



IE-352

Section 1, CRN: 48700

Section 2, CRN: 48703

Section 3, CRN: 48706

Second Semester 1434-35 H (Spring-2014) – 4(4,1,2)

“MANUFACTURING PROCESSES – 2”

Tuesday, February 11, 2014 (11/04/1435H)

Quiz 1 ANSWERS

Name: AHMED M. EL-SHERBEENY, PHD	Student Number: 4	Section: S/M8/M10
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Answers the Questions Below Briefly. [2 Points Each]

1. What is a polymer?

Compound formed of repeating structural units called mers

Mer atoms share electrons to form very large molecules

2. Name one example of a polymer?

Nylon, plastics, rubber, etc.

3. What are the different types of polymers?

- **Thermoplastic polymers**
- **Thermosetting polymers**
- **Elastomers**

4. What is the major difference between polymers and ceramics?

Polymers consist of mer compounds;

Ceramics: compounds containing metallic (or semi-metallic) and nonmetallic elements

5. What do you call a non-homogenous mixture between a ceramic and a polymer?

Ceramic-Polymer composite



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Second Semester 1434-35 H (Spring-2014) – 4(4,1,2)

“MANUFACTURING PROCESSES – 2”

Wednesday, February 12, 2014 (12/04/1435H)

Quiz 1 ANSWERS

Name: AHMED M. EL-SHERBEENY, PHD	Student Number: 4	Section: S/M8/M10
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Answers the Questions Below Briefly. [2 Points Each]

1. What is a ceramic?

Compounds containing metallic (or semi-metallic) and nonmetallic elements

2. Name one example of a ceramic?

Clay, glass

3. What are the different types of ceramics?

- **Crystalline ceramics**
- **Glasses**

4. What is the major difference between polymers and ceramics?

Polymers consist of mer compounds;

Ceramics: compounds containing metallic (or semi-metallic) and nonmetallic elements

5. What do you call a non-homogenous mixture between a ceramic and a polymer?

Ceramic-Polymer composite



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“MANUFACTURING PROCESSES – 2”

Wednesday, February 12, 2014 (12/04/1435H)

Quiz 1 ANSWERS

Name: AHMED M. EL-SHERBEENY, PHD	Student Number: 4	Section: S/M8/M10
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Answers the Questions Below Briefly. [2 Points Each]

1. What is a metal composed of?

Usually alloys composed of two or more elements, at least one of which is metallic

2. Name one example of a metal?

steel

cast iron

aluminum, copper, magnesium, nickel, silver, tin, titanium, etc.

3. What are the different types of metals?

- **Ferrous metals**
- **Nonferrous metals**

4. What is the major difference between metals and ceramics?

Metals: *alloys* composed of two or more elements

Ceramics: *compounds* containing metallic and nonmetallic elements

5. What do you call a non-homogenous mixture between a metal and a ceramic?

Metal-Ceramic composite