The questions on this worksheet have been taken from the OCR GCSE Computer Science Specimen Paper 2

6-A-Day – Computer Science GCSE (p2.2-2016)

Q1

(d) There is a subroutine, HEX(), that takes a denary number between 10 and 15 and returns the corresponding hexadecimal number. E.g. HEX(10) would return "A", HEX(15) would return "F".

Write an algorithm, using the subroutine HEX(), to convert any whole decimal number between 0 and 255 into a 2 digit hexadecimal number.

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[4]

Q2

(e) **(i)** Add together the following two 8 bit binary numbers. Express your response in an 8 bit binary form.

01101010

10010110

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[2]

Q3

(ii) Identify the problem this addition has created.

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[1]

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Q4

(a) Complete a 2 place right shift on the binary number 11001011.

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[1]

Q5

(b) Explain the effect of performing a 2 place right shift on the binary number 11001011.

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[2]

Q6

(c) Complete the truth table below for the Boolean statement `P = NOT (A AND B)`.

A	B	P
FALSE	FALSE	TRUE
FALSE	TRUE	
TRUE	FALSE	
TRUE	TRUE	FALSE

[2]