Assignment 04

The due date for submitting this assignment has passed.
As per our records you have not submitted this assignment.

1. What are the components of cell wall?
   - Hemicelluloses and lignin
   - Cellulose and hemicellulose
   - Lignin and cellulose
   - Hemicelluloses, cellulose and lignin
   No, this answer is incorrect. Score: 0
   Accepted Answers: Hemicelluloses, cellulose and lignin

2. Hemicelluloses consist of
   - C4, C5 and C6 sugars
   - C5 and C6 sugars
   - Only C6 sugars
   No, this answer is incorrect. Score: 0
   Accepted Answers: C4, C5 and C6 sugars

3. Calculate the HHV (kJ/kg) of a sample with 5.2% moisture and 28% Hydrogen content. Also the LHV of the sample is 1850 kJ/kg
   - 1950
   - 7350
   - 5060
   Daily cutoff
   No, this answer is incorrect. Score: 0
   Accepted Answers: 7350

4. If the initial weight of biomass sample is 20g and its final weight is 18.7g, calculate the percent moisture in the analysis sample. (Weight of container is 15g)
   - 16%
   - 25%
   - 20%
   - 28%
   No, the answer is incorrect. Score: 0
   Accepted Answers: 25%

5. You should define (πw is defined as)
   - total mass of biomass
   - total volume in biomass
   - solid volume in biomass
   - solid volume in biomass
   No, the answer is incorrect. Score: 0
   Accepted Answers: total mass of biomass

6. Calculate the fixed carbon content (wt% basis) of the biomass if its moisture, volatile and ash contents are 5.3%, 71.2% and 11% respectively.
   - 12.6%
   - 12.5%
   - 12.5%
   - 11.3%
   No, the answer is incorrect. Score: 0
   Accepted Answers: 12.5%

7. The derivative (DPG) of the resulting data (weight curve) relates to
   - devolutilization rate of the sample
   - decomposition rate of the sample
   - conversion rate of the sample
   - all of the above
   No, the answer is incorrect. Score: 0
   Accepted Answers: conversion rate of the sample

8. High grade (500 – 1000 °C) thermal energy can be efficiently converted into ……
   - Mechanical energy
   - Chemical energy
   - Electrical energy
   - Low grade energy
   No, the answer is incorrect. Score: 0
   Accepted Answers: Mechanical energy

9. Some water plants grow faster than land based plants and provide new materials for the purpose of ……
   - Extractives
   - Cellulose
   - Structured polymer compounds
   - None of the above
   No, the answer is incorrect. Score: 0
   Accepted Answers: Extractives