Automotive Technology 7th Edition
Chapter 91: Regenerative Brakes
Short Answer Quiz

Name: _____ Date: _____

1. How does the kinetic energy of a vehicle change with its speed, and what implication does this have for regenerative braking systems?

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2. Explain the concept of inertia and its relevance to regenerative braking in electric and hybrid electric vehicles.

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3. What are the limitations of regenerative brakes and how do they impact the design of these systems?

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4. Describe the process of energy transfer back to the motor during regenerative braking.

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5. How does the regenerative braking system interact with the antilock braking system (ABS) in hybrid vehicles?

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6. Discuss the concept of 'one-pedal driving' and provide examples of vehicles that offer this feature.

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7. What precautions should be taken when servicing the brakes on a Ford Escape hybrid vehicle?

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8. Explain the difference between mass and weight in the context of vehicle dynamics.

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9. Are friction brakes used during regenerative braking, and if so, how is the balance between regenerative and friction braking managed?

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10. What is the role of the electronic brake controller in hybrid vehicles equipped with regenerative braking systems?

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