## Question 7

(45 marks)
Table 1 below gives details of the number of males (M) and females (F) aged 15 years and over at work, unemployed, or not in the labour force for each year in the period 2004 to 2013.

| Table 1 |  |  |  |  |  |  |  |  |  |  |
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| Labour Force Statistics 2004 to 2013 - Persons aged 15 years and over (000's) |  |  |  |  |  |  |  |  |  |  |
| Year | At work |  |  | Unemployed |  |  | Not in labour force |  |  | Total |
|  | M | F | Total | M | F | Total | M | F | Total |  |
| 2004 | 1045.9 | 738.9 | 1784.8 | 79.6 | 31.6 | 111.2 | 457.1 | 854.2 | 1311.3 | 3207.3 |
| 2005 | 1087.3 | 779.7 | 1867.0 | 81.3 | 33.5 | 114.8 | 459.5 | 846.6 | 1306.1 | 3287.9 |
| 2006 | 1139.8 | 815.1 | 1954.9 | 80.6 | 38.1 | 118.7 | 457.6 | 844.9 | 1302.5 | 3376.1 |
| 2007 | 1184.0 | 865.6 | 2049.6 | 84.3 | 39.2 | 123.5 | 472.4 | 852.7 | 1325.1 | 3498.2 |
| 2008 | 1170.9 | 889.5 | 2060.4 | 106.3 | 41.0 | 147.3 | 494.8 | 872.5 | 1367.3 | 3575.0 |
| 2009 | 1039.8 | 863.5 | 1903.3 | 234.0 | 82.4 | 316.4 | 505.6 | 874.9 | 1380.5 | 3600.2 |
| 2010 | 985.1 | 843.5 | 1828.6 | 257.6 | 98.2 | 355.8 | 529.2 | 884.6 | 1413.8 | 3598.2 |
| 2011 | 970.2 | 843.2 | 1813.4 | 260.7 | 103.4 | 364.1 | 540.1 | 881.5 | 1421.6 | 3599.1 |
| 2012 | 949.6 | 823.8 | 1773.4 | 265.2 | 108.0 | 373.2 | 546.5 | 896.9 | 1443.4 | 3590.0 |
| 2013 | 974.4 | 829.0 | 1803.4 | 227.7 | 102.3 | 330.0 | 557.8 | 895.0 | 1452.8 | 3586.2 |

(Source: Central Statistics Office http://www.cso.ie)
(a) Suggest two categories of people, aged 15 years and over, who might not be in the labour force.

(b) Find the median and the interquartile range of the total persons at work over the period.

(c) The following data was obtained from Table 1. The percentages of persons aged 15 years and over at work, unemployed, or not in the labour force for the year 2006 are given below.

|  |  | At work | Unemployed | Not in the labour force |
| :---: | :---: | :---: | :---: | :---: |
| Persons aged 15 <br> years and over | 2006 | $57 \cdot 9 \%$ | $3 \cdot 5 \%$ | $38 \cdot 6 \%$ |
|  | 2011 |  |  |  |

(i) Complete the table for the year 2011. Give your answers correct to one decimal place.

(ii) A census in 2006 showed that there were 864449 persons in the population aged under 15 years of age. The corresponding number in the 2011 census was 979 590. Assuming that none of these persons are in the labour force, complete the table below to give the percentages of the total population at work, unemployed, or not in the labour force for the year 2011.

|  |  | At work | Unemployed | Not in the labour force |
| :---: | :---: | :---: | :---: | :---: |
| Total population | 2006 | $46 \cdot 1 \%$ | $2 \cdot 8 \%$ | $51 \cdot 1 \%$ |
|  | 2011 |  |  |  |


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(iii) A commentator states that "The changes reflected in the data from 2006 to 2011 make it more difficult to balance the Government's income and expenditure."
Do you agree with this statement? Give two reasons for your answer based on your calculations above.

(d) Liam and Niamh are analysing the number of males and the number of females at work over the period 2004 to 2013.

Liam draws the following chart, using data from Table 1.


Niamh uses the same data and calculates the number of females at work as a percentage of the total number of persons at work and then draws the following chart.

(i) Having examined both charts, a commentator states "females were affected just as much as males by the downturn in employment." Do you agree or disagree with this statement? Give a reason for your conclusion.
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(ii) Which, if any, of the two charts did you find most useful in reaching your conclusion above? Give a reason for your answer.

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(iii) Use the data in Table 1, for the years 2012 and 2013 only, to predict the percentage of persons, aged 15 years and over, who will be at work in 2014.


