Version M1

**Multiple Choice**--- 30 pts total

1. B
2. E
3. B
4. D
5. D
6. A
7. C
8. A
9. A
10. D

**Tracing**--- 18 pts total

1. B
2. 2
3. 3
4. 15
5. 3
6. 3

**Design Problem--**- 22 pts total

1. 3
2. char char double
3. 1
4. double
5. Generate a GTID based on student info.
6. function id = GTID(first,last,bday)
7. 2017
8. 1514

Version M2

**Multiple Choice**--- 30pts total

1. A
2. D
3. E
4. B
5. A
6. C
7. A
8. E
9. A
10. D

**Tracing**--- 18pts total

1. A
2. 2
3. 3
4. 15
5. 3
6. 3

**Design Problem**--- 22pts total

1. 1
2. double
3. 3
4. char char double
5. function id = GTID(first,last,bday)
6. Generate a GTID based on student info.
7. 1514
8. 2017

Version M3

**Multiple Choice**--- 30 pts total

1. C
2. E
3. D
4. B
5. E
6. A
7. C
8. C
9. E
10. D

**Tracing**--- 18pts total

1. D
2. 3
3. 2
4. 15
5. 3
6. 0

**Design Problem**--- 22pts total

1. 1
2. 3
3. char char double
4. double
5. function id = GTID(first,last,bday)
6. Generate a GTID based on student info.
7. 2017
8. 1514Version M4

**Multiple Choice**--- 30pts total

1. E
2. C
3. B
4. B
5. D
6. B
7. E
8. C
9. B
10. B

**Tracing**--- 18pts total

1. C
2. 3
3. 2
4. 15
5. 3
6. 3

**Design Problem**--- 22pts total

1. 1
2. 3
3. double
4. char char double
5. function id = GTID(first,last,bday)
6. Generate a GTID based on student info.
7. 1514
8. 2017

**CODING**

**A** Suggested Solution:

function [x,y,z] = countChar(ca)

x = 0;

y = 0;

z = 0;

for index = 1:length(ca)

if ischar(ca{index})

if length(ca{index}) > 7

x = x + 1;

elseif length(ca{index}) < 7

y = y + 1;

end

z = z + length(ca{index});

end

end

**B**

function avg\_bsc = calcBSC(ca)

bsc = [];

for index = 1:length(ca)

if ca{index}(1) <= 1 && ca{index}(1) >= .1

newbsc = ca{index}(2) / (ca{index}(1) \* ca{index}(3));

bsc = [bsc newbsc];

end

end

avg\_bsc = mean(bsc);