1 **(a)** **(i)** Convert the binary number into hexadecimal.

101100111010

..... [1]

(ii) Convert the denary number into Binary Coded Decimal (BCD).

108

..... [1]

(iii) Convert the 12-bit two's complement binary integer into denary.

Show your working.

111110111100

Working .....

.....

.....

.....

Denary value .....

[2]

(b) **(i)** The following binary addition is performed using 8-bit registers.

Complete the calculation using binary addition.

```
  1 0 1 1 0 0 1 1
+ 0 1 1 1 1 0 0 0
-----------------
```

[1]

(ii) Name and describe the error that can occur when binary addition is performed.

.....

.....

.....

..... [2]