43 |
| 35 | 24/01/2014 | E | AS | 12.5 | R$ 3.96 |
| 36 | 25/01/2014 | D | AS | 10 | R$ 3.17 |
| 37 | 25/01/2014 | E | AU | 2.5 | R$ 5.25 |
| 38 | 26/01/2014 | D | EU | 20 | R$ 49.72 |
| 39 | 26/01/2014 | R | AS | 3500 | R$ 1,109.35 |
| 40 | | | | | R$ 8,771.17 |

| Printout | Single page, portrait, all visible | 1 mark |
|---|---|---|

Centre number Candidate number        **Last edited on** date **at** time

**Week 4**                                                     **Last edited by** Candidate name

| Total income | SUMIF | 1 mark |
|---|---|---|
| | Correct absolute range | 1 mark |
| | Lookup cell - relative | 1 mark |
| | Correct absolute range | 1 mark |

| Regional income | SUMIF | 1 mark |
|---|---|---|
| | Correct | 1 mark |
| | With absolute reference | 1 mark |
| | Lookup cell - relative | 1 mark |
| | Correct absolute range | 1 mark |

|  | E |
|---|---|

| | |
|---|---|
| 1 | Manta Conservation Pr |
| 2 | |
| 3 | Income analysis |
| 4 | Income type |

| 4 | Income type | ICode | Total income | | |
|---|---|---|---|---|---|
| 5 | Donations | D | =SUMIF($B$19:$B$39,B5,$E$19:$E$39) | | |
| 6 | Research grants | R | =SUMIF($B$19:$B$39,B6,$E$19:$E$39) | | |
| 7 | Education pack sales | E | =SUMIF($B$19:$B$39,B7,$E$19:$E$39) | | |

| Income (Real) | Lookup used | 1 mark |
|---|---|---|
| | Correct relative lookup reference | 1 mark |
| | Correct named range | 1 mark |
| | Correct return column | 1 mark |
| | Multiplied by D19 | 1 mark |

| | | ICode | Rcode | | Currency | Regional income |
|---|---|---|---|---|---|---|
| 9 | Regional analy | | | | | |
| 10 | Region | | | | Currency | Regional income |
| 11 | Africa | | | | Rand | =SUMIF($C$19:$C$39,B11,$D$19:$D$39) |
| 12 | Asia | | | | Yuan | =SUMIF($C$19:$C$39,B12,$D$19:$D$39) |
| 13 | Australasia | AU | 2.1 | | Dollars | =SUMIF($C$19:$C$39,B13,$D$19:$D$39) |
| 14 | Europe | EU | 2.48615 | | Euro | =SUMIF($C$19:$C$39,B14,$D$19:$D$39) |
| 15 | North America | NA | 2.0156 | | Dollars | =SUMIF($C$19:$C$39,B15,$D$19:$D$39) |
| 16 | South America | SA | 1 | | Real | =SUMIF($C$19:$C$39,B16,$D$19:$D$39) |
| 17 | | | | | | |
| 18 | Date | ICode | Rcode | | Amount | Income (Real) |
| 19 | 41659 | D | AF | | 15 | =VLOOKUP(C19,Rate,2)*D19 |
| 20 | 41659 | D | AS | | 150 | =VLOOKUP(C20,Rate,2)*D20 |
| 21 | 41659 | R | NA | | 2000 | =VLOOKUP(C21,Rate,2)*D21 |
| 22 | 41659 | D | EU | | 25 | =VLOOKUP(C22,Rate,2)*D22 |
| 23 | 41660 | E | NA | | 120.5 | =VLOOKUP(C23,Rate,2)*D23 |

Centre number        Candidate number                                    **Last edited on** date **at** time

**Week 4**

**Last edited by** Candidate name

| | | | | | |
|---|---|---|---|---|---|
| 24 | 41660 | D | SA | 50 | =VLOOKUP(C24,Rate,2)*D24 |
| 25 | 41660 | E | AF | 50 | =VLOOKUP(C25,Rate,2)*D25 |
| 26 | 41660 | E | AS | 25 | =VLOOKUP(C26,Rate,2)*D26 |
| 27 | 41660 | E | EU | 15 | =VLOOKUP(C27,Rate,2)*D27 |
| 28 | 41661 | E | AU | 140 | =VLOOKUP(C28,Rate,2)*D28 |
| 29 | 41661 | D | EU | 1000 | =VLOOKUP(C29,Rate,2)*D29 |
| 30 | 41661 | D | NA | 20 | =VLOOKUP(C30,Rate,2)*D30 |
| 31 | 41662 | R | SA | 25.75 | =VLOOKUP(C31,Rate,2)*D31 |
| 32 | 41662 | E | EU | 16 | =VLOOKUP(C32,Rate,2)*D32 |
| 33 | 41662 | D | NA | 100 | =VLOOKUP(C33,Rate,2)*D33 |
| 34 | 41662 | D | AS | 55 | =VLOOKUP(C34,Rate,2)*D34 |
| 35 | 41663 | E | AS | 12.5 | =VLOOKUP(C35,Rate,2)*D35 |
| 36 | 41664 | D | AS | 10 | =VLOOKUP(C36,Rate,2)*D36 |
| 37 | 41664 | E | AU | 2.5 | =VLOOKUP(C37,Rate,2)*D37 |
| 38 | 41665 | D | EU | 20 | =VLOOKUP(C38,Rate,2)*D38 |
| 39 | 41665 | R | AS | 3500 | =VLOOKUP(C39,Rate,2)*D39 |
| 40 | | | | | =SUM(E19:E39) |

| | | |
|---|---|---|
| Total income | Correct function & range | 1 mark |

Centre number Candidate number

**Last edited on** date **at** time

| | | |
|---|---|---|
| Printout | Single landscape page wide, all visible | 1 mark |
| Replication | All 3 formulae | 1 mark |

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Candidate name                                    Centre number                                    Candidate number

| RCode | Rate | Currency | T |
|-------|------|----------|---|
| AF | 0.242 | Rand | |
| AS | 0.317 | Yuan | |
| AU | 2.100 | Dollars | |
| EU | 2.486 | Euro | |
| NA | 2.016 | Dollars | |
| SA | 1.000 | Real | |

**New Name**

Name: Rate

Scope: Workbook

Comment:

Refers to: =J143:income!$B$11:$C$16

OK    Cancel

| ICode | Rcode | Amount | In |
|-------|-------|--------|----|
| 14 D | AF | 15 | |
| 14 D | AS | 150 | |

| Named range | Correct range | 1 mark |
|-------------|---------------|--------|
| | Correct name | 1 mark |

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Candidate name                                    Centre number                                    Candidate number

**Regional income by A Candidate, XX999, 9999**

South America
1%

Africa
0%

Asia
14%

Australasia
3%

North America
51%

Europe
31%
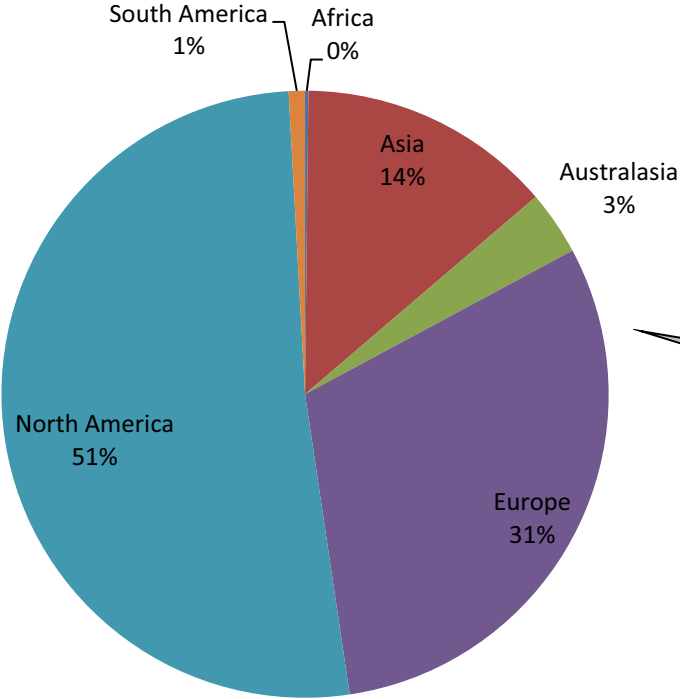
| Pie chart | Correct chart type | 1 mark |
| Labels | Region names visible | 1 mark |
| | Percentages visible | 1 mark |
| | Title contains Region & Income | 1 mark |

Candidate name                                    Centre number                                    Candidate number

| Region | Regional income |
|--------|-----------------|
| Africa | =E11*C11 |
| Asia | =E12*C12 |
| Australasia | =E13*C13 |
| Europe | =E14*C14 |
| North America | =E15*C15 |
| South America | =E16*C16 |

| Conversion to Real (maybe from formulae or values view) | 1 mark |
|---|---|
| Correct result for Africa | 1 mark |
| Correct results for all others | 1 mark |

| Region | Regional income |
|--------|-----------------|
| Africa | R$ 15.74 |
| Asia | R$ 1,189.38 |
| Australasia | R$ 299.25 |
| Europe | R$ 2,675.10 |
| North America | R$ 4,515.95 |
| South America | R$ 75.75 |