

NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY
FACULTY OF APPLIED SCIENCE
COMPUTER SCIENCE DEPARTMENT
DECEMBER EXAMINATIONS 2004

SUBJECT: OBJECT ORIENTED PROGRAMMING AND APPLICATIONS
CODE: SCS6101

INSTRUCTION TO CANDIDATES

Answer any five questions.
Total marks 100

Time: 3 hours

QUESTION ONE

- a) How does a world-wide-web server work? [5]
- b) What is the purpose of a client-side scripting language such as Javascript? [5]
- c) What is the purpose of a server-side scripting language such as Active Server Pages VB Script? [5]
- d) What factors should be considered when choosing a server-side scripting language or CGI language. [5]

QUESTION TWO

Write an HTML script to display the following table:

| Student_ID | Name | Programme | Part |
|------------|------------|----------------------|------|
| N0001234X | Kofi Annan | Computer Science | 3 |
| N0034837J | Hans Blix | Chemical Engineering | 4 |

[20]

QUESTION THREE

Write an Active Server Page application to access data stored in a SQL database table. The SQL server database should make use of a DSN called Staff, a database called Personnel and a table called Employee. The following fields should be included in the table: ID [int], Firstname [nvarchar], Lastname [nvarchar], DateofBirth [DateTime].

[20]

QUESTION FOUR

Write an SQL stored procedure to insert a record into a database. This stored procedure should accept parameters corresponding to the following fields in a database table called Employee: Name, Lastname, Gender, DateOfBirth, Salary. [20]

QUESTION FIVE

- a) QUESTION FIVE What is the difference between an absolute URL and a relative URL? [4]
- b) What is the eXtensible Markup Language? [4]
- c) Compare and contrast XML and HTML. [4]
- d) Explain the basic mechanism of a Web application connected to a database server. Include the manner in which data is accessed and transported. [8]

QUESTION SIX

List and describe the server-side objects that are available in the scripting object model for Active Server Pages. [20]

QUESTION SEVEN

- a) Define an object, as the term is used in Object-Oriented programming. [4]
- b) Define the term inheritance, and explain how this concept is used in designing an object oriented program. [6]
- c) What is a property or instance variable? [4]
- d) What is a method? [3]
- e) What is a message? [3]

END OF QUESTION PAPER

GOOD LUCK!