Quiz 6: Shell Programming

Do not refer to any printed material.
No talking or discussion is allowed until the answer sheets are all collected.

Review:

1. It is necessary to quote the *parentheses* '(...)' in the following shell command because:

   `$ echo \(3 + 4\) \* 5`

   (A) The shell will try to start a subshell
   (B) The shell will terminate with a *divide by zero* exception
   (C) The *precedence* will be wrong, i.e., addition will not be done *before* multiplication
   (D) The shell will expand into a list of files otherwise
   (E) The shell will cause a sementation fault

2. Which of the following will cause a shell variable `var` to be defined with the value "`value`"?

   (A) `$ $var=${value}`
   (B) `$ $var = value`
   (C) `$ var = value`
   (D) `$ var=value`
   (E) `$ $var=value`

3. A shell script `script.sh` is executed like this, and the output is shown:

   ```
   $ script.sh 1 2 3 4 5 6
   parameters are 1 2 3 4 5 6
   ```

   The first line of the file `script.sh` is `#! /bin/sh` The second line could be:

   (A) `$ parameters are $* $2 $3 $4 $5 $6`
   (B) `$ echo parameters are $0 $1 $2 $3 $4 $5`
   (C) `$ echo parameters are $# $1 $2 $3 $4 $5`
   (D) `$ echo parameters are $@`
   (E) `$ echo parameters are $$ $1 $2 $3 $4 $5`

Preparation:

4. This question relates to input and output in the shell:

   (A) We can perform *input* with `read`, *output* with `printf`
   (B) We can perform *input* with `read`, *output* with `echo`
   (C) We often use a `while` loop with `read` to process *input*, one line for each iteration of the loop
   (D) We use *redirection* to put output into files
   (E) All the other choices are correct

5. Functions in the shell:

   (A) are not *actual* functions, but are separate shell scripts that are loaded at run time
   (B) are not supported in version 2.x of Bash;
   (C) are less useful than in other programming languages
   (D) Cannot accept function parameters
   (E) Do not start a new process