

ID \_\_\_\_\_

**ICS313-02 (031)**

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Quiz # 1  
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Question 1: \_\_\_\_\_ (4 points)

Define the following terms relating to language evaluation criteria:

**Readability**

**Writability**

**Reliability**

**Orthogonality**

Question 2: \_\_\_\_\_ (4 points)

A software development firm is make a choice among many programming languages to develop a GIS (Geographic Information System) which requires high resolution graphical user interface of locations and fast response on-line critical transactions. Set criteria to help this firm do the job with your justifications.

Question 3:

(4 points)

Given the following grammar, show the parse tree for the statement:

$M := A * ((B + C) * D)$

$\langle \text{assign} \rangle \rightarrow \langle \text{id} \rangle := \langle \text{expr} \rangle$

$\langle \text{id} \rangle \rightarrow A \mid B \mid C \mid D \mid M$

$\langle \text{expr} \rangle \rightarrow \langle \text{expr} \rangle + \langle \text{term} \rangle \mid \langle \text{term} \rangle$

$\langle \text{term} \rangle \rightarrow \langle \text{term} \rangle * \langle \text{factor} \rangle \mid \langle \text{factor} \rangle$

$\langle \text{factor} \rangle \rightarrow ( \langle \text{expr} \rangle ) \mid \langle \text{id} \rangle$