

## Second Term Exam of URM (3rd Year) - Answer Key

**Exercise 1:** Fill in the gaps below with the appropriate terms. **(1 pt. each)**

1. “Children classified as having high IQs will exhibit more anxiety in the classroom than children classified as having low IQs” is a **directional alternative hypothesis**.
2. “There is a relationship between technology usage and EFL speaking fluency” is a **nondirectional alternative hypothesis**.
3. “There is no relationship between the frequency of EFL vocabulary practice and vocabulary retention in the population” is a **null hypothesis**.
4. “There will be an increase in EFL vocabulary retention among students who engage in passive learning strategies compared to those who actively participate in vocabulary practice exercises.” is a **directional alternative hypothesis** to “There will be no improvement in EFL vocabulary retention among students who engage in passive learning strategies compared to those who actively participate in vocabulary practice exercises.”
5. **Boolean logic** a system of operations – AND, OR, and NOT – utilized by computers to combine search terms, enabling users to refine and broaden their searches effectively.
6. An **operational definition** of "stress" in a research study could be: "the number of times a participant's heart rate exceeds 100 beats per minute during a standardized cognitive task."
7. **Databases** are organized collections of structured information, or data, typically stored electronically in a computer system.
8. An encyclopaedia entry describing various types of educational research conducted over a 10-year period is an example of a **secondary source**.
9. **Null hypotheses**, unlike **alternative hypotheses**, are not described as being directional or nondirectional.

**Exercise 2:** Indicate, using a tick (✓), whether each of the hypotheses stated below is *plausible* or *implausible*, and provide the reason why any deemed implausible is considered as such.

**Plausible: 1 pt. Implausible: 0.25 /Justification: 0.75. Sum = 10 pts.**

1. Students are exposed to vocabulary learning through virtual reality environments and they demonstrate higher retention rates compared to those using traditional methods. **(implausible)**  
**No relationship between variables is stated.**
2. Students receiving audio feedback on their writing assignments will show greater improvement in their creativity compared to those receiving written feedback. **(Implausible)**  
**Not simply/ concisely stated (more than one relationship is addressed).**
3. EFL learners immersed in culturally authentic listening and video materials will exhibit enhanced listening and speaking comprehension abilities compared to those exposed solely to standard instructional materials. **(Implausible)**  
**Not simply/ concisely stated (more than one relationship is addressed).**
4. EFL students engaged in regular peer interaction activities will demonstrate increased fluency and confidence in spoken English compared to those who primarily engage in teacher-led activities. **(Implausible)**  
**Not simply/ concisely stated (more than one relationship is addressed).**
5. EFL learners with higher levels of intrinsic motivation will exhibit decreased proficiency gains compared to those with lower levels of motivation. **(Implausible)**  
**Not consistent with the existing body of knowledge.**
6. EFL students who receive regular formative assessment and feedback on their reading comprehension tasks will demonstrate higher levels of comprehension compared to those who do not. **(Plausible)**
7. EFL learners exposed to grammar instruction through task-based language teaching as well as consistently listening to educational podcasts will show greater improvement in grammatical accuracy and usage compared to those taught through traditional grammar instruction methods. **Not simply/ concisely stated (more than one relationship is addressed).**
8. Pronunciation practice using technology-assisted tools is desirable by students for the improvement in reducing their native-language accent. **(Implausible)**  
**Not testable.**
9. EFL students have higher levels of autonomy in their learning process and they demonstrate greater proficiency gains. **(Implausible)**  
**No relationship is stated between the variables.**
10. The intrinsic motivation to learn language is the same across all cultures. **(Implausible)**  
**Not testable.**