Assignment 9

The due date for submitting this assignment has passed. An extension has not been granted for this assignment.

1. The addition of gypsum below the reaction of the __________ phase.
   - Alite
   - Aluminate
   - Portland
   - None, the answer is incorrect.
   - Accepted Answers: None
   - 1 point

2. The EDX system has already passed and identified products can be verified using which of the following characterization techniques?
   - Secondary Electron - Scanning Electron Microscopy
   - Back Scattered Electron - Scanning Electron Microscopy
   - Energy Dispersive Spectroscopy
   - Aperture Microscopy
   - None, the answer is incorrect.
   - Accepted Answers: Energy Dispersive Spectroscopy
   - 1 point

3. In DPH testing, which increases the temperature, the Cl/Na ratio in C-S-H was found to become more viscous. This can be verified using which of the following characterization techniques?
   - Secondary Electron - Scanning Electron Microscopy
   - Back Scattered Electron - Scanning Electron Microscopy
   - Energy Dispersive Spectroscopy
   - Aperture Microscopy
   - None, the answer is incorrect.
   - Accepted Answers: Energy Dispersive Spectroscopy
   - 1 point

4. A 3:1 ternary will always have as its end.
   - Graying filter
   - Smoothing filter
   - None of the above
   - None, the answer is incorrect.
   - Accepted Answers: None of the above
   - 1 point

5. For which of the following tests, an SEM microscopy can be used?
   - Fixed infiltration in 72
   - Determination of C/S ratio
   - To determine the elemental composition of material
   - To determine the phase composition of material
   - None, the answer is incorrect.
   - Accepted Answers: To determine the phase composition of material
   - 1 point

6. Choose the correct statement from the options given below:
   - Peak depth is a measure of image density.
   - Peak depth relates to the layer of material.
   - Display image has a depth of 50 om or 2.
   - Compress values for depth range from 1 to 20 times per pixel.
   - None, the answer is incorrect.
   - Accepted Answers: Peak depth is a measure of image density.
   - 1 point

7. An image with a resolution of 1280x1024 contains _______ pixels in a square inch.
   - 0
   - 100
   - 1024
   - 10,000
   - None, the answer is incorrect.
   - Accepted Answers: 10,000
   - 1 point

8. Select the correct increasing order of grey scale values of the phases present in the X-rayed cement paste:
   - Arthrodol + Inner C-S-H + Outer C-S-H + Portlandite
   - Portlandite + Outer C-S-H + Inner C-S-H + Arthrodol
   - Portlandite + Inner C-S-H + Outer C-S-H + Arthrodol
   - Arthrodol + Outer C-S-H + Inner C-S-H + Portlandite
   - None, the answer is incorrect.
   - Accepted Answers: Portlandite + Inner C-S-H + Outer C-S-H + Arthrodol
   - 1 point

9. Click here for Download Image
   - Use an image processing software (e.g., ImageJ) to determine the following:
   - The number of particles in the given image.
   - Accepted Answers: 121
   - 1 point

10. The percentage area covered by the particles (%):
   - None, the answer is incorrect.
   - Accepted Answers: 51%
   - 1 point

11. The mean size of the particle (average area):
   - None, the answer is incorrect.
   - Accepted Answers: 75.7
   - 1 point