**Chapter 5 & 6 Fuel Systems and Governor Systems** Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Chapter 5 Questions:

**Section A: Define the following terms. (1M for each)**

1. Gasoline:

2. Fossil Fuel:

3. Combustion:

4. Nitric Oxide:

5. Catalytic converter:

6. Ambient temperature:

7. Octane:

8. Catalysis:

9. Volatility:

10. Bernoulli’s Principle:

**Section B: Short Answer**

1. Describe what a primer system on a small engine is and how it works. (3M)

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2. Where must the fuel tank be located on a gravity feed fuel system? (2M)

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3. For safety reasons; what must be worn when using aerosol cleaners and compressed air? (2M)

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4. What does a fuel filter do in a fuel system? (2M)

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**Section C: Drawing (10M)**

Pick **one topic** and reproduce the diagram from the notes in Ch.5.

a.) Draw and explain what vapor lock is.

b.) Draw and explain what Bernoulli’s principle is.

c.) Draw a gasoline hydrocarbon molecule.

Chapter 6 Questions:

**Section A: Define the following terms. (1M for each)**

1. Governor system:

2. Parasitic load:

3. Mechanical governor system:

4. Electric governor system:

5. Inductive field:

6. Surging:

7. Hooke’s law:

8. Governed idle:

9. Hysteresis:

10. Applied load:

**Section B: Short Answer**

1. What is the purpose of a governor system? (3M)

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2. Early governor system only used what for speed and torque control? (1M)

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3. Governor systems limit the amount of horsepower by controlling what? (1M)

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4. What is common misconception regarding governor systems? (1M)

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Section C: Drawing (10M)

Draw the diagram and explain the undesirable condition of *hysteresis.*

Explanation of the hysteresis drawing: Note- you might mention what it is and how to provide a solution to this problem.

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