Name: Class: Mark:

1. Explain **three** reasons why programmers use functions and procedures. [6]

2. The following is a function:

 function findmax(score)

 length = score.length

 maxvalue = score[0]

 for i = 1 to length - 1

 if score[i] > maxvalue

 maxvalue = score[i]

 endif

 next n

 return maxvalue

 endfunction

(a) Write a statement to call this function to find the maximum value in an array called **NumberOfViewers** [1]

(b) Give the name of a parameter used by this function. [1]

(c) Give an example of a local variable. [1]

(d) State the data type of **score**. [1]

(e) Give an example from this function of:

(i) an assignment statement [1]

(ii) iteration [1]

 (iii) selection [1]

3. (a) Write a program which asks the user to enter their favourite colour.

 The program then calls a procedure named colour which takes the entered colour
as an input. The procedure will then output one of the following comments depending
on the colour chosen: [5]

|  |  |
| --- | --- |
| Colour | Output |
| black | Night |
| blue | Sky |
| red | Danger |
| All other colours entered | Don’t know |

(b) Explain why this program would be better written using a function. [2]

 [Total 20 marks]