

School of Engineering
Chemical Engineering Department
Computer Applications in Chemical Engineering.

CHE-0965201-Tue

2^{ed} 2018/2019

Quiz 1 - F1

Time Limit: 10 Minutes

Student Name: Answer

Student ID: _____

Quiz Mark [10]: _____

Date: 12/2/2019

1. (8 points) Fill the circle for the correct answers of the following questions ?

1. Which of the following represent an wrong MATLAB command?

- ☒ a+b=sin(5* π)/2;
- ☐ 5+3*12-2
- ☐ b=cosd(30)+c
- ☐ z=3+2*5

2. The command that is used to clear the command window in MATLAB is:

- ☐ clear
- ☐ quit
- ☐ who
- ☒ clc

3. Which of the following symbol used to connect the next line to the current line

- ☐ :
- ☐ ,
- ☐ ;
- ☒ ...

4. The value of variable (z) after apply the following command is:

>> i = 5;

>> z = 3 + 5 * i

$$z = 3 + 5 \times 5 = 28$$

- ☐ 3+5i
- ☒ 28
- ☐ 5i
- ☐ Error message.

5. The command that is used to show the results of calculation in scientific format with 4 decimals is:

- ☒ format short e
- ☐ format long
- ☐ format long e
- ☐ format rat

6. The value of variable (y) after apply the following command is:

```
>> format bank
```

```
>> y = 3 + 5i
```

- ☐ 3+5i
☒ 3
☐ 5i
☐ Error message.

7. The value of variable (z) after apply the following command is:

```
>> format short
```

```
>> y = 13.567863567;
```

```
>> z = round(y, 6)
```

- ☐ 13
☒ 13.5679
☐ 13.567864
☐ Error message.

8. One of the following is valid variable name in MATLAB:

- ☐ e\$5
☐ 5e
☒ e₅
☐ 1e5.

2. (1 point) Write the MATLAB code that used to calculate the following Mathematical expression [Just write the Command]

$$e^{(-3.1)^2} + 3.47 \ln(14) + \sqrt[3]{287} + \tan(60^\circ)$$

$\text{exp}(-3.1^2) + 3.47 * \log(14) + (287)^{(1/3)} + \text{tand}(60)$
 or
 $\tan(60 * \text{Pi} / 180)$

3. (1 point) Consider the MATLAB is used to calculate the following expression

$$\frac{25^2}{3} + \frac{219^{4/5}}{5} + 10(10)^{-2}$$

Show the order of precedence and write the final answer

① $25^2 = 625$ / ② $(219)^{(4/5)} = 74.53$ ③ $10^{(-2)} = 0.01$
 ④ $\frac{625}{3}$ ⑤ $\frac{74.53}{5}$ ⑥ 10×0.01
 $208.33 + 14.91 + 0.1$
 ⑦ $223.24 + 0.1 = 223.34$
 ⑧

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Quiz 1 - F2

Time Limit: 10 Minutes

Student Name: Answer

Student ID: _____

Quiz Mark [10]: _____

Date: 12/2/2019

1. (8 points) Fill the circle for the correct answers of the following questions ?

1. The value of variable (z) after apply the following command is:

>> format long

>> y = 13.567863567;

>> z = round(y,6)

☐ 13

☐ 13.5679

☒ 13.567864

☐ Error message.

2. Which of the following symbol used to connect the next line to the current line

☐ :

☐ ,

☐ ;

☒ ...

3. The command that is used to clear the command window in MATLAB is:

☐ clear

☐ quit

☐ who

☒ clc

4. The command that is used to show the results of calculation in scientific format with 15 decimals is:

☐ format short e

☐ format long

☒ format long e

☐ format rat

5. The value of variable (z) after apply the following command is:

>> e = 5;

>> z = 5 * 1e5

☒ 5e5

☐ 25

☐ 5000

☐ Error message.

6. Which of the following represent an wrong MATLAB command?

- ☐ $a = \sin(5 * \pi) / 2;$
☐ $5 + 3 * 12 - 2$
☒ $b + c = \cosd(30) + 6$
☐ $z = 3 + 2 * 5$

7. The value of variable (y) after apply the following command is:

>> format bank

>> $y = 7 + 2i$

- ☐ 7+2i
☒ 7
☐ 2i
☐ Error message.

8. One of the following is valid variable name in MATLAB:

- ☐ i\$5
☐ 5i
☒ i_5
☐ li.

2. (1 point) Write the MATLAB code that used to calculate the following Mathematical expression [Just write the Command]

$$e^{(-2.5)^{1.5}} + 3.47 \log(14) + \sqrt[4]{187} + \sin(60^\circ)$$

$\text{exp}(-2.5^{1.5}) + 3.47 * \log(14) + (187)^{(1/4)} + \text{sind}(60)$
 $\sin(60 * \pi / 180)$

3. (1 point) Consider the MATLAB is used to calculate the following expression

$$\frac{35^2}{5} + \frac{115^{3/5}}{6} + 15(8)^{-2}$$

Show the order of precedence and write the final answer

① $35^2 = 1225$ / ② $115^{(3/5)} = 17.2353$ / ③ $8^{-2} = 0.0156$
 ④ $\frac{1225}{5} + \frac{17.2353}{6} + 15 * 0.0156$
 $245 + 2.8725 + 0.234 =$
 ⑦ $247.8725 + 0.234 = 248.1065$
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