Name of the Teacher: KANIKA Class: BCA 3rd Sem

**Lesson Plan**

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| **S No** | **Period** | **Topics to be Covered** | **Academic Activity to be Organized** |
|  | **17-31 July 2017** | **Computer Arithmetic: Floating-point**  **representation of numbers, arithmetic operations**  **with normalized floating-point numbers and their**  **consequences, significant figures. Error in**  **number representation-inherent error, truncation,**  **absolute, relative, percentage and round-off**  **error** | **Daily revision of previous topic** |
|  | **01-31 Aug 2017** | **Iterative Methods: Bisection, False**  **position, Newton Raphson method.**  **Iteration method, discussion of convergence,** | **Class test** |
|  | **01-30 Sept 2017** | **Solution of simultaneous linear equations and**  **ordinary differential equations: Gauss-**  **Elimination methods, pivoting, Ill-conditioned**  **equations, refinement of solution. Gauss-Seidal**  **iterative method,** | **Ppt on given topics** |
|  | **01-31 Oct 2017** | **Euler method, Euler modified method,** **Chebyshev polynomial: First kind, Second kind and their relations, Orthogonal properties.** **Interpolation and Approximation: Polynomial interpolation: Newton, Lagranges, Difference tables,** | **Class level quiz** |
|  | **01-13 Nov 2017** | **Approximation of functions by Taylor**  **Series. Numerical Differentiation and**  **integration: Differentiation formulae based on**  **polynomial fit, pitfalls in differentiation,**  **Trapezoidal &Simpson Rules, Gaussian**  **Quadrature, Bairstow's method,** **Taylor-series**  **method, Runge-Kutta methods, Predictor-**  **Corrector methods.** | **Revision** |

**Topics of Assignments/ Class Tests to be given to the Students:**

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| **Assignment 1** | **Order of convergence of bisection, regula falsi, newton raphson** |
| **Assignment 2** | **Chebyshev polynomial first kind, second kind, third kind, orthogonal properties** |
| **Class Test** | **Order of convergence of bisection, regula falsi, newton raphson** |

Name of the Teacher: KANIKA Class: BCA 5TH Sem

**Lesson Plan**

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| **S No** | **Period** | **Topics to be Covered** | **Academic Activity to be Organized** |
|  | **17-31 July 2017** | **Introduction to Data Communication and Computer Networks; Uses of Computer Networks; Types of Computer Networks and their Topologies;**  **Network Hardware Components: Connectors, Transceivers, Repeaters, Hubs, Network Interface Cards and PC Cards, Bridges, Switches, Routers, Gateways;** | **Daily revision of previous topic** |
|  | **01-31 Aug 2017** | **Network Software: Network Design issues and Protocols; Connection Oriented and Connection less Services; OSI Reference Model; Networking Models: Distributed Systems, Client/Server Model, Peer to Peer Model, Web Based Model and Emerging File Sharing Model** | **Class test** |
|  | **01-30 Sept 2017** | **Data Link Layer Design issues; Error Detection and Correction; Sliding Window Protocols: One bit,Go Back N and Selective Repeat; Media Access Control: ALOHA, Slotted ALOHA, CSMA, Collision free protocols; Congestion Control; Traffic**  **shaping; Choke packets; Load shedding;** | **Ppt on given topics** |
|  | **01-31 Oct 2017** | **Routing Algorithms: Flooding, Shortest Path Routing, Distance Vector Routing; Link State Routing, Hierarchical Routing; Elements of Transport Protocols; Network Security Issues: Security attacks; Encryption methods; Digital**  **Signature; Digital Certificate .Guided Transmission Media; Wireless Transmission ; Communication Satellites; Analog and Digital data and signals; Bandwidth and Data Rate, Capacity, Baud Rate; Transmission Impairment; Switching and Multiplexing;** | **Class level quiz** |
|  | **01-13 Nov 2017** | **Introduction to LAN technologies: Ethernet, Switched Ethernet, Fast Ethernet, Gigabit Ethernet; Token Ring; Introduction to Wireless LANs and Bluetooth; VLANs, Data Rate Limits; Modems and Modulation techniques; ADSL and Cable Modems;** | **Revision** |

**Topics of Assignments/ Class Tests to be given to the Students:**

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| **Assignment 1** | **Error detection and correction: sliding window protocol: one bit, go-back-n and selective repeat** |
| **Assignment 2** | **Guided transmission media, wireless transmission, communication satellites** |
| **Class Test** | **Error detection and correction: sliding window protocol: one bit, go-back-n and selective repeat** |

Name of the Teacher: KANIKA Class: BSc 1ST Sem

**Lesson Plan**

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| **S No** | **Period** | **Topics to be Covered** | **Academic Activity to be Organized** |
|  | **17-31 July 2017** | **Windows: Basics of Windows. Windows History, Basic components of windows, icons, types of icons,** | **Daily revision of previous topic** |
|  | **01-31 Aug 2017** | **taskbar, activating windows, using desktop, title bar, running applications, Windows explorer, managing files and folders, Configuring System devices . Control panel , using windows accessories. Documentation Using Word Introduction to Office Automation** | **Class test** |
|  | **01-30 Sept 2017** | **Creating &amp; Editing Document, Formatting Document, Autotext, Autocorrect, Spelling and Grammar Tool, Document Dictionary, Page**  **Formatting, Bookmark, Advance Features of MS Word Mail Merge, Macros, Tables, File Management, Printing, Styles, linking and**  **embedding object.** | **Ppt on given topics** |
|  | **01-31 Oct 2017** | **Electronic Spread Sheet using Excel Introduction to**  **MS Excel, Creating &amp; Editing Worksheet, Formatting and Essential Operations, Formulas and Functions, Charts,** | **Class level quiz** |
|  | **01-13 Nov 2017** | **Advance features of MS Excel Pivot table &amp; Pivot Chart, Linking and Consolidation, Database Management using Excel Sorting, Filtering,**  **Table, Validation, Goal Seek, Scenario. Presentation using PowerPoint: Presentations, Creating, Manipulating &amp; Enhancing Slides,**  **Organizational Charts, Excel Charts, Word Art, Layering art Objects, Animations and Sounds, Inserting Animated Pictures or Accessing**  **through Object, Inserting Recorded Sound Effect or in-Built Sound Effect.** | **Revision** |

**Topics of Assignments/ Class Tests to be given to the Students:**

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| **Assignment 1** | **Basic components of windows, managing file and folder** |
| **Assignment 2** | **Mail merge, macro, functions and formula,** |
| **Class Test** | **Basic components of windows, managing file and folder** |

Name of the Teacher: KANIKA Class: BCOM COMP. 5TH Sem

**Lesson Plan**

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| **S No** | **Period** | **Topics to be Covered** | **Academic Activity to be Organized** |
|  | **17-31 July 2017** | **Data structure: linear and least structures: array definition, type, address calculation,** | **Daily revision of previous topic** |
|  | **01-31 Aug 2017** | **List: single linked list, algorithms** | **Class test** |
|  | **01-30 Sept 2017** | **List: single linked list, algorithm and double linked list and circular linked list concepts;** | **Ppt on given topics** |
|  | **01-31 Oct 2017** | **stack: push/pop algorithms, applications.**  **Queue: INS/DEL algorithm, double and circular queue concept only.** | **Class level quiz** |
|  | **01-13 Nov 2017** | **B tree concept. Files: serial, sequential, indexed, direct, multi list** | **Revision** |

**Topics of Assignments/ Class Tests to be given to the Students:**

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| **Assignment 1** | **Array insertion deletion traversal, linear search, binary search** |
| **Assignment 2** | **Stack operation, application, queue operations** |
| **Class Test** | **Array insertion deletion traversal, linear search, binary search** |