

# Unx511/DPS912: Unix Systems Programming

## Quiz 2

1. What is the difference between a shared library and a static library? [2 marks]
2. What command would you issue to list the dynamic dependencies of a shared library (for instance, libcrypt.so)? [1 mark]
3. What command would you issue to see the symbols inside a static library (ie. libcrypt.a)? [1 mark]
4. Why do functions, processes, and/or programs return an error number? [1 mark]
5. What do the following functions do?  
#include <string.h>  
#include <stdio.h>  
a) void perror(const char \*msg); [1 mark]  
  
b) char \*strerror(int errnum); [1 mark]
6. When writing portable applications, we may want the various header files to expose only the definitions (constants, function prototypes, and so on) that follow a particular standard. To do this, we define one or more feature macros when compiling a program or by defining the macro in the program source code:  
#define \_BSD\_SOURCE 1, or  
\$cc -D\_BSD\_SOURCE prog.c  
What standards do the following macros represent?  
a) \_GNU\_SOURCE [1 mark]  
  
b) \_BSD\_SOURCE [1 mark]  
  
c) \_POSIX\_SOURCE [1 mark]