



## 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 segmentation 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