1. Which technology is most commonly used for recognizing spoken words in a speech-to-sign language converter?

- A) Optical Character Recognition (OCR)

- B) Natural Language Processing (NLP)

- C) Speech-to-Text (STT)

- D) Image Processing

Answer: C) Speech-to-Text (STT)

2. In an application converting spoken language to ISL, what role does a gesture recognition model play?

- A) It converts spoken words into text.

- B) It translates text into sign language gestures.

- C) It analyzes the grammatical structure of text.

- D) It records spoken input.

Answer: B) It translates text into sign language gestures.

3. Which programming language is preferred for real-time image and video processing in sign language recognition?

- A) Java

- B) Python

- C) HTML

- D) SQL

-Answer: B) Python

4. What is the primary challenge in converting spoken Indian languages directly into ISL?

- A) Lack of accurate NLP tools

- B) Complexity of ISL grammar and gestures

- C) High costs of video rendering software

- D) Limited availability of ISL dictionaries

- Answer:B) Complexity of ISL grammar and gestures

5. What role does a machine learning model play in a spoken-to-sign language system?

- A) It translates sign language into text.

- B) It learns patterns to convert spoken language into ISL gestures.

- C) It enhances video quality.

- D) It helps to animate sign language avatars.

- Answer: B) It learns patterns to convert spoken language into ISL gestures.

6. Which of the following is an example of a commonly used dataset for gesture recognition?

- A) CIFAR-10

- B) Imagenet

- C) MS-ASL (Microsoft American Sign Language)

- D) TensorFlow Datasets

- Answer:C) MS-ASL (Microsoft American Sign Language)

7. What feature in ISL differs most significantly from spoken language and poses challenges in translation?

- A) Vocabulary size

- B) Sentence structure

- C) Verb conjugation

- D) Punctuation

-Answer: B) Sentence structure

8. Which type of neural network is most commonly used for image-based sign language translation?

- A) Convolutional Neural Network (CNN)

- B) Recurrent Neural Network (RNN)

- C) Feed-forward Neural Network

- D) Bayesian Network

- Answer: A) Convolutional Neural Network (CNN)

9. In a speech-to-ISL project, the purpose of using NLP is to:

- A) Recognize gestures.

- B) Detect facial expressions.

- C) Parse the spoken input into understandable commands.

- D) Generate high-resolution images.

- Answer: C) Parse the spoken input into understandable commands.

10. Which platform is best for training deep learning models for gesture recognition?

- A) AWS

- B) Arduino

- C) SQL Server

- D) Excel

- Answer: A) AWS

11. What is the main limitation of using standard text-to-sign language translation systems for ISL?

- A) Vocabulary limitations

- B) Limited to specific age groups

- C) Expensive to deploy

- D) Limited visual fidelity

- Answer: A) Vocabulary limitations

12. Which open-source framework is commonly used for implementing machine learning models in Python?

- A) Jupyter

- B) Django

- C) TensorFlow

- D) Notepad++

- Answer:C) TensorFlow

13. Which of the following poses a unique challenge in ISL translation for emotions or intonations?

- A) Voice modulation

- B) Use of facial expressions in ISL

- C) Text formatting

- D) Verb positioning

- Answer:B) Use of facial expressions in ISL

14. To improve real-time processing, which optimization technique is often employed in gesture recognition systems?

- A) Data augmentation

- B) Dimensionality reduction

- C) Cloud computing

- D) Data compression

- Answer: B) Dimensionality reduction

15. In ISL, what is an important visual cue that may accompany hand gestures?

- A) Tone of voice

- B) Eye gaze and facial expressions

- C) Sentence punctuation

- D) Character spacing

- Answer: B) Eye gaze and facial expressions

16. Which algorithm is most suitable for real-time image classification in video frames for gesture recognition?

- A) Naive Bayes

- B) Random Forest

- C) YOLO (You Only Look Once)

- D) K-Nearest Neighbors

- Answer: C) YOLO (You Only Look Once)

17. When converting spoken language to ISL, why is it important to understand Indian linguistic nuances?

- A) ISL is not affected by linguistic nuances.

- B) Some words lack direct translation in ISL.

- C) Linguistic nuances simplify gesture creation.

- D) Indian language uses simpler grammar than ISL.

- Answer: B) Some words lack direct translation in ISL.

18. Which of the following is a key advantage of using avatars for sign language in digital platforms?

- A) Reduces computational costs

- B) Allows for personalization and expressive gestures

- C) Eliminates the need for video content

- D) Simplifies grammatical complexity

- Answer: B) Allows for personalization and expressive gestures

19. What type of preprocessing is most critical for a gesture recognition system?

- A) Data duplication

- B) Background noise removal

- C) Gesture resizing

- D) Gesture labeling

- Answer:B) Background noise removal

20. A major limitation of translating spoken language to ISL is:

- A) Over-reliance on manual input

- B) Difficulty in processing fast speech

- C) Requirement of high-definition video

- D) Inconsistent vocabulary across languages

- Answer:D) Inconsistent vocabulary across languages