

Part A Answer all questions 10 marks each

1. Complete the following code fragments:

(a) To print the numbers 10 20 30 40 50 ... 200

```
int num;
for (int i= __ ; _____ ; ____ ) {
    num = _____
    System.out.print(" " + num);
}
```

(b) To print the response based on the input marks/
grade HD if marks in the range 80 – 100
grade D if marks in the range 70 – 79
grade C if marks in the range 60-69
grade P if marks in the range 50 – 59
grade F if marks in the range 0 - 49
Invalid marks otherwise

```
System.out.println("Enter marks ");
int marks = console.readInt();
String response;
```

```
System.out.println(response);
```

- (c) To get a valid marks in the range 0 to 100 with a loop
print Error message "Marks too low. Re-enter" if it is less than 0
print Error message "Marks too high. Re-enter" if it is greater than 100

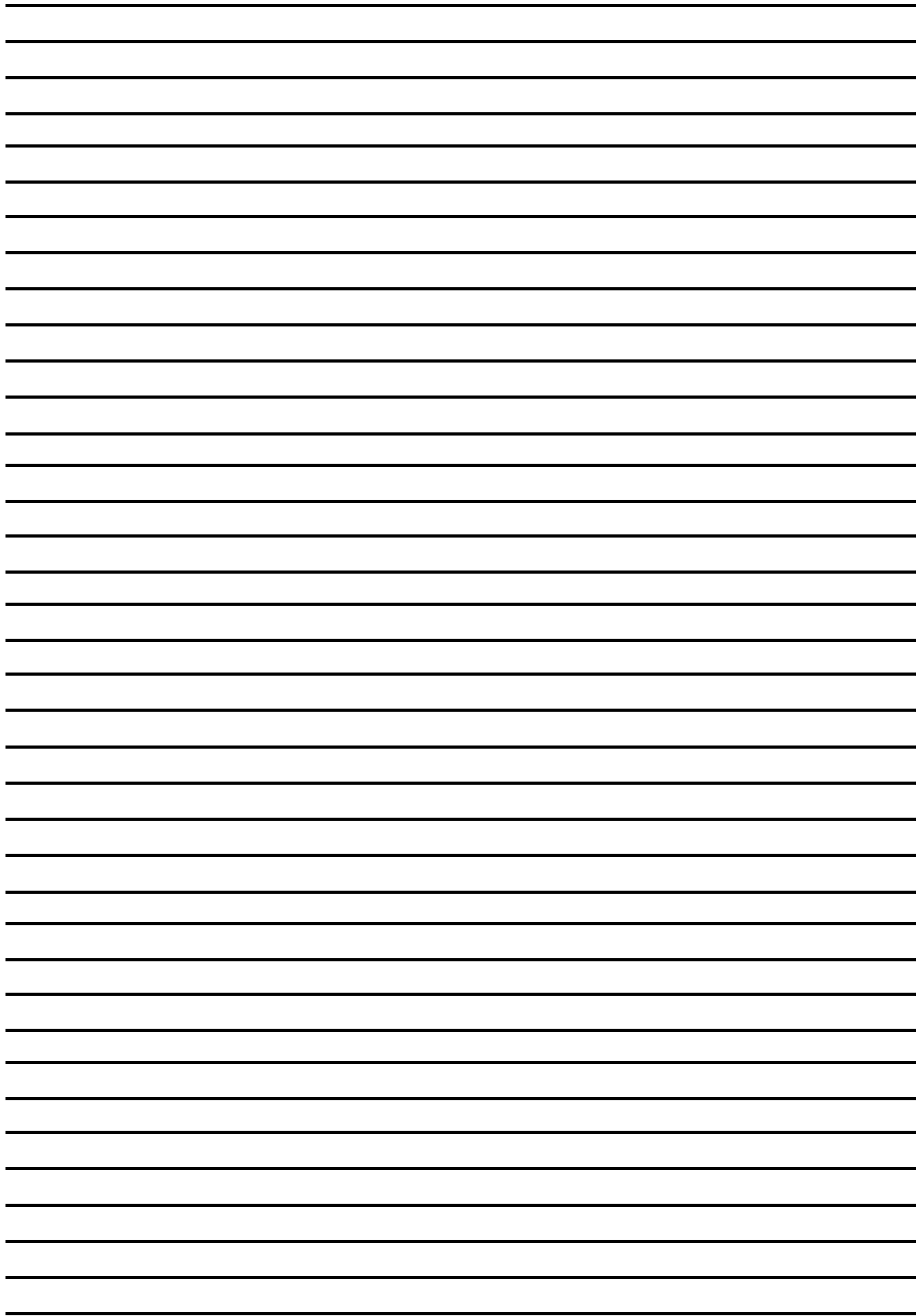
- (d) Use nested for loops to print the table

1	2	3
2	4	6
3	6	9

for (_____

- (e) Complete the program segment below that will read values for a and b and print all numbers in the range a to b repeatedly. The program should terminate when b is less than a.

```
int a;  
int b;
```



(b) Using the Part class

Using the class created above perform the following operations

// Create a Part array that can store up to 10 elements

// Construct 4 Part objects and Set the first 4 array references to refer to them

// First part “p1234” “nuts 1.5 cm” , 12000, 1000, 0.15

// Second part “p1235” “nuts 2.0 cm”, 15000, 8000, 0.20

// Third part “p1236” “bolts 1.2 cm”, 400, 300, 0.10

// Fourth part “p1237” “bolts 0.5 cm”, 900, 400, 0.12

// Write a statement using a for loop to withdraw 500 items from all the existing parts

// If operation is successful print new stock-level otherwise print “insufficient stock”

// Print details of all items whose stock-level is lower than the reorder level

// Withdraw stock specifying ID.

System.out.println("Enter part ID")

String partID = console.readLine();

System.out.println("Enter Quantity")

int qty = console.readInt();

// Search through the array. If not found print error message otherwise perform operation
