**PG.GOVT COLLEGE FOR GIRLS, SECTOR-42, CHANDIGARH**

**Teaching Plan Even Semester**

**Session (2018-19)**

**Class: BCA -2nd Sem Name of the Teacher: Nidhi Goyal**

**Subject: Object Oriented Programming using C++ Period : W-S (6th Period)**

**Paper : BCA -16-204 Room No : 202**

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| **S. No** | **Dates** | **Topics to be covered** |
| Week 1 | 14 /01/2019 – 19/01/2019 | Introduction to C and C++ |
| Week 2 | 21/01/2019 –  25/01/2019 | Principles of Object Oriented Programming (OOP): Introduction to OOP, Difference between OOP and Procedure Oriented Programming |
| Week 3 | 28/01/2019 –  2/02/2019 | Concepts: Object, Class, Encapsulation, Abstraction, Polymorphism and Inheritance, Applications of OOP |
| Week 4 | 4/02/2019 –  9/02/2019 | Special operators: scope resolution operator, Member Dereferencing operators, Memory management operators, Manipulators and Type cast operator |
| Week 5 | 11/02/2019 –  16/02/2019 | Structure of a C++ Program and Classes and Objects : Class Declaration : Data Members, Member Functions, Private and Public members |
| Week 6 | 18/02/2019 –  23/02/2019 | Creating Objects, Accessing class data members, Accessing member functions; Class Function Definition |
| Week 7 | 25/02/2019 –  02/03/2019 | Member Function definition inside the class declaration and outside the class declaration |
| Mid Semester Exam | | |
| Week 8 | 11/03/2019 –  16/03/2019 | Friend function, inline function, Static members |
| Week 9 | 18 /03/2019 –  22/03/2019 | Function Overloading, Arrays within a class. Arrays of Objects; Objects as function arguments, Pass by value, Pass by reference, Pointers to Objects |
| Week 10 | 25/03/2019 –  30/03/2019 | Constructors: Declaration and Definition, Types of Constructors, (Default, Parameterized, Copy Constructors). Destructors: Definition and use |
| Week 11 | 1/04/2019 –  6/04/2019 | Operator Overloading & Type Conversion: Conversion from basic type to user defined type, User defined to basic type and one user defined conversion to another user defined type. |
| Week 12 | 8/04/2019 –  12/04/2019 | Inheritance: Extending Classes Concept of inheritance, Base class, Defining derived classes, Visibility modes : Public, Private, Protected ;Types of Inheritance: Single inheritance : Privately derived, Publicly derived; Making a protected member inheritable, multilevel inheritance |
| Week 13 | 15/04/2019 –  20/04/2019 | Multiple Inheritance and ambiguity of multiple inheritance, Hierarchal Inheritance, Hybrid, Nesting of classes. Polymorphism: Definition, Application and demonstration of Data Abstraction, Encapsulation and Polymorphism. Early Binding |
| Week 14 | 22/04/2019 –  27/04/2019 | Polymorphism with pointers, Virtual Functions, Late binding, pure virtual functions. Exception Handling: Definition, Exception Handling Mechanism : Throwing mechanism and Catching Mechanism, Rethrowing an Exception |
| Week 15 | 29 /04/2019 –  3/05/2019 | File Processing : Opening and closing of file, Binary file operations, structures and file operations, classes and file operations, Random file processing  Revision of All Syllabus |

**PG.GOVT COLLEGE FOR GIRLS, SECTOR-42, CHANDIGARH**

**Teaching Plan Even Semester**

**Session (2018-19)**

**Class: BCA 1st Sem Name of the Teacher: Nidhi Goyal**

**Subject: Computer Organization Period : T (6th Period), W-S (2nd Period)**

**Paper : BCA-16-202 Room No : 202**

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| **S. No** | **Dates** | **Topics to be covered** |
| Week 1 | 14 /01/2019 – 19/01/2019 | Computer Organization: Evolution of Computers, Stored program concept and Von Neumann Architecture |
| Week 2 | 21/01/2019 –  25/01/2019 | Information representation and codes, Number System |
| Week 3 | 28/01/2019 –  2/02/2019 | Arithmetic algorithms : Addition and subtraction for signed magnitude and 2's complement numbers, integer multiplication using shift and add |
| Week 4 | 4/02/2019 –  9/02/2019 | Combinatorial Blocks : Gates, Multiplexers, Decoders |
| Week 5 | 11/02/2019 –  16/02/2019 | Encoders, Sequential Building blocks : Flip Flops, Registers, Counters |
| Week 6 | 18/02/2019 –  23/02/2019 | Memory Organization: RAM, Basic cell of static and dynamic RAM, Building large memories using chips, Associative memory |
| Week 7 | 25/02/2019 –  02/03/2019 | Cache memory organization,  Virtual memory organization. |
| Mid Semester Exam | | |
| Week 8 | 11/03/2019 –  16/03/2019 | Assembly Language Programming: Machine and assembly language, Pseudo operations, subroutines in assembly language, Assembly language programs:-To add/subtract two numbers, Program to input/output one character, Program to demonstrate the use of subroutines. |
| Week 9 | 18 /03/2019 –  22/03/2019 | Register Transfer Language and micro-operations; Language to represent conditional data transfer, Arithmetic and logical operations along with register transfer. |
| Week 10 | 25/03/2019 –  30/03/2019 | Architecture of a Simple Processor: An instruction set, Addressing Modes, Instruction formats, |
| Week 11 | 1/04/2019 –  6/04/2019 | Instruction execution in terms of Microinstructions, Concept of interrupt and simple I/O organization |
| Week 12 | 8/04/2019 –  12/04/2019 | I/O organization : Strobe based and Handshake based communication, Vector and priority interrupts, DMA  based data transfer; |
| Week 13 | 15/04/2019 –  20/04/2019 | CPU organization with large registers, Stacks and handling of  interrupts and subroutines. Concept of Bus, data movement among registers, data movement from/to memory. |
| Week 14 | 22/04/2019 –  27/04/2019 | System Maintenance, Physical Inspection of a PC and internal cards, Diagnostics on a PC, Functional description of various modules and cards. |
| Week 15 | 29 /04/2019 –  3/05/2019 | PC Doctor, Norton, Simantac, Steps of Diagnostics. Viruses, Types of viruses. Detection, Protection and Cure of Viruses on a PC.  **Revision of whole syllabus** |

**PG.GOVT COLLEGE FOR GIRLS, SECTOR-42, CHANDIGARH**

**Teaching Plan Even Semester**

**Session (2018-19)**

**Class: BCA 6TH Sem Name of the Teacher: Nidhi Goyal**

**Subject: E-Commerce Period : M-T (5th Period), F-S (4th Period)**

**Paper : BCA-16-601 Room No : 202,101**

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| **S. No** | **Dates** | **Topics to be covered** |
| Week 1 | 14 /01/2019 – 19/01/2019 | **An Overview of E-Commerce:**  Definitions: E-commerce, E-business, difference between E-commerce and E-business, Problems with Traditional business systems, Aims of E-commerce |
| Week 2 | 21/01/2019 –  25/01/2019 | Types of E-commerce: B2B, B2C, C2C, B2G, G2H, G2C, Operational & Strategic benefits of E-commerce, Issues & Challenges in E-commerce |
| Week 3 | 28/01/2019 –  2/02/2019 | Electronic Data Interchange (EDI): Definition; Traditional versus EDI enabled system for document exchange; Components of EDI: EDI Standards, EDI Software, Communication Networks; EDI Message Structure |
| Week 4 | 4/02/2019 –  9/02/2019 | EDI Notification Structure; EDI in India; EDI enabled procurement process; Benefits of EDI: Direct Benefits, Strategic Benefits; EDI Implementation issues; Legal Aspects |
| Week 5 | 11/02/2019 –  16/02/2019 | Web based E-Commerce: Definition; Need for web based business, Steps in setting up business on Internet: Selection & registration of domain name |
| Week 6 | 18/02/2019 –  23/02/2019 | Website development : Planning a website, Steps for creating a website, Elements of a webpage, web authoring tools,Hosting a website: Website hosting considerations |
| Week 7 | 25/02/2019 –  02/03/2019 | Online Promotion tools & techniques: Getting links to your site, banner advertisements & measuring advertisement effectiveness; Web Traffic Analysis |
| Mid Semester Exam | | |
| Week 8 | 11/03/2019 –  16/03/2019 | Electronic Payment Systems: E-cash: Purchasing & using of e-cash; |
| Week 9 | 18 /03/2019 –  22/03/2019 | Electronic Purses their loading with cash and use; E-cheque payment system |
| Week 10 | 25/03/2019 –  30/03/2019 | Online Third Party Verified Payment System through Credit & Debit Cards; |
| Week 11 | 1/04/2019 –  6/04/2019 | ATM based cash disbursement system; Electronic Bill Payment System; Inter bank clearing system |
| Week 12 | 8/04/2019 –  12/04/2019 | Mobile Commerce: Definition, Benefits of Mobile Commerce |
| Week 13 | 15/04/2019 –  20/04/2019 | Issues in Mobile Commerce, Mobile Commerce Framework |
| Week 14 | 22/04/2019 –  27/04/2019 | **Applications of E-Commerce & Case Studies**: Applications of e-commerce, Case studies in Retailing, Banking and e-governance |
| Week 15 | 29 /04/2019 –  3/05/2019 | Cyber Crimes: Types, Cyber Forensics, Cyber crimes and IT Act - 2000 |