NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY
FACULTY OF APPLIED SCIENCE
COMPUTER SCIENCE DEPARTMENT
DECEMBER EXAMINATIONS 2005

SUBJECT: OBJECT-ORIENTED PROGRAMMING AND APPLICATIONS
CODE: SCS6101

INSTRUCTION TO CANDIDATES

Answer any five questions.

Time: 3 hours

QUESTION ONE

a) Outline design considerations for forms   [8]
b) What is the difference between post and get methods?   [4]
c) How does a check box differ from a radio button
     i)   Functionally   [1]
     ii)   Implementationally   [2]

d) PHP uses a blend of interpretation and compilation in order to provide the best mix of performance and flexibility to programmers. Explain this statement   [5]

QUESTION TWO

a) Outline the installation of php onto an apache web server   [10]
b) Assume that in a web page a user can enter a word into a text box (with the name attribute = word) and the web page allows for the generation of another string which is the given string in reverse. Without using php's inbuilt functions write the script that will perform this string manipulation and send a web page back to the client browser with a statement that reads for example "hello reversed is olleh"   [10]

1

QUESTION THREE

a) Desribe the $_REQUEST autoglobal   [3]
b) How does cgi differ from active server pages?   [5]
c) If your computer does not have IIS outline how you would install it?
                                                                       [5]
d) What is the difference between a monitor and server in mysql? [4]
e) What do you understand by the term PEAR with regards to extending
   php?   [3]

QUESTION FOUR

If you want to use php in your company and your manager favours another
solution, or if you are trying to convince a potential client that php is really a
superior choice for the web, you are going to need to have a clear-cut set of
reasons why you believe php is the superior language. Outline the selling points
of php that you would use to justify your choice of php   [20]

QUESTION FIVE

a)   Explain the following php functions with as much detail:
     i)   mysql_connect   [4]
     ii)   phpinfo   [4]
     iii) mysql_select_db   [2]

b)   i)   How does xml differ from html functionally?   [2]
     ii)   Give a detailed example of how it can be used in web applications
                                                                       [2]

c)   What do you understand by the term multimedia? Give examples with
     regards to web pages   [3]

d)   Name a unique IDE that can be used with the following: asp, php and
     mysql   [3]

QUESTION SIX

a) Explain the following code:

i) Hi <?php echo $_POST['name']; ?>.
You are <?php echo $_POST['age']; ?> years old.   [4]

ii)
```
<?php
if (strpos($_SERVER['HTTP_USER_AGENT'], 'MSIE') !== FALSE) {
?>
<h3>strpos() must have returned non-false</h3>
<p>You are using Internet Explorer</p>
<?php
} else {
?>
<h3>strpos() must have returned false</h3>
<p>You are not using Internet Explorer</p>
```
[4]

c) i) What is a cookie and what are its attributes?   [5]
    ii) Are there any security risks associated with cookies? Explain [3]
    iii) What is the difference between cookies and sessions?   [4]

END OF QUESTION PAPER