Sessional Quiz **Date: 24/07/2021**

BANGLADESH UNIVERSITY OF ENGINEERING AND TECHNOLOGY
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

L-3/T-1 CSE 300: Technical Writing and Presentation

Time: 45 minutes **Marks: 50**

Student Name: _____ Student No: _____

1. Write down the most appropriate answer for each of the following multiple choice questions. (10x1=10)

Please format your answers in the following manner:
(a): (G)
(b): (K)

(a) Which latex code will generate the correct output as follows:
this is a **bold** text with an *italic* text

(A) `this is a \bf{bold} text with an \textit{italic} text`
(B) `this is a {\bfseries bold} text with an \emph{italic} text`
(C) `this is a \bfseries{bold} text with an \textit{italic} text`
(D) `this is a \bf{bold text} with an \em{italic} text`

(b) Which documentclass should we use to write research papers?
(A) article (C) book
(B) report (D) letter

(c) Which is a good presentation practice?
(A) Keep a small number of slides but assign enough time to each slide.
(B) Keep a large number of slides but assign enough time to only important slides.
(C) Keep a large number of slides and assign equal time to each slide.
(D) None of the above

(d) Which of the following can not be a numbering scheme for reference items?
(A) Numbering in order of presence in the bibliography item list
(B) Numbering in order of mention
(C) Alphabet-wise
(D) Random

(e) Which of the following is not a list environment in LaTex ?
(A) itemize (C) enumerate
(B) description (D) record

(f) Which of the following statements is true?
(A) `[htbp]` and `[pbth]` will produce an identical placement
(B) `[htbp]` and `[thbp]` will produce and identical placement
(C) Both (A) and (B)
(D) None of the above

(g) What are the minimum required components in a latex document?
(A) `\documentclass{}`, `\begin{document}`, and `\end{document}`
(B) `\begin{document}` and `\end{document}`
(C) `\documentclass{}`, `\maketitle`, `\begin{document}`, and `\end{document}`
(D) None of the above

(h) How do you write the column specifiers for a table with five columns, the first of which is left justified, the last of which is right justified, and the rest are centered? Except for the left and right boundaries, there are no vertical lines?
(A) [lcccr] (C) {|l!c!c!c!r|}
(B) {|lcccr|} (D) {lcccr}

(i) What is the correct syntax for a LaTeX table?
(A) `\begin{tabular}` (C) `\begin{tables}`
(B) `\start{table}` (D) All of the above

(j) What will be the maximum allowed number of bibitems within the following bibliographic environment?

```
\begin{thebibliography}{2}
\end{thebibliography}
```

(A) 2 (C) 10
(B) 9 (D) 99

2. Consider the given write-up `safelabeling.pdf` in which we have purposefully violated basic technical writing principles in many places. You have to identify and correct those. (20)

   Please format your answers in the following manner.

   - Line 2: "Dr." is not allowed in authors' names
   - Line 48: lemma → Lemma
   - etc.

3. Answer the following questions. (5x4=20)

   (a) Suppose you want to generate a table in your CSE300 presentation (you can assume that the document class is beamer). Your table will have 3 rows and each row will have 3 columns. Your table (of size 3x3) will be blank on the first page (a particular frame) and will be populated with numbers having a maximum of 3 digits on the next page (the following frame). In order to keep the look consistent, although the table on the first page is blank, you want to keep the height and width of the cells identical to the populated table of the next page. For your convenience, the output is shown in Figure 2 (two consecutive pages i.e., frames). Note that the heights of the rows are also increased (2x of the default value). The code to generate the second frame with the populated table is also given. Now write necessary codes in order to generate the output of the first frame having the blank table. In case you find it difficult to write the exact code, try to write an idea to accomplish this task. This could be worth some partial credit.

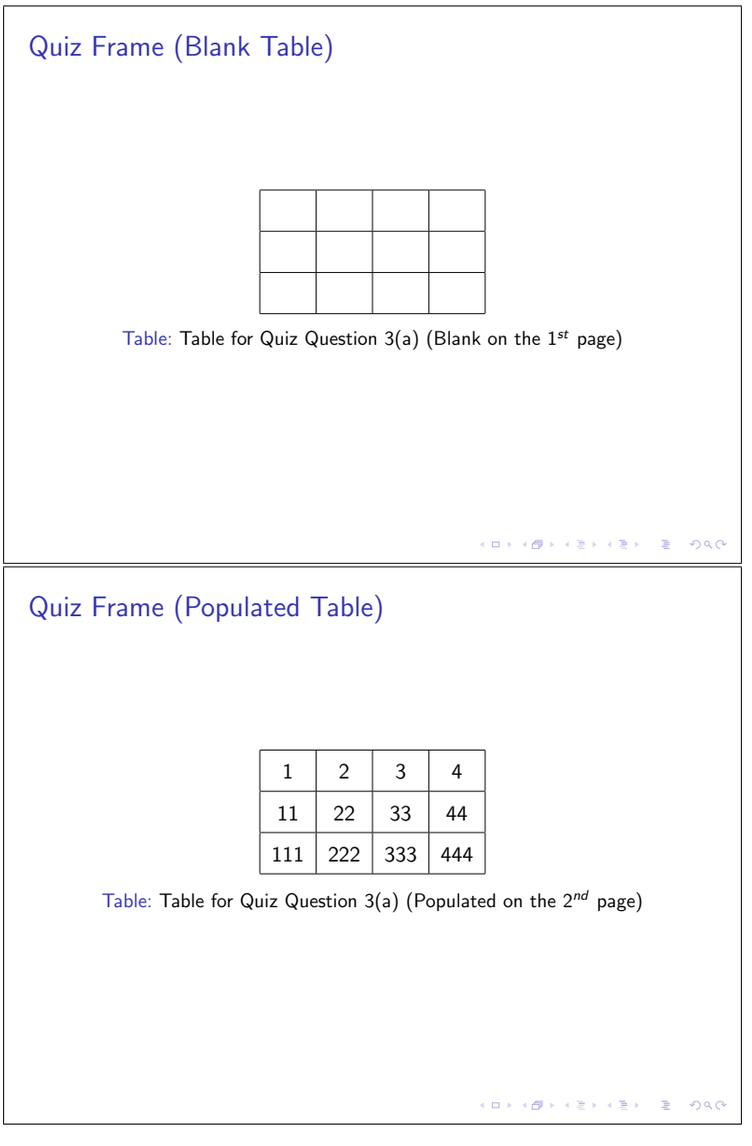

Figure 1: Figure of two consecutive frames for Question No. 3(a)

```latex
\begin{frame}{Quiz Frame (Populated Table)}
    \begin{table}[]
    \centering
    \begin{tabular}{|c|c|c|c|}
        \hline
        1 & 2 & 3 & 4\\
        \hline
        11 & 22 & 33 & 44\\
        \hline
        111 & 222 & 333 & 444\\
        \hline
    \end{tabular}
    \caption{Table for Quiz Question 3(a) (Populated on the $2^{nd}$ page)}
    \label{tab:my_label}
\end{table}
\end{frame}
```

Figure 2: Figure for code to generate the second frame of Question 3(a)

(b) Why should we use LaTeX instead of WYSIWYG (What You See Is What You Get) editors e.g., MS Word, LibreOffice Writer, Apple Pages? State three concrete reasons with justifications.

(c) When do we need to use vector graphics instead of raster graphics in technical writing/presentation? Give one example for each when you need to use pie-chart rather than bar chart and vice-versa.

(d) In beamer, how do slides and frames differ? Give an example. Mention two points which help in making your presentation slides visible from a distance.

(e) What will be outcome of the following LaTeX code snippet?

```
Consider the following equation.
\begin{equation}
    a + b = c
\end{equation}
It can also be written as follows: $$a+b=c$$ If you prefer, it can also be
written as $a+b=c$.
```