**Practice Question 1**

**Sentence**: كتب الطالب الدرس  
**Q**: What type of challenge does this sentence represent?

**A**:

* **Challenge**: Diacritic Ambiguity
* **Problem**: It could be interpreted as "kataba" (he wrote) or "kutiba" (it was written).
* **Solution**: Apply morphological analysis with contextual disambiguation or automatic diacritization.

**Practice Question 2**

**Sentence**: رأيت القطة، فأعطيتها الطعام  
**Q**: What kind of anaphora is this, and what challenge does it present?

**A**:

* **Challenge**: Ambiguous Anaphora
* **Problem**: "ها" could refer to a human or non-human, machine can't distinguish.
* **Solution**: Add semantic features (e.g., human/non-human) to the NLP system for resolution.

**Practice Question 3**

**Sentence**: المعلمون المجتهدون حضروا مبكرًا  
**Q**: Identify the syntactic challenge in this sentence.

**A**:

* **Challenge**: Agreement
* **Problem**: Adjective must agree in number, gender, definiteness.
* **Solution**: Use syntactic parsing and grammar rules to ensure full agreement.

**Practice Question 4**

**Sentence**: لم يقل الطالب الحقيقة  
**Q**: What is the morphological challenge here?

**A**:

* **Challenge**: Defective Verb
* **Problem**: The root verb has a long vowel that changes when conjugated.
* **Solution**: Use a root-pattern morphological analyzer for weak verbs.

**Practice Question 5**

**Sentence**: واشنطن / واشينغتون  
**Q**: What is the orthographic issue here?

**A**:

* **Challenge**: Lack of Uniformity in Writing Styles
* **Problem**: Named Entity inconsistency (Arabization variance).
* **Solution**: Normalize names using transliteration tables and lexicons.

**Practice Question 6**

**Sentence**: الطالب يقرأ الكتاب  
**Q**: What type of sentence is this and what syntactic feature does it show?

**A**:

* **Challenge**: Flexible Word Order (SVO here)
* **Problem**: Syntactic parsers must handle multiple word orders.
* **Solution**: Use dependency parsers trained on Arabic text.

**Practice Question 7**

**Sentence**: رأسمالية  
**Q**: What morphological challenge is represented?

**A**:

* **Challenge**: Annexation (Compound Morphology)
* **Problem**: Two words ("رأس" + "مال") combined semantically.
* **Solution**: Segment and process compound nouns semantically.

**Practice Question 8**

**Sentence**: جاء الأولاد / جاءت البنات  
**Q**: What syntactic feature is this?

**A**:

* **Challenge**: Agreement (Verb-Subject)
* **Problem**: Verb agreement changes with gender/number/order.
* **Solution**: Apply grammar-based parsing for subject-verb agreement rules.

**Practice Question 9**

**Sentence**: معقدة، الملاحظة على اللوح  
**Q**: What type of anaphora is hidden here?

**A**:

* **Challenge**: Hidden Anaphora (Zero Anaphora)
* **Problem**: No explicit subject; causes ambiguity in sentence parsing.
* **Solution**: Infer subject using syntactic structure and context models.

**Practice Question 10**

**Sentence**: بالحديد والنار  
**Q**: What kind of lexical structure is this?

**A**:

* **Challenge**: Multi-Word Expression (MWE, Idiomatic)
* **Problem**: Literal meaning fails (not "with iron and fire").
* **Solution**: Use idiom recognition systems and MWE dictionaries.