Percentage of Revision of B. Sc., - Computer Technology
Syllabus Revised for - 2020-2023

B.Sc., CT							
S. No	**Course Code**	**Course Title**	**Change Details**	**% of Changes**	**Content Deleted**	**Content Updated**	**Reason for Change**
1	20UCT 102	Core II: Digital Fundamentals And Computer Organization	Paper has renamed as Digital Fundamentals And Computer Organization and Two papers combined **DIGITAL COMPUTER FUNDAMENTALS** and **COMPUTER SYSTEM ARCHITECTURE**	50	**UnitI:** Double precision Numbers, Floating Point Representation , Weighted Codes. **Unit II:** Implicants, Don't Care Combinations, Irredundant expressions **Unit III:** Parallel Binary Adders , BCD Adder ,2's Complement Adder, Parallel Binary Subtractors ,2's Complement Subtractor , 2's Complement Adder/Subtractor , Binary Multiplier , Binary Divider , Comparator **Unit IV:** Clock Signals – Clocked R-S Flip-Flop – Data Latch or D-Flip-Flop – Clocked Data Latch, Positive Edge Triggered Data Flip-Flop, T Flip-Flop –	**UnitI:** 9's Complement ,10's Complement **Unit II:** NIL **Unit III**: NIL **Unit IV: Central Processing Unit:** General Register Organization, Stack Organization, Instruction Formats, Data Transfer and Manipulation, Reduced Instruction Set Computer (RISC). **Unit V: Memory Organization:** Memory Hierarchy, Main Memory, Auxiliary Memory , Associative Memory , Cache Memory ,Virtual Memory.	As Board members suggested combining to papers.

				Master-Slave J K Flip-Flop, Shift registers – Shift-left Register - Shift-Right Register. **Unit V: NII**		
2	20UCT 2A	Allied II: Discrete Mathematic	Unit 1& 2 Interchanged and Few topics excluded and included.	10	**Unit I**: Inclusion and Exclusion principle. **Unit II**: NIL **Unit III**: Binary Relations **Unit IV**:NIL **Unit V**:NIL (Unit 1& 2 Interchanged.)	**Unit I**: NIL. **Unit II**: NIL **Unit III**: NIL **Unit IV**:NIL **Unit V**: Operations on Graphs	As Board members suggested to made few changes.
3	20UCT 30	Core V: Java Programmin	Few contents removed in unit III, IV and V. & Few content included in Unit IV.	10	**Unit I**: NIL **Unit II**: NIL **Unit III**: Synchronization, Throwing our Own Exceptions , Using Exceptions for Debugging **Unit IV**: More About Applet Tag **Unit V**: Reading / Writing Bytes, Random Access Files, Interactive Input and Output ,Other Stream Classes.	**Unit I**: NIL. **Unit II**: NIL **Unit III**: NIL **Unit IV**: Event Handling **Unit V**: NIL	As Board members suggested to made few changes.
4	20UCT 30	Core VI: Database Managemen System	Few contents removed in unit I, II , III & V. Few content included in Unit II, V.	25	**Unit I:** Another Example of Normalization. **Unit II:** Logging into SQL *Plus – SQL *Plus Commands – Oracle Errors and Online Help – Alternate Text Editors - SQL *Plus Worksheet	**Unit II**: Sample Databases **Unit V:** Cursors: Types of Cursor, Implicit cursor , Explicit cursor, Action on Explicit cursors.	As Board members suggested to made few changes.

					SQL *Plus Table Types Spooling Error codes **Unit III:** Formatting Substitution Variables DEFINE Command, CASE structure Unit IV: Bind variables Arithmetic Operations, Nested Blocks **Unit IV:** NIL. **Unit V:** PL/SQL Varrays, Data Dictionary Views		
5	20UCT…	…VII …rating …stems	Few contents removed in unit I, II & V Few content included in Unit I & II.	20	**Unit I:** Introduction of Operating System, Types of Operating System **Unit II:** Operations on Process, Cooperating Processes, Inter-process Communication, Basic Concepts, Multiple-Processor Scheduling, Real Time Scheduling **Unit III**: NIL **Unit IV:** NIL **Unit V:** Disk management	**Unit I**: What is an Operating System, **Operating System Structures**: System Components- Operating System Services -System Calls - System Programs - System Structure. **Unit II: Threads:** Overview - Benefits- User and Kernel Threads- Multithreading Models. **Unit III**: NIL **Unit IV**: NIL **Unit V**: NIL	As Board members suggested to made few changes

6	20UCT 41	Core IX: Software Engineering	Few contents removed in unit II , IV & V. Few content included in Unit V.	15	**Unit I:** NIL **Unit II**: System Modeling **Unit III**: NIL **Unit IV**: Mapping Data Flow into a Software Architecture **Unit V**: A strategic approach to software testing, White-Box Testing, Functional and Non Functional Testing.	**Unit I:** NIL **Unit II**: NIL **Unit III**: NIL **Unit IV**: Nil **Unit V**: **Testing for Web Apps**: Performance testing: Performance testing objectives , Load testing , Stress Testing	As Board members suggested to made few changes.
7	20UCT 4A	Allied IV: Big Data Analyties	New Syllabus introduced	100	New Syllabus introduced for all 5 Units instead of **Allied IV: Processors** Paper (**Allied IV: Processors** Shifted to III Semester of this syllabus scheme)	**Allied IV: Processors** Shifted To Iii Semester Of This Syllabus Scheme	As Board members suggested to introduced New paper.
8	20UCT 51	Core XII: Information Security	Few contents removed in unit III & V .	5	**Unit I:** NIL **Unit II**: NIL **Unit III**: Basic Concepts **Unit IV**: NIL **Unit V**: Brief Introduction To TCP/IP	**Unit I:** NIL **Unit II**: NIL **Unit III:** NIL **Unit IV**: NIL **Unit V:** NIL	As Board members suggested to made few changes.
9	20UCT 5E	Elective I – Data Mining and Warehousin	Paper name has renamed as Elective I -Data Mining and	20	**Unit I**: NIL **Unit II**: NIL **Unit III**: NIL **Unit IV**: NIL **Unit V: Big data Analytics :**	**Unit I:** NIL **Unit II:** NIL **Unit III:** NIL **Unit IV:** NIL **Unit V: Data warehousing :**	As Board members suggested, for introducin g

			are housing Instead Of Elective I- Data Mining And Analytics . Unit V has revamped.		Introduction ,Drivers for big data, Applications, Architecture, Advanced Analytics platform- Implementation	Data warehousing Components ,Building a Data warehouse ,Mapping the Data Warehouse to a Multiprocessor Architecture ,DBMS Schemas for Decision Support , Data Extraction, Cleanup, and Transformation Tools – Metadata.	Warehousing Basics in syllabi.
10	20 UCT 6E4	lective II - mbedded stems	Few contents removed in unit III & V. Few content included in Unit III & V.	10	**Unit I**: NIL **Unit II**: NIL **Unit III:** Serial port device drivers , Device drivers for IPTD. **Unit IV: NIL** **Unit V:** Multiple Threads Shared Data , Inter process communication, I/O subsystem,	**Unit I:** NIL **Unit II**: NIL **Unit III**: ISR concept , Writing physical device, driving ISRs in a system **Unit IV: NIL** **Unit V:** Multiple Threads in an application, Tasks- Task States, RTOS: Principles, Cooperative Scheduling model, Cyclic and Round Robin Scheduling models, Preemptive Scheduling model.	As Board members suggested to made few changes.

11	20UCT6L	ctive III ultimedia echniques		5	**Unit I**: Ellipse-generating algorithms **Unit II**: NIL **Unit III:** NIL **Unit IV**: Audio File formats and CODECs **Unit V**: NIL	**Unit I**: NIL **Unit II**: NIL **Unit III:** NIL **Unit IV**: NIL **Unit V**: NIL	

Total NO. pers = 26

Weightage ach paper = 100

PERCENT OF SYLLABUS REVISED = (270/2600)*100

=10.38 %

22/2/2020

BoS Chairman

Ms. C. Keerthana

Assistant Professor

Dept. of CT, NGMC