Question 1: [Marks: 5X1]
a) Start / first byte of RAM
b) '' Flash
c) Location of the Reset Vector
d) Last byte of RAM
e) 0x20001FFF

Question 2: [Marks: 3X1]
a) Holds the address of the instruction which is about to be fetched for execution.

b) ADD R0, R0, R8 or ADD R0, R8
Note: ADD**S** is not valid.
c) ORRS R1, R1, R0 or ORRS R1, R0

Question 3: [Marks:2]
LDR Rx, [R0]
STR Rx, [R1]

Where x is an element of [2; 7] or 0

Question 4: [Marks: 4X1]
ANDS R2, R2, R1 = 0100 0000 0000 1010
MOVS R7, #0xF0 = 0010 0111 1111 0000
Therefore:
AA: 0x0A
AB: 0x40
AC: 0xF0
AD: 0x27

Question 5: [Marks: 6X1]
a) Convert human-readable assembly instruction into object code.
b) Convert object code into executable code by assigning absolute memory addresses to data.
c) Informs the linker at what address it should place the text section.
d) Provides an interface between GDB and the debugger by listening for TCP/IP data and converting it into USB traffic which the debugger can understand.
e) Instructs the compiler to place whatever 32-bit data comes after the directive into memory.
f) Allows the file name for the output file to be specified.

Bonus: [Marks: 2]
Specifies that the instruction at _start is a Thumb instruction, as opposed to an ARM instruction.