|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name: | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | | | 60  = % |
| pact jpg1 | **Year 11 Essentials**  **Practical Application 2, 2015**  **Topic – Building Your First Home** | | | |  |
| **Weighting:** | | *13% of the semester* |  |  | |

*You are building your first home. The plan below shows the dimensions of the house you are about to build. All measurements on the plan are in a scale of 1:100.*

**PART ONE: Building Plans and Council Specifications**

|  |  |
| --- | --- |
|  | **[23 marks: 1, 1, 2, 2, 2, 3, 2, 10)** |
|  | *Use the plan to answer the following questions.* |
| **a)** | How many bedrooms are shown on the plan? |
|  |  |
| **b)** | How many toilets are there? |
|  |  |
| **c)** | What are the dimensions of the kitchen? |
|  |  |
| **e)** | Where are the doorways to go outside? |
|  |  |
| **f)** | In what rooms are there built-in cupboards? |
| **g)** | The council requires all houses to be at least 900 mm from the side fences, 4.2 m from the  front fence and 3 m from the back fence. What are the dimensions of the smallest block of  land on which you can build this house? |
| **h)** | What are the dimensions of the garage? |
|  |  |
| **i)** | Using 1 cm grid paper, draw this same house plan, including block dimensions, and  making sure that Council requirements are met. |

****

|  |  |  |  |
| --- | --- | --- | --- |
|  | **PART TWO: Additions to Yard**   |  |  | | --- | --- | |  | **[37 marks: 2, 2, 2, 2, 2, 2, 12, 2, 2, 2, 2, 2, 3]** |   *You have been given a Government grant to install a rain water tank on your property.*  *The diameter of your rainwater tank must be 3 metres.*  **a)** Calculate the circumference of your tank to one decimal place.  **b)** Construct and place the tank on your plan in an appropriate position.  **c)** You have decided to carpet the bedrooms and study. How many square metres of carpet will  you need?  **d)** If it costs $26 / m² for the carpet, how much will cost to carpet these rooms?  **e)** You intend to tile the family room, meals room and kitchen. How many square metres of  tiles will you need?  **f)** If tiles cost $49.00 / m², how much will it cost to tiles these rooms?  **g)** The windows will require blinds. State the width of each window. |

**h)** You decide to build a pergola in the back yard located off the kitchen and meals room.

You want it to end at the edge of the carport. What will the dimensions of the pergola be?

**i)** Sketch the pergola on your 1cm grid paper.

**j)** You intend to pave the area under the pergola. How many square metres of pavers will you need?

**k)** The dimensions of a single paver is 20cm x 20cm. How many pavers will you need?

**l)** If pavers cost $55 / m² how much will it cost to pave under the pergola?

**m)** You had a budget of$3500 todo the extras outlined in section two. Do you have enough money to complete all the extra projects? (show all working)