# SARDAR PATEL UNIVERSITY

Programme: B.Com.

## Syllabus with effect from: June-2017

Choice Based Credit system

Computer Application Paper – VIII (Subject Elective / Core Elective – Computer Application Group)

#### Paper Code: UB04ECOM38

**Total Credit:** 3 (Theory + Practical)

Title of Paper: Open Source software and Language Operations. Weightage of Marks : Theory(50%) + Practical(50%)

# **Objectives**:

• To provide knowledge of Open source software specially open office, Gujarati language typing through IME Indic and Cryptography and also computer security tools

Ι	<b>Cryptography:</b> Introduction, Foundations of Cryptography, Needs for Cryptography, Aims of Cryptography, Who used Cryptography, Terminologies used in Cryptography (Definitions) – Algorithm, Crypto System, Cipher Text, Code, Decipher, Encipher, Key, Key Space, Link Encryption, Plain Text, Stenography, Work Factor Cipher Methods – Bit stream Method, Block Cipher Method, Substitution Cipher, Transposition Cipher, Vernam Cipher, Running Key Cipher, Hash Function, Cryptographic Algorithms – Symmetric Algorithm, Asymmetric Algorithm, Cryptographic Tools – Public Key Infrastructure, Digital Certificate, Digital Signature, Hybrid Cryptographic System, Stenography, Secret Key Cryptography, Public Key Cryptography	25%
II	<b>Open Source:</b> Concept of Open Source, Various types of Open Source Software, Advantages and disadvantages of Open Source Software, Concept of GPL-General Public License, Difference between Licensed and GPL software. <b>Software in public</b> <b>domain:</b> Open source, Freeware, Shareware, Adware, Crippleware, Trialware, Nagware.	25%
III	Open Source Software - Open Office : What Is OpenOffice.org? What is Writer?What is Calc? What is Impress? What is Draw?Using Writer - Word Processor : Opening a Document, Laying Out the Page, Entering and Editing Text, Navigating Through Your Document, Viewing Your Words, Spelling It Correctly, Printing, Formatting your document - Font, Paragraph, Spacing, Inserting - Tables, Pictures, Borders, etc.	25%
IV	Using Calc : Creating Spread Sheet, Inputting your Data, Columns and Rows, Selecting Cells, Copying, Paste and Dragging Data, Formatting Numbers and Text Using Impress : What is Impress? Parts of the main Impress window, Working with views, Creating a new presentation, Formatting a presentation, Slide masters and style, Working with slide masters, Adding and formatting text, Creating tables, Adding graphics, spreadsheets, charts, and other objects, Adding comments to a presentation.	25%

Practicals: Practicals are based on above Units. (Weightage 50%) – Two Practical periods per week per batch

## **Reference Books**

- Getting started with Open Office.org ooo Authors, http://www.odfauthors.org/openoffice.org/english/userguide3/published/
- Cyber Security by Godbole, Wiley India.
- Computer Security by Gollman Wiley India
- Principles of Information Security by Micheal E. Whitman & Herbert J Mattord, 4<sup>th</sup> Edition-Course Technology
- The basics of Information Security by Jason Andress, Syngress Press
- Information Security Management Hand Book by Richard O'Hanley & James S. Tiller, 6<sup>th</sup> edition, CRC Press

