

Manual Drivetrains and Axles 9th Edition

Chapter 17

Multiple Choice Quiz B

Name: _____ Date: _____

1. What is the significance of balancing a driveshaft in rear-wheel-drive vehicles?
 - A. To enhance fuel efficiency
 - B. To reduce engine noise
 - C. To minimize vibrations
 - D. To improve braking

2. How is frequency defined in the context of vehicle vibrations?
 - A. Distance covered per unit time
 - B. Number of complete motion cycles per second
 - C. Speed of the vehicle
 - D. Intensity of the vibration

3. What is a first-order vibration in a vehicle?
 - A. A vibration caused by engine misfiring
 - B. A vibration occurring at the highest frequency
 - C. A vibration created by a single disturbance per revolution
 - D. A vibration noticeable only at high speeds

4. In what condition is a high-frequency vibration most likely caused by an engine problem?
 - A. When accelerating
 - B. When idling
 - C. When braking
 - D. At constant speeds

5. What does an electronic vibration analyzer measure in a vehicle?
 - A. Engine RPM
 - B. Electrical current
 - C. Vibration frequency and intensity
 - D. Tire pressure

6. What does a dampener weight in a vehicle help with?
 - A. Reducing engine heat
 - B. Improving fuel efficiency
 - C. Dampening certain frequency vibrations
 - D. Balancing wheel alignment

7. What could cause a vibration felt in the steering wheel during braking?
 - A. Low tire pressure
 - B. Warped front disc brake rotors
 - C. Faulty spark plugs
 - D. Malfunctioning air conditioner

8. Which vehicle problem is most likely to be diagnosed with a neutral run-up test?

- A. Engine-related vibrations
- B. Transmission issues
- C. Brake system malfunctions
- D. Steering problems

9. What can cause a medium-frequency vibration felt throughout the vehicle?

- A. Unbalanced tires
- B. Driveshaft imbalance
- C. Electrical system faults
- D. Air conditioning malfunctions

10. What type of vibration is often described as 'nibble' or 'shimmy'?

- A. Low-frequency
- B. High-frequency
- C. Medium-frequency
- D. Variable-frequency

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Answer Key

1. C

2. B

3. C

4. D

5. C

6. C

7. B

8. A

9. B

10. A