

These questions refer to the preliminary material and require you to load the skeleton program, but do not require any additional programming.

MARKS /50

1. State the name of an identifier for:

- a) A string constant (or variable used as a constant) [1]

.....

- b) A subroutine with two parameters [1]

.....

- c) A subroutine that returns a tuple (more than one value) [1]

.....

- d) A Boolean variable [1]

.....

- e) A parameter that is a list [1]

.....

- f) An integer list [1]

.....

- g) A built-in function called from within the GetMenuItem subroutine [1]

.....

- h) The identifier for a user-defined function called from the GetNextLetter subroutine [1]

.....

2. State the purpose of each of the following lines in the GetTransmission subroutine: [4]

```
FileName = input("Enter file name: ")  
...  
FileHandle = open(FileName, 'r')  
Transmission = FileHandle.readline(0029  
FileHandle.close()  
...
```

.....  
.....  
.....

3. Describe the purpose of the While loop within the SendReceiveMessages subroutine. [2]

.....  
.....  
.....

4. Describe the nature and purpose of the Dash data structure in SendReceiveMessages. [3]

.....  
.....  
.....  
.....  
.....

5. Look at the subroutine StripLeadingSpaces. Describe the purpose and use of the variable FirstSignal. [2]

.....  
.....  
.....

6. Describe each of the following lines of code, taken from the StripTrailingSpaces subroutine: [6]

```
LastChar = len(Transmission) - 1  
while Transmission[LastChar] == SPACE:  
    LastChar -= 1  
    Transmission = Transmission[:-1]  
return Transmission
```

.....  
.....  
.....  
.....  
.....  
.....  
.....

7. Describe the function of the following line from the SendMorseCode subroutine: [3]

```
Index = ord(PlainTextLetter) - ord('A') + 1
```

.....  
.....  
.....  
.....  
.....

8. Describe the purpose of the `except:` block in the `GetTransmission` subroutine.

State one situation in which the code in the `except:` block would be executed. [2]

.....  
.....  
.....

9. The skeleton program begins with a number of constants (or variables used as constants by convention).

State two benefits of the program being written in this way. [2]

.....  
.....  
.....

10. The `StripLeadingSpaces` subroutine uses the `[1:]` operation.

Describe the purpose of the `[1:]` operation and explain how it is used in `StripLeadingSpaces`. [3]

.....  
.....  
.....  
.....  
.....  
.....

11. Describe each of the circumstances that would lead to the subroutine `ReportError` being called. [5]

.....  
.....  
.....  
.....  
.....

12. Describe fully the operation of the `Decode` subroutine if the value of `CodedLetter` is - . . - [10]

.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....