# Midterm Marking Scheme - Part 2 Question 1 - Out of 12 marks

### Function header -> 3 marks:

- "def" -> 0.5 marks
- descriptive function name (like "encrypt") -> 0.5 marks
- parameter (a string) -> 0.5 marks
- descriptive parameter name (like "plainMessage") -> 0.5 marks
- docstring -> 0.5 marks
- docstring well describes what the function does and returns -> 0.5 marks

### Function body -> 9 marks:

- Mapping vowels to numbers (encrypted vowels): 2 marks
  There is an accumulator variable -> 0.5 marks
- Accumulator variable initialize to "" (empty string) -> 0.5 marks
- Each char of plain message is "processed" (perhaps in a "for" loop) -> 1 mark
  Lower/upper case of char is dealt with -> 1 mark
- Each character, if a vowel, is mapped to its corresponding encrypted characters (a number) -> 1 mark
- And "put" into the accumulated cipher -> 1 mark
- Any non-vowel character finds itself in the accumulated cipher -> 1 mark
- "return" statement -> 0.5
- returning the accumulator variable (i.e., encrypted message aka cipher) -> 0.5

## Midterm Marking Scheme - Part 2 Question 2 - Out of 20 marks

#### Header Comment Block -> 2 marks:

•Filename -> 0.5 marks

•Description of program -> 0.5 marks

•Author -> 0.5 marks

•Date -> 0.5 marks

Sensible comments throughout the program -> 1 mark

#### Body of program -> 17 marks:

• Display vending machine welcome -> 0.5 marks

•If above is done matching the wording and layout of the sample runs -> +0.5 marks

•Display vending machine menu (item and cost) -> 1 mark

•If above is done matching the wording and layout (order) of the sample runs -> +1 mark

•If above is done without repeating the code -> +2 marks

Display menu prompt -> 0.5 marks

•If above is done matching the wording and layout of the sample runs -> +0.5 marks

Display each item +  $(y/n) \rightarrow 1$  mark

If above is done matching the wording and layout of the sample runs -> +1 mark

•If above is done without repeating the code -> +1 mark

•Read user input for each item -> 1 mark

•And take care of lower/upper case of user input -> 1 mark

•Take care of user input that is neither "y/Y" nor "n/N" -> 1 mark

•Initialize accumulator variable (running cost or sum or total) to 0 -> 1 mark

•If user input "y/Y", accumulate the sum of selected item -> 2 marks

• Print the cost of selected items -> 1 mark

•If above is done matching the wording and layout of the sample runs -> +1 mark

•If tax correctly computed and added to total -> BONUS 1 mark - should we give 0.5 marks if tax wrongly computed?