UNIT CODE: SIT 404
UNIT TITLE: CLIENT SERVER SYSTEMS
LECTURE HOURS: 45 Prerequisite: *None*
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1.1 Purpose of the Course

Provides in-depth concepts of data communications, and networking and the concept of client server technology.

1.2 EXPECTED LEARNING OUTCOMES

At the end of this course the learner should be able to:

i) Design moderately complex networks using appropriate network and link types.

ii) Configure different types of network hardware.

iii) Physically construct different types of network cables.

3.0 Course description

Information systems approach to client-server and distributed systems analysis, design, and management. The theory behind each component will be presented while exploring the impact it has on the business of managing information.

WEEK	TOPIC	SUB TOPIC	REMARKS
1.	Components of client-server and distributed systems architecture	• Introduction to computing systems • Components of client-server and distributed systems • Architecture of client-server and distributed systems	
2.	Operating systems	• Desktop operating system • Network operating system • Server operating system	
3.	CAT 1	WEEK 1 & 2 Content	
4.	Networking, inter-process communication	• Networking • Standards • Protocols • Security • Inter-process communication • Distributed objects	

5.	Client/Server and databases	• Introduction • Client/Server in Respect of Databases • Client/Server Database Architecture	
6.	Distributed systems development	• Client-server databases • User interfaces	
7.	CAT II	Week 4,5 & 6 Content	
8.	Application interfaces	• Client/Server Application Components • Technologies for Client/Server Application • Service of a Client/Server Application • Categories of Client/Server Applications • Client and Server Services • Client/Server Application: Connectivity • Client/Server Application: Layered Architecture	
9.	Practical Assignment	Identify Client-server topologies and demonstrate design of networks using appropriate links types	
10.	Client-server computing and business process reengineering	• Relationship between client-server computing and Business process reengineering	
11.	Workflow automation, and groupware	• Workflow Automation • Groupware	
12.	Migration from legacy systems is considered along with project development and management.	• Service of a client/server application	
13.	Revision	Course content, Past paper Questions	
14.	University Exams		
15.			

4.0 Teaching Methodologies

Lectures, guided reading, presentations and discussions.

5.0 Instructional Materials/Equipment

Computers, Textbooks, Online tools

6.0 Course Assessment

Type of Assessment	Weighting
C.A.T(Practical, class presentation)	30%
Examination	70%
Total Scores	**100%**

7.0 Reading Materials for the Course

CORE TEXTBOOKS

1. Williams B. K. & Sawyer S. C. (2005) Using information technology: A practical introduction to computers and communications. 6th Ed. New Delhi : Tata McGraw-Hill Publishing Company Limited, [ISNB 978-0073516752]
2. Rainer, R. Kelly (2009). Introduction to information systems. New Jersey: John Wiley & Sons [ISBN 978-0470169001]
3. Burch J. G., Strater F. R., & Grudnitski G. (1979) Information systems: Theory and practice. 2nd Ed. New York : John Wiley and Sons, [ISBN 978-0471123224]

RECOMMENDED TEXTBOOKS

4. O'Brien J. A. (2000) Introduction to information systems: Essentials for the internetworked e- business enterprise. Boston : McGraw-Hill Higher Education, [ISBN 978-0072423242]
5. Norton P. (2006) Introduction to computers. New Delhi : Tata McGraw-Hill Publishing Company Limited, [ISBN 978-0072978902]