Certified Professionals may earn .2 CEUs by completing quizzes based on selected articles in each issue of the *Assistive Technology* journal.

Each quiz is 12 questions in multiple-choice or true-false format. You must answer nine questions correctly (75%) to earn the .2 CEU credit. Results of the quiz will be emailed (or mailed by request) upon completion.

Complete the quiz by circling the correct answers. Mail or fax the completed quiz with payment to RESNA Quizzes, 1700 N. Moore St, Suite 1540, Arlington, VA 22209. FAX: (703) 524-6630.

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*Other quizzes from Assistive Technology Journal articles may be found on the RESNA website (www.RESNA.org). The primary program learning objective is to keep abreast of current findings and practices in assistive technology, research and rehabilitation engineering.*

Was the content of the article relevant to current AT practice?  ☐ Yes  ☐ No

Was reading the article and completing the quiz a good way for you to learn?  ☐ Yes  ☐ No
1. Which of the following is NOT a factor affecting ASR performance:
   A. user characteristics
   B. static or noise interference
   C. technology design
   D. surrounding environment
   E. type and quality of speech input

2. Speaker adaptable ASR is similar to speaker independent ASR in that...
   A. no distinct pauses or periods of silence are required
   B. no initial speaker training is required prior to use
   C. no initial voice recognition system is required

3. True/False Several types of dysarthria exist, each with distinct expressed speech characteristics.

4. Age-related voice (speech) deterioration may begin around ____________ years of age, but is highly dependent on the overall individual’s _________________.
   A. 52…hearing ability
   B. 74…condition of the vocal chords
   C. 60…health and well being

5. In the Sy and Horowitz study, an isolated-word, speaker dependent, speech recognition system based on ________________ was used.
   A. Tonal cadence
   B. Dynamic time warping
   C. Flow and rhythmic counting

6. True/False Clinicians rarely have difficulty obtaining quantitative acoustical measures of an individual’s speech consistency, particularly because equipment is very accessible.

7. The speech consistency score (SCS), or measure of speech consistency, was defined as the ratio of:
   A. speech dissimilarity over similarity
   B. speech similarity over dissimilarity
   C. speech dissonance over sonant harmony
8. True/False  Concerning dysarthric speech variability, confusion with vowel pairs was found to relate to vowels articulated mostly in front of the mouth as opposed to the back.

9. True/False  High recognition accuracy is typically the goal for the majority of adult users and designers of ASR systems.

10. True/False  From the early 1990’s to the early 2000’s, the general overall performance trends or patterns revealed have changed significantly because of improvements in ASR technology, differences in research study protocols, study subjects, and category of ASR system used.

11. Another research direction with some positive results involves using the _____________ characteristics or spectral transformations of disordered speech to account for the speech variability prior to speech recognition.

   A. electric – linguistic
   B. caustic – spastic
   C. acoustic – phonetic
   D. linguistic – acoustic

12. True/False  One strategy for dealing with stress-related reduction in accuracy is to increase the size of the vocabulary required for speech recognition in order to enhance word recognition skills.