Lesson Plan for the Semester Starting: 3February, 2025

Data and File Structure

BCA 2ndSem

Name of Institute: DAV Institute of Management

Name of Teacher with designation: Ms.Pooja Gour(Assistant professor)

Department: BCA

| Month | Class | Date of Class taken | Topic/Chapter Covered | Academic activity | Test/Assignment |
|-------|-------|---------------------|---|--------------------------|---------------------------|
| Feb | 1 | | Introduction of Data Structures | | |
| | 2 | | Introduction of arrays | | |
| | 3 | | array insertion, Deletion | | |
| | 4 | | Linear Search | | |
| | 5 | | Binary Search | | |
| | 6 | | , 2D arrays, Sparse Matrix, tridiagonal matrix | | |
| | 7 | | Practice of Arrays | Practical Implementation | Assignment of Arrays |
| | 8 | | Introduction of Stack Push, Pop operation on Stack | | |
| | 9 | | Infix,postfix,prefix notations and conversion | | |
| | 10 | | Evaluation of Postfix expression | | |
| | 11 | | C implementation of Stack | Practical Implementation | Assignment of stacks |
| | 12 | | Introduction of queses, insertion, deletion operation in simple queue | Practical Implementation | |
| March | 13 | | Circular queues insertion, deletion operation in simple queue | Practical Implementation | |
| | 14 | | Dequeues and Priority Queues | Practical Implementation | |
| | 15 | | Practice of Queses and Revision | Practical Implementation | Assignment of Queues |
| | 16 | | Linked list (singular) insertion | Practical Implementation | Assignment of Linked list |
| | 17 | | Linked list (singular) deletion | Practical Implementation | |
| | 18 | | Sorted linked list | Practical Implementation | |
| | 19 | | Doubly Linked list insertion, Deletion | Practical Implementation | |

| | 20 | Polynominal addition and | | |
|-------|----|--|--------------------------|----------------------|
| | | subtraction using header linked list | | |
| | 21 | Circular linked list insertion and deletion | Practical Implementation | |
| | 22 | Threaded list, garbage collection and applications of linked list, Linked represention of Stack and Quesues. | | |
| April | 23 | Practice of linked list | Practical Implementation | |
| | 24 | Introduction of Binary Tree | | Assignment of trees |
| | 25 | Sequential representation of binary tree. | | |
| | 26 | Binary Search tree Insertion and Seraching and Traversing | Practice Questions | |
| | 27 | Deletion in Binary Search Tree. | Practice Questions | |
| | 28 | Preorder and Inorder traversal Using stacks | | |
| | 29 | Postorder traversal using stacks | Practice Questions | |
| | 30 | Revision and Doubts | | |
| | 31 | Revision and Doubts | Practice Questions | |
| | 32 | Introduction of Graphs, Sequential Representation of Graph | | Assignment of graphs |
| | 33 | Traversing of graph(Breadth First search and Depth First Search) | | |
| | 34 | Linked Representation of Graphs | | |
| May | 35 | Revision and Doubts | | |
| | 36 | Sorting Techniques | Practical Implementation | |
| | 37 | Algorithm Complexity, Time space Complexity and Big O notations | | |
| | 38 | Revision | | |
| | 39 | Revision | | |
| | 40 | Revision | | |
| | 41 | Revison | | |

Lesson Plan for the Semester Starting: 3rdFebruary 2025

Name of the subject: Tourism & Hospitality: An introduction

Name of the Institution: DAV Institute of Management

Name of the teacher with designation: Dr. Parul Nagi, Asst. Professor

Department: BCA(NEP) 2nd SEM

| Month | Class | Date of Class taken | Topic/Chapter Covered | Academic Activity | Test/Assignment | Deviation if any |
|-------|-------|---------------------------|--|-------------------------|-----------------|------------------|
| | | | UNIT 1 | | | |
| | 1 | | Meaning of Tourism | Lecture &Discussion | | |
| | 2 | | The Tourism Industry | Lecture & Discussion | | |
| | 3 | | Significance of Tourism | Lecture & Discussion | | |
| | 4 | | The Tourism System | Discussion | | |
| | 5 | | A's of Tourism | Case Study | | |
| | | | UNIT 2 | | | |
| | 6 | | Purpose of Tourism | Discussion | | |
| | | | (Domestic & International) | | | |
| | 7 | | Types of Tourism (Domestic & International) | Group Discussion | | |
| | 8 | | Travel Motivation | Lecture & Discussion | | |
| | 9 | | Leisure or Holiday | Lecture & Discussion | | |
| | 10 | | VFR | Presentation | | |
| | 11 | | Cultural Tourism | Group Discussion | | |
| | 12 | | Spiritual Tourism | Lecture & | | |

| | | Discussion |
|----|------------------------|----------------------|
| 13 | Religious Tourism | Group |
| | Religious Tourism | Discussion |
| 14 | Adventure Tourism | |
| 14 | Adventure rourism | Lecture 8 Discussion |
| 45 | | &Discussion |
| 15 | Sports Tourism | Lecture & |
| | | Discussion |
| 16 | Other form of Tourism | Lecture & |
| | | Discussion |
| | UNIT 3 | |
| 17 | The Meaning of | Lecture & |
| | Hospitality | Discussion |
| | Trospicancy | |
| 18 | Types of Hotels | Lecture & |
| | Types of flotels | Discussion |
| 19 | Meal Plans | Discussion |
| | carrians | |
| 20 | Various Departments in | Discussion |
| | Hotel | |
| | Tiotei | |
| 21 | Food Outlets in | Lecture & |
| | Hospitality Business | Discussion |
| | Hospitality busiless | 51364331011 |
| 22 | Food Outlets in | Lecture & |
| | | Discussion |
| | Hospitality Business | Discussion |
| | UNIT 4 | |
| | | |
| 23 | Tourism & Hospitality | Lecture & |
| | Education in India- | Discussion |
| | Introduction | |
| | oudelion | |
| 24 | Ministry of Tourism, | Lecture & |
| | Government of | Discussion |
| | | |
| | India(Tasks & | |
| | Functions) | |
| 25 | Organization and | Lecture & |
| | Association -UNWTO | Discussion |
| | | |
| 26 | IATA | Lecture & |
| | | Discussion |
| 27 | FHRAI | Lecture & |
| | | Discussion |
| | | DISCUSSION |

| 28 | IATO(5) | Lecture & Discussion |
|----|---|----------------------|
| 29 | Taj Group of Hotels | Lecture & Discussion |
| 30 | Lalit Group of Hotels | Lecture & Discussion |
| 31 | ITC Hotels | Lecture & Discussion |
| 32 | Oberoi Hotels | Lecture & Discussion |
| 33 | Service Provider- Intro Make my trip | Lecture & Discussion |
| 34 | Yatra-Introduction | Lecture & Discussion |
| 35 | Balmer-introduction | Lecture & Discussion |
| 36 | Lawrie-Introduction | Lecture & Discussion |
| 37 | Revision | Revision |
| 38 | Revision | Revision |
| 39 | Revision | Revision |
| 40 | Revision | Revision |

Lesson Plan for the Semester Starting:5thFeb' 2025

Name of the subject: Travel & Tourism Management

Subject Code:24 HTMX02MD01

Name of the Institution: DAV Institute of Management

Name of the teacher with designation: Dr. Dhrity Ahuja

Department: BBA (II)

Class Time: 1Hr. (3 Hrs/Week)

| Month | Cl | Date of | Topic/Chapter Covered | Academic | Test/Assign | Deviat |
|----------|----|------------------------|--------------------------------------|--------------|--------------|--------|
| | as | Class | | Activity | ment | ion if |
| | S | taken | | | | any |
| February | 1 | 3 rd Feb | Overview of Syllabus | Lecture | | |
| | 2 | 4 th Feb | Meaning of Tourism | Lecture &ppt | | |
| | 3 | 5 th Feb | Objectives of Tourism | Lecture &ppt | | |
| | 4 | 6 th Feb | Concept of Tourism Industry | Lecture &ppt | | |
| | 5 | 10 th Feb | Origin of Tourism | Lecture &ppt | | |
| | 6 | 11 th Feb | Significance of Tourism | Lecture &ppt | Assignment 1 | |
| | 7 | 17 th Feb | Tourism System | Lecture &ppt | | |
| | 8 | 18 th Feb | A's of Tourism | Lecture &ppt | | |
| | 9 | 20 th Feb | A's of Tourism (Contd.) | Lecture &ppt | | |
| | 10 | 24 th Feb | Concept of Ecotourism & Excursionist | Lecture &ppt | | |
| | 11 | 25 th Feb | Benefits of Tourism | Lecture &ppt | | |
| | 12 | 26 th Feb | Purpose of Tourism | Lecture &ppt | | |
| | 13 | 3 rd March | General types of tourism | Lecture &ppt | | |
| | 14 | 4 th March | Travel Motivations | Lecture &ppt | | |
| | 15 | 5 th March | Leisure or Holidays | Lecture &ppt | | |
| | 16 | 6 th March | VFR | Lecture &ppt | | |
| | 17 | 17 th March | Cultural tourism | Lecture &ppt | Assignment | |
| | 18 | 18 th march | Spiritual tourism | Lecture &ppt | | |

| 20 21 22 23 24 25 | 20 th March 24 th March 25 th March 26 th March 27 th March 1 st April | Adventure tourism Sports tourism Other forms of tourism Role of tourism Concept of Hospitality | Lecture &ppt Lecture &ppt Lecture &ppt Lecture &ppt | Assignment | |
|----------------------------------|--|---|--|------------|--|
| 22 23 24 | 25 th March 26 th March 27 th March | Other forms of tourism Role of tourism Concept of Hospitality | Lecture &ppt | | |
| 23 24 | 26 th March 27 th March | Role of tourism Concept of Hospitality | | | |
| 24 | 27 th March | Concept of Hospitality | Lecture &nnt | | |
| | | · | | | |
| 25 | 1 st April | II | Lecture &ppt | | |
| | | Hospitality & Tourism | Lecture &ppt | | |
| 26 | 2 nd April | Types of Hotels | Lecture &ppt | | |
| 27 | 3 rd April | Types of Hotels (contd.) | Lecture &ppt | | |
| 28 | 7 th April | Meal Plans in hotels | Lecture &ppt | | |
| 29 | 8 th April | Various departments in hotels | Lecture &ppt | | |
| 30 | 9 th April | Departments (contd.) | Lecture &ppt | | |
| 31 | 15 th April | Food outlets in hospitality business | Lecture &ppt | | |
| 32 | 16 th April | Assignment discussion | Lecture &ppt | | |
| 33 | 17 th April | Tourism education in India | Lecture &ppt | | |
| 34 | 21st April | Hospitality education in India | Lecture &ppt | | |
| 35 | 22 nd April | Ministry of Tourism- tasks | Lecture &ppt | | |
| 36 | 23 rd April | Ministry of Tourism- functions | Lecture &ppt | | |
| 37 | 24 th April | Contd. | Lecture &ppt | | |
| 38 | 28 th April | UNWTO | Lecture &ppt | | |

| 39 | 1 st May | IATA | Lecture &ppt | |
|----|----------------------|-------------------------------|--------------|--|
| 40 | 5 th May | FHRAI | Lecture &ppt | |
| 41 | 6 th May | Assignment Discussion | Lecture &ppt | |
| 42 | 7 th May | IATO | Lecture &ppt | |
| 43 | 8 th May | Taj Group of Hotels | Lecture &ppt | |
| 44 | 13 th May | Lalit Group of Hotels | Lecture &ppt | |
| 45 | 14 th May | ITC Hotels | Lecture &ppt | |
| 46 | 15 th May | Oberoi Hotels | Lecture &ppt | |
| 47 | 19 th May | Make my Trip | Lecture &ppt | |
| 48 | 20 th May | Yatra.com | Lecture &ppt | |
| 49 | 21st May | Balmer&Lawrie | Lecture &ppt | |
| 50 | 22 nd May | Important question discussion | Lecture &ppt | |

Lesson Plan

Course – BCA

Semester:2nd

Subject:Corporate Leadership

Starting Date:1st February 2025

| Month | Class | Date of Class taken | Topic | Test/Assignment |
|----------|-------|---------------------|--|-----------------|
| February | 1 | | Concept of Leadership | |
| | 2 | | Leadership vs Management | |
| | 3 | | Trait Theory | |
| | 4 | | Behavioural Theory -Ohio State studies, Michigan Studies, | |
| | 5 | | Leadership Styles | |
| | 6 | | Contingency ApprocahFiedler's Contingency theory,Situational Leadership theory | |
| | 7 | | Contingency ApprocahPath Goal Theory,Leader Member Exchange Theory | |
| | 8 | | Charcteristics of Leader | |
| | 9 | | InteractiveFramework for Analyzing Leadership | Assignment No-1 |
| | 10 | | Leader as an individual -Personality Traits | |
| | 11 | | Leader as an individualEssence of Individual Leadership | |
| | 12 | | Types of Power | |
| | 13 | | Influence | |
| March | 1 | | Values in Leaderhip | |
| | 2 | | Role of Values in Leaderhip | |
| | 3 | | Emotional Leadership | |
| | 4 | | Spectrum of Leadership Behaviours | |
| | 5 | | Impact of Leadership Behaviours | |
| | 6 | | Understanding Courageous Leadership | |
| | 7 | | Role of Moral Leadership | |
| | 8 | | Focus on Leaders | Assignment No-2 |
| | 9 | | Motivation Content Theory | |
| | 10 | | Motivation Process Thory | |
| | 11 | | Empowerment | |
| | 12 | | Leadership Diversity | |
| | 13 | | Leadership Diversity | |
| April | 1 | | Leader as Champion | |
| | 2 | | Communication | |
| | 3 | | Leading Teams | |

| | 4 | Leading Teams | |
|-----|----|--|-----------------|
| | 5 | Leader as relationship builder | Assignmnet No-3 |
| | 6 | Creating Vision and Strategic Decision | |
| | 7 | Process of creating vision and strategic decision | |
| | 8 | Define Culture & values | |
| | 9 | Significance of Shaping Cuture Values | |
| | 10 | Defination of Learning Organization, Charateristics | |
| May | 1 | Steps of Leading Change in Organization, Key Challenges of Managing Change | |
| | 2 | Relationship between Corporate Leadership & Change Mangement, Steps of Sustaining Change | |
| | 3 | Revision of Unit-1 | |
| | 4 | Revision of Unit-1 | |
| | 5 | Revision of Unit-2 | |
| | 6 | Revision of Unit-2 | |
| | 7 | Revision of Unit-3 | |
| | 8 | Revision of Unit-3 | |
| | 9 | Revision of Unit-4 | |
| | 10 | Revision of Unit-4 | |

DAV INSTITUTE OF MANAGEMENT LESSON PLAN FOR THE SEMESTER STARTING : 2nd FEB. 2025

DEPT.

NAME OF SUBJECT : हिन्दी भाषा संवर्धन SUBJECT CODE :

CLASS TIME :1HR

FACULTY NAME & DESIGNATION: DEVDUTT - ASST.PROF.

| वय नानांकिकरण | | | |
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| नकीकरण | | | |
| माला के तत्व | | | |
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| | र्माला के तत्व ं चुनौतियाँ अंकमाला अनुनासिक व धि से अभिप्राय द्धियों के द्धियों के उपाय क साहित्य का वरूप त्मक साहित्य | र्माला के तत्व ं चुनौतियाँ अंकमाला अनुनासिक व धि से अभिप्राय दिधियों के उद्धियों के उपाय क साहित्य का वरूप त्मक साहित्य | र्माता के तत्व ं चुनौतियाँ अंकमाला अनुनासिक व धि से अभिप्राय दिधियों के दिधियों के उपाय क साहित्य का वरूप |

| योगदान 13 निबंध का अर्थ एवं स्वरूप 14 निबंध एवं उसके प्रकार 15 कहानी का स्वरूप एवं तत्व 16 कविता की परिभाषा एवं विशेषताएँ कविता लेखन कौशल का विकास 3 मुवाद का अर्थ एवं स्वरूप 21 वीं सदी में अनुवाद की 19 19 19 19 19 19 19 1 |
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| 14 निबंध एवं उसके प्रकार 15 कहानी का स्वरूप एवं तत्व किवता की परिभाषा एवं विशेषताएँ किवता लेखन कौशल का विकास अनुवाद का अर्थ एवं स्वरूप स्वरूप 19 21 वीं सदी में अनुवाद की |
| 15 |
| 15 तत्व 16 किविता की परिभाषा एवं विशेषताएँ किविता लेखन कौशल का विकास 18 अनुवाद का अर्थ एवं स्वरूप 21 वीं सदी में अनुवाद की |
| तत्व 16 किविता की परिभाषा एवं विशेषताएँ किविता लेखन कौशल का विकास 3 नुवाद का अर्थ एवं स्वरूप 21 वीं सदी में अनुवाद की |
| 16 विशेषताएँ 17 कविता लेखन कौशल का विकास 18 अनुवाद का अर्थ एवं स्वरूप 21 वीं सदी में अनुवाद की |
| विशेषताएँ |
| 17 विकास 3 अनुवाद का अर्थ एवं स्वरूप 21 वीं सदी में अनुवाद की |
| विकास अनुवाद का अर्थ एवं स्वरूप 21 वीं सदी में अनुवाद की |
| 18 स्वरूप 21 वीं सदी में अनुवाद की |
| स्वरूप 21 वीं सदी में अनुवाद की |
| |
| |
| उपयोगिता |
| 20 अनुवादक के गुण और |
| विस्तार |
| 3 अनुवाद का अर्थ और |
| प्रकार |
| 3 मुवाद में कम्प्युटर का |
| योगदान |
| 23 धारावाहिकों का हिन्दी |
| रूपांतरण और प्रभाव |
| बैंकिंग साहित्य में हिन्दी |
| 24 प्रयोग और अनुवाद की |
| आवश्यकता |
| र्डुबिंग के क्षेत्र में अनुवाद 25 |
| की प्रक्रिया |
| विप्यंतरण की परिभाषा |
| एवं स्वरूप |
| हिन्दी साहित्य की |
| 27 रचनाओं का अनुवाद |

| 28 | अनुवाद के क्षेत्रों में | | |
|----|---------------------------|--|--|
| 20 | रोजगार के अवसर | | |
| 29 | शोध-पत्र प्रस्तुतीकरण | | |
| 23 | अर्थ एवं नियम | | |
| 30 | शोध-पत्र लेखन व | | |
| 30 | प्रस्तुतीकरण की प्रक्रिया | | |
| | पत्र-प्रस्तुतीकरण और | | |
| 31 | नवीन शोधात्मक | | |
| | वैचारिकता | | |
| | पत्र-प्रस्तुतीकरण में | | |
| 32 | शोध-निर्देशक की | | |
| | भूमिका | | |
| 33 | शोध-पत्र प्रस्तोता के | | |
| 33 | मनोबल वृद्धि के कारक | | |
| | पत्र प्रस्तुतीकरण में | | |
| 34 | वक्तृत्व कला के विकास | | |
| | के विभिन्न पहलू | | |
| 25 | शोध अभिरुचि का महत्व | | |
| 35 | व प्रक्रिया | | |

^{*} Note:2 Lectures per Week

Lesson Plan for the Semester Starting: 3rd February, 2025

Digital Design

BCA 2nd Sem

Name of Institute: DAV Institute of Management

Name of Teacher with designation: Ms.Poonam (Assistant professor)

Department: BCA

| Month | Class | Date of Class | Topic/Chapter Covered | Academic activity | Test/Assignment | Deviation if any |
|-------|-------|------------------|---------------------------------------|-------------------|-----------------|------------------|
| | | taken | Covered | activity | | |
| | 1 | | Digital systems, | | | |
| Feb | | | Digital Signals, | | | |
| | | | Digital Waveforms | | | |
| | 2 | | Digital Computer & | | | |
| | | | Digital Integrated | | | |
| | | | Circuits | | | |
| | 3 | | Binary, Octal | | | |
| | | | Number System | | | |
| | 4 | | Decimal | | | |
| | | | & Hexadecimal | | | |
| | _ | | Number System | | | |
| | 5 | | Number base | | | |
| | 6 | | Conversions Complement Signed | | | |
| | 0 | | Complement, Signed Binary numbers and | | | |
| | | | Binary codes | | | |
| | 7 | | Error Detection & | | | |
| | , | | Correction Codes | | | |
| | 8 | | Boolean Algebra | | | |
| | | | Axioms Definition | | | |
| | 9 | | Boolean Algebra | | | |
| | | | theorems & | | | |
| | | | Properties | | | |
| | 10 | | Boolean Functions | | | |
| | 11 | | Sop & Pos forms | | | |
| | 12 | | Canonical Standard | | | |
| | | | forms | | | |

| March | 13 | Digital Logic Basic gates- AND, OR, NOT | |
|-------|----|--|--|
| | 14 | Universal NAND, NOR and XOR, XNOR | |
| | 15 | Universal Gates and their Implementation | |
| | 16 | K Map Method Simplification | |
| | 17 | Algebra Postulates and Canonical Forms | |
| | 18 | Prime Implicants Types | |
| | 19 | Determination and Selection of Prime implicants | |
| | 20 | Don't Care Condition | |
| | 21 | NAND & NOR implementation | |
| | 22 | Combinational Circuits Introduction | |
| April | 23 | Characteristics & Designing Principles of Combinational circuits | |
| | 24 | Binary Adder- Half Adder | |
| | 25 | Full Adder | |
| | 26 | Half Subtractor | |
| | 27 | Full Subtractor | |
| | 28 | Parallel Binary Adder-Subtractor | |
| | 29 | Binary Multiplier | |
| | 30 | Comparator | |
| | 31 | Multiplexer | |
| | 32 | De-Multiplexer | |
| | 33 | Encoder | |
| | 34 | Decoder | |

| May | 35 | Sequential Circuits- Latches |
|-----|----|---------------------------------|
| | 36 | Flip Flops Introduction |
| | 37 | SR Flip Flop |
| | 38 | JK Flip Flop |
| | 39 | D & T Flip Flop |
| | 40 | Master Slave Flip Flop |
| | 41 | Shift Registers- SISO, SIPO |
| | 42 | PISO, PIPO |
| | 43 | Applications of Registers |
| | 44 | Asynchronous Counters |
| | 45 | Synchronous Counters |
| | 46 | Modulo N Counter |
| | 47 | Up-Down Counter |
| | 48 | Revision |
| | 49 | Revision |
| | 50 | Revision |

Lesson Plan for the Semester Starting: 15th Jan 2024

Name of the Subject: WEB DESGNING

Subject Code: BCA-206

Name of the institution: DAV Institute of Management

Name of the teacher with designation: Ms. Poonam (Assistant Professor)

Department: BCA

| Month | Class | Date of Class Taken | Topic /Chapter Covered | Academic Activity | Test/ Assignment | Deviation (if any) |
|-------|-------|------------------------------|---------------------------------|----------------------|---------------------|-----------------------|
| Jan | 1 | | Introduction to Internet | Lecture | | |
| | 2 | | World wide web detail | Lecture | | |
| | 3 | | History of internet and www | Lecture | | |
| | 4 | | Web browser | Lecture | | |
| | 5 | | Web Server | Lecture | | |
| | 6 | | Protocols | Lecture | | |
| | 7 | | TCP/IP services | Lecture | | |
| | 8 | | TCP/IP services | Lecture | | |
| | 9 | | OSI Model | Lab | | |
| | 10 | | URL details | Lecture | | |
| | 11 | | Search engines and tools | Lecture | | |

| | 12 | Hosting the site | Lab | |
|-------|----|-------------------------------|---------|------------|
| | 13 | ISP | Lecture | Assignment |
| Feb | 14 | Web terminologies | Lecture | |
| | 15 | Web site planning phases | Lecture | |
| | 16 | Designing web site | Lecture | |
| | 17 | Steps for developing the site | Lecture | |
| | 18 | how to choose contents | Lecture | |
| | 19 | detail of home page | Lecture | |
| | 20 | Domain names | Lecture | |
| | 21 | Front page views | Lecture | |
| | 22 | Picture editing | Lab | Assignment |
| | 23 | Links | Lab | |
| | 24 | HTML introduction | Lecture | |
| | 25 | Features of HTML | Lecture | |
| | 26 | HTML command tags | Lab | |
| | 27 | HTML tags | Lab | |
| | 28 | HTML tags | Lab | |
| | 29 | HTML tags | Lab | |
| March | 30 | HTML linking | Lab | |
| | 31 | Image tag | Lab | |
| | 32 | Ordered List | Lab | |

| | 33 | Unordered List | Lab | | |
|-------|----|-----------------------|---------|------------|--|
| | 34 | Tables | Lab | | |
| | 35 | Tables | Lab | | |
| | 36 | Frames | Lab | | |
| | 37 | Frames | Lab | | |
| | 38 | Frames | Lab | | |
| | 39 | Forms(Buttons) | Lab | | |
| | 40 | HTML website | Lab | | |
| | 41 | HTML website | Lab | | |
| April | 42 | HTML website | Lab | | |
| | 43 | DHTML | Lecture | | |
| | 44 | Features of DHTML | Lecture | Assignment | |
| | 45 | DHTML Tags, DIV tags | Lecture | | |
| | 46 | DHTML Tags | Lab | | |
| | 47 | DHTML Tags | Lab | | |
| | 48 | CSSP | Lecture | | |
| | 49 | JSSS | Lecture | | |
| | 50 | Revision and Doubts | Lecture | | |
| | 51 | Revision and Doubts | Lab | | |
| | | | | | |

Revision and Doubts Lecture

Lesson Plan for the Semester Starting: 15th Jan 2024

Name of the Subject: WEB DESGNING

Subject Code: BCA-206

Name of the institution: DAV Institute of Management

Name of the teacher with designation: Ms. Deepika Kamboj (Assistant Professor)

Department: BBA

| Month | Class | Date of Class Taken | Topic /Chapter Covered | Academic Activity | Test/ Assignment | Deviation (if any) |
|-------|-------|------------------------------|-------------------------------|----------------------|---------------------|--------------------|
| Jan | 1 | | Introduction to Internet | Lecture | | |
| | 2 | | World wide web detail | Lecture | | |
| | 3 | | History of internet and www | Lecture | | |
| | 4 | | Web browser | Lecture | | |
| | 5 | | Web Server | Lecture | | |
| | 6 | | Protocols | Lecture | | |
| | 7 | | TCP/IP services | Lecture | | |
| | 8 | | TCP/IP services | Lecture | | |
| | 9 | | OSI Model | Lab | | |
| | 10 | | URL details | Lecture | | |
| | 11 | | Search engines and tools | Lecture | | |
| | 12 | | Hosting the site | Lab | | |
| | 13 | | ISP | Lecture | Assignment | |
| Feb | 14 | | Web terminologies | Lecture | | |
| | 15 | | Web site planning phases | Lecture | | |
| | 16 | | Designing web site | Lecture | | |
| | 17 | | Steps for developing the site | Lecture | | |
| | 18 | | how to choose contents | Lecture | | |
| | 19 | | detail of home page | Lecture | | |
| | 20 | | Domain names | Lecture | | |

| | 21 | Front page views | Lecture | |
|-------|----|----------------------------|---------|------------|
| | 22 | Picture editing | Lecture | Assignment |
| | 23 | Links | Lecture | |
| | 24 | HTML introduction | Lecture | |
| | 25 | Features of HTML | Lecture | |
| | 26 | HTML command tags | Lecture | |
| | 27 | HTML tags | Lecture | |
| | 28 | HTML tags | Lecture | |
| | 29 | HTML tags | Lecture | |
| March | 30 | HTML linking | Lecture | |
| | 31 | Image tag | Lecture | |
| | 32 | Listing | Lecture | |
| | 33 | Listing | Lecture | |
| | 34 | Tables | Lecture | |
| | 35 | Tables | Lecture | |
| | 36 | Frames | Lecture | |
| | 37 | Frames | Lecture | |
| | 38 | Frames | Lecture | |
| | 39 | Forms(Buttons) | Lecture | |
| | 40 | HTML website | Lecture | |
| | 41 | HTML website | Lecture | |
| April | 42 | HTML website | Lecture | |
| | 43 | DHTML | Lecture | |
| | 44 | Features of DHTML | Lecture | Assignment |
| | 45 | DHTML Tags, DIV tags | Lecture | |
| | 46 | DHTML Tags | Lecture | |
| | 47 | DHTML Tags | Lecture | |
| | 48 | CSSP | Lecture | |
| | 49 | JSSS | Lecture | |
| | 50 | Revision and Doubts | Lecture | |
| | 51 | Revision and Doubts | Lecture | |
| | 52 | Revision and Doubts | Lecture | |

Lesson Plan for the Semester Starting: 15 January, 2025

Object Oriented Programming using C++-

BCA 4thSem

Paper Code: BCA-208

Name of Institute: DAV Institute of Management

Name of Teacher with designation: Ms. Pooja Gour (Assistant professor)

Department: BCA

| Month | Class | Date of Class taken | Topic/Chapter Covered | Academic activity | Test/Assignment |
|-------|-------|------------------------|--|---------------------------|---|
| Jan | 1 | 15/01/25 | Introduction to computer languages, Generations of languages | Theory | |
| | 2 | 16/01/25 | Unit-I: Introduction to object orientedprogramming ,Difference between Procedural and Object oriented languages | theory | |
| | 3 | 17/01/25 | Characteristics of OOP: Objects, classes, Encapsulation, Data Abstraction, Inheritance, Polymorphism, Dynamic Binding, and Message Passing. | Theory | |
| | 4 | 20/01/25 | Structure of C++ program: Syntax,Data- types, Variables, Static Variables,string,namespace,exception | Theory+Demo using LCD+LAB | |
| | 5 | 21/01/25 | Operators in C++,flow Control | Theory+Demo using LCD+LAB | Lab Assignment-I on the topic of conditional constructs and looping constructs(5 days) |
| | 6 | 22/01/25 | Arrays , pointer | Theory+Demo using LCD+LAB | |
| | 7 | 23/01/25 | Structure | Theory+Demo using LCD+LAB | |
| | 8 | 24/01/25 | Functions, Recursion | Theory+Demo using LCD+LAB | Lab Assignment-II on the topic of Arrays, Strings, Structure and Functions (Four days) |
| | 9 | 27/01/25 | Revision of Unit-I | Discussion | Assignment-I: Prepare answers to question based on topics of UNIT-I Time given: One week |
| | 10 | 28/01/25 | Unit-II: Abstracting mechanism: Classes, Private, | Theory+Demo using LCD+LAB | |

| | | | Public and Protected | | |
|------------------|----|----------|---|---------------------------|--|
| | 11 | 29/01/25 | Constructor and Destructor | Theory+Demo using LCD+LAB | |
| | 12 | 31/01/25 | Member functions, static members , references | Theory+Demo using LCD+LAB | |
| Feb | 13 | | Memory Management: new,delete,objectcopying,copyconstructo r,assignment operator | Theory+Demo using LCD+LAB | Lab assignment-III based on the topics:classes and objects,memberfunctions,co nstructor and destructor,copy constructor(5 days) |
| | 14 | | Assignment operator, this input/output | Theory+Demo using LCD+LAB | |
| | 15 | | Revision of Unit-II | Theory+Demo using LCD+LAB | |
| | 16 | | Unit III: Inheritance and Polymorphism: Derived class and Base class, Different types of inheritance | Theory+Demo using LCD+LAB | |
| | 17 | | Overriding member function, Abstract class, Public and private inheritance | Theory | |
| | 18 | | Ambigity in multiple inheritance, Virtual function | Theory+Demo using LCD+LAB | Lab assignment IV based on topics: Inheritance(4 days) |
| | 19 | | friend function ,static function | Theory+Demo using LCD+LAB | Assignment II: Prepare answers to questions based on topics of UNIT-III Time given: Four days |
| | 20 | | Revision of Unit-III | Theory+Demo using LCD+LAB | |
| | 21 | | Unit-IV: Exception Handling: Exception and derived class | Theory+Demo using LCD+LAB | Lab assignment V based on topics:Friendfunction,operat oroverloading,memory management(5 days) |
| March & April | 22 | | Function exception declaration,unexpected exception | Theory+Demo using LCD+LAB | |
| | 23 | | Exception when handling exception,resource capture and relaease | Theory+Demo using LCD+LAB | |
| | 24 | | Template and Standard Template Library: Template classes, declaration | Theory+Demo using LCD+LAB | Assignment III: Prepare answers to questions based |

| | | | on UNIT-III |
|----|--|---------------------------|---|
| | | | Time given: Four days |
| 25 | Template functions,namespace | Theory+Demo using LCD+LAB | |
| 26 | String, iterators, Hashes, iostreams and other types | Theory+Demo using LCD+LAB | Lab Assignment Vi:Programs based on topics of Unit IV |
| 27 | Revision of Unit-IV | Theory+Demo using LCD+LAB | Assignment IV: Prepare answers to questions based on unit IV Time given:Three days |
| 28 | Doubt clearing/Remedial/Meritorius classes | | |

Lesson Plan for the Semester Starting: 15th Jan 2024
Name of the Subject: ADVANCE DATA STRUCTURE

Subject Code: BCA-207

Name of the institution: DAV Institute of Management

Name of the teacher with designation: Dr. Anamika Bhargava (Associate Professor)

Department: MCA

| Month | Class | Date of Class Taken | Topic /Chapter Covered | Academic Activity | Test/ Assignment | Deviation |
|-------|-------|------------------------------|--|----------------------|---------------------|-----------|
| Jan | 1 | | Files: Physical storage devices and their characteristics, Attributes of a file. | Lecture | | |
| | 2 | | Records, Fixed and variable length records | Lecture | | |
| | 3 | | Primary and secondary keys, Classification of files | Lecture | | |
| | 4 | | File operations, | Lecture | | |
| | 5 | | Comparison of various types of files | Lecture | | |
| | 6 | | File organization: | Lecture | | |
| | 7 | | Serial, Sequential, | Lecture | | |
| | 8 | | Indexed-sequential, Random-access/Direct, | Lecture | | |
| | 9 | | Inverted, Multi-list file organization | Lecture | | |
| | 10 | | Hashing: Introduction | Lecture | | |
| | 11 | | Hashing functions and Collision resolution methods | Lecture | Assignment -1 | |
| | 12 | | Graphs: | Lecture | | |
| Feb | 13 | | Warshall's algorithm | Lecture | | |
| | 14 | | Warshall's algorithm for shortest path | Lecture | | |
| | | 15 | Dijkstra algorithm | Lecture | | |
| | | 16 | Dijkstra algorithm for shortest | Lecture | | |

| | | path, | | | |
|-------|----|--|---------|---------------|--|
| | 17 | Operations on graphs, | Lecture | | |
| | 18 | Traversal of graph, | Lecture | | |
| | 19 | Topological sorting. | Lecture | | |
| | 20 | Topological sorting. | Lecture | Assignment -2 | |
| | 21 | Tree: | Lecture | | |
| | 22 | Header nodes, Threads, | Lecture | | |
| | 23 | Binary search trees, | Lecture | | |
| March | 24 | Searching, Insertion and deletion in a Binary search tree, | Lecture | | |
| | 25 | AVL search trees | Lecture | | |
| | 26 | Insertion and deletion in AVL search tree, | Lecture | | |
| | 27 | m-way search tree, | Lecture | | |
| | 28 | Searching, Insertion and deletion in an m-way search tree, | Lecture | | |
| | 29 | B-trees, | Lecture | | |
| | 30 | Searching, Insertion and deletion in a B-tree | Lecture | | |
| | 31 | B+tree | Lecture | | |
| | 32 | Huffman's algorithm, | Lecture | | |
| | 33 | Huffman's algorithm, | Lecture | | |
| | 34 | General trees | Lecture | | |
| | 35 | Sorting: | Lecture | Assignment -3 | |
| | 36 | Internal & external sorting, | Lecture | | |

| | 37 | Radix sort | Lecture | | |
|-------|--------|---|---------|------------------|--|
| | 38 | Dry Run of Radix sort | Lecture | | |
| April | 39 | Quick sort | Lecture | | |
| | 40 | Dry Run of Quick sort | Lecture | | |
| | 41 | Heap sort | Lecture | | |
| | 42 | Dry Run of Heap sort | Lecture | | |
| | 43 | Merge sort, | Lecture | | |
| | 44 | Dry Run of Merge sort | Lecture | | |
| | 45 | Tournament sort, | Lecture | | |
| | 46 | Dry Run of Tournament sort, | Lecture | | |
| | 47 | Searching: Liner search | Lecture | | |
| | 48 | Binary search, | Lecture | | |
| | 49 | Compression between linear and binary Search | Lecture | | |
| | 50 | Merging, | Lecture | | |
| | 51 | Dry Run of Merging | Lecture | | |
| May | 52 | Comparison of various sorting and searching algorithms on the basis of their complexity | Lecture | Assignment -4 | |
| | 53- 54 | Comparison of various sorting and searching algorithms on the basis of their complexity | Lecture | | |

Lesson Plan for the Semester Starting: 15th Jan 2024

Name of the Subject: Software Engineering

Subject Code: BCA-209

Name of the institution: DAV Institute of Management

Name of the teacher with designation: Ms. Preeti Goswami (Assistant Professor)

Department: BCA

| Month | Class | Date of Class Taken | Topic /Chapter Covered | Academic Activity | Test/ Assignment | Deviation (if any) |
|-------|-------|---------------------------|---|----------------------|---------------------|--------------------|
| Jan | 1 | | Introduction to Software Engineering | Lecture | | |
| | 2 | | Software Processes | Lecture | | |
| | 3 | | SDLC | Lecture | | |
| | 4 | | Waterfall model, Prototype | Lecture | | |
| | 5 | | Evolutionary & Spiral Model | Lecture | | |
| | 6 | | Elicitation Techniques | Lecture | | |
| | 7 | | FAST QFD | Lecture | | |
| | 8 | | Nature of SRS | Lecture | Assignment | |
| | 9 | | Data Dictionary | Lab | | |
| | 10 | | The Management Spectrum | Lecture | | |
| | 11 | | The People and the Problem | Lecture | Assignment | |
| | 12 | | Project Management | Lab | _ | |
| | 13 | | Lines Of Code | Lecture | Assignment | |
| Feb | 14 | | Function Point | Lecture | | |
| | 15 | | COCOMO Model | Lecture | | |
| | 16 | | Types Importance | Lecture | | |
| | 17 | | Advantage Disadvantage | Lecture | | |
| | 18 | | Need of COCOMO Model | Lecture | | |
| | 19 | | Coupling Types and Importance | Lecture | | |
| | 20 | | Cohesion | Lecture | | |
| | 21 | | Function Oriented | Lecture | | |
| | 22 | | Object Oriented | Lecture | Assignment | |
| | 23 | | Test | Lecture | _ | |
| | 24 | | Software Measurement & Metrics Types | Lecture | | |

| | 25 | Halstead Software Metrics | Lecture | | |
|-------|----|--|---------|------------|--|
| | 26 | Numerical | Lecture | | |
| | 27 | Data Structure Metrics | Lecture | | |
| | 28 | Test | Lecture | | |
| | 29 | Programming Support Environment | Lecture | | |
| March | 30 | Good Coding Style | Lecture | | |
| | 31 | Relation Between Design and Implementation | Lecture | | |
| | 32 | Procedural Design | Lecture | | |
| | 33 | Implementation Issues | Lecture | | |
| | 34 | Test | Lecture | | |
| | 35 | Software Testing | Lecture | | |
| | 36 | White Box Testing | Lecture | | |
| | 37 | Types automated and Manual Testing | Lecture | | |
| | 38 | Management Of Maintenance | Lecture | | |
| | 39 | Process | Lecture | | |
| | 40 | Reverse Engineering | Lecture | | |
| | 41 | Software RE-Engineering | Lecture | | |
| April | 42 | Configuration Management | Lecture | | |
| | 43 | Documentation | Lecture | | |
| | 44 | Revision | Lecture | Assignment | |
| | 45 | Revision | Lecture | | |
| | 46 | Revision | Lecture | | |
| | 47 | Revision | Lecture | | |
| | 48 | Revision | Lecture | | |
| | 49 | Revision | Lecture | | |
| | 50 | Revision and Doubts | Lecture | | |
| | 51 | Revision and Doubts | Lecture | | |
| | 52 | Revision and Doubts | Lecture | | |

<u>Lecture Plan for the semester starting (Jan 2025 – June 2025)</u> <u>E.Commerce – BCA6th Sem</u>

Name of the Institute: DAV Institute of Management, Faridabad

Name of teacher with designation: Dr.Ashima Tandon(Assistant Professor)

Department: MBA

| Month | Class | Date of Class taken | Topic/Chapter Covered | Academic Activity | Test/Assignment | Deviation if any |
|--------|-------|------------------------------|---------------------------------------|----------------------|-----------------|------------------|
| UNIT 1 | 1 | | Intro to subject and Use& Overview of | | | |
| | | | Electronic Commerce | | | |
| | 2 | | Scope of Electronic | | | |
| | | | Commerce, Traditional | | | |
| | | | Commerce vs. | | | |
| | | | Electronic Commerce | | | |
| | 3 | | Impact of E- | | | |
| | | | Commerce | | | |
| | 4 | | Electronic Markets | | | |
| | 5 | | Internet Commerce | | | |
| | 6 | | E-Commerce in | | | |
| | | | Perspective& | | | |
| | | | Application of E- | | | |
| | | | Commerce in Direct | | | |
| | | | Marketing & Selling | | | |
| | 7 | | Obstacles in adopting | | | |
| | | | E-Commerce | | | |
| | | | applications | | | |
| | 8 | | Future of E- | | Assignment 1 | |
| | | | Commerce | | | |
| | 9 | | Doubt Class of Unit-1 | | | |
| | 10 | | Test | | Test | |
| | | | | | | |
| UNIT 2 | 11 | | Value Chains in | | | |
| | | | Electronic Commerce | | | |
| | 12 | | Supply Chain | | | |
| | 13 | | Porter's Value Chain Model | | | |
| | 14 | | Inter Organizational | | | |

| | | Value Chains | |
|--------|----|-------------------------|--------------|
| | 15 | Strategic Business | |
| | | Unit Chains | |
| | 16 | Industry Value Chains | |
| | | 1134314 (1141) | |
| | 17 | Security Threats to E- | |
| | | Commerce: Security | |
| | | Overview | |
| | 18 | Computer Security | |
| | | Classification & | |
| | | Copyright and | |
| | | Intellectual Property | |
| | 19 | Security Policy and | |
| | | Integrated Security | |
| | 20 | Intellectual Property | |
| | | Threats & Client | |
| | | Threats | |
| | 21 | Electronic Commerce | Assignment 2 |
| | | Threats | |
| | 22 | Communication | |
| | | Channel Threats & | |
| | | Server Threats | |
| | 23 | Test | Test |
| | | | |
| | | | |
| UNIT 3 | 24 | Implementing security | |
| | | for E-Commerce: | |
| | | Protecting E- | |
| | | Commerce Assets | |
| | 25 | Protecting Intellectual | |
| | | Property & Protecting | |
| | | Client Computers | |
| | 26 | Protecting E- | |
| | | Commerce Channels | |
| | 27 | Insuring Transaction | |
| | | Integrity & Protecting | |
| | | the Commerce Server | |
| | 28 | Electronic Payment | |
| | | System: Electronic | |
| | | Cash | |
| | 29 | Electronic Wallets | |
| | 30 | Smart Card | |
| | | | |
| | 31 | Smart Card | Assignment 3 |
| | 30 | Smart Card | Assignment 3 |

| | 32 | Credit and Charge Card | |
|----------|----|--|--------------|
| | 33 | Revision and Doubt Class of Unit-3 | |
| | 34 | Test | Test |
| TINITE 4 | 25 | DAD E C | |
| UNIT 4 | 35 | B2B E-Commerce: Inter-Organizational Transitions | |
| | 36 | Credit Transaction Trade Cycle | |
| | 37 | Variety of transactions | |
| | 38 | Introduction to Electronic Data Interchange (EDI) | |
| | 39 | Benefits of EDI & EDI Technology | |
| | 40 | EDI Standards & EDI Communication | |
| | 41 | EDI Implementation | Assignment 4 |
| | 42 | EDI Agreement & EDI Security | |
| | 43 | EDI Agreement & EDI Security | |
| | 44 | Doubt Class of Unit 4 | |
| | 45 | Test | Test |
| | | | |

NOTE: Classes might increase depending on students' doubts. The above schedule does not include the presentations which will be conducted time to time. The dates will be updated

The above schedule does not include the presentations which will be conducted time to time. The dates will be updated

Lecture Plan for the semester starting w.e.fJanuary 2025

Object Technologies & Programming using JAVA – BCA 6thSem Paper Code: BCA-307

Name of the Institute: DAV Institute of Management, Faridabad

Name of teacher with designation: Dr. Sarita Kaushik(Associate Professor)

Department: MCA

| Month | Class | Topic/Chapter Covered | Academic activity | Test/Assignment |
|---------|-------|--|---------------------------|--|
| January | 1 | UNIT-I: Object Oriented Methodology-1: Paradigms of Programming Languages, Evolution of OO Methodology, Basic concepts of OO approaches | Theory | |
| | 2 | Benefits of OOPs,Introduction of common OO Language,Applications of OOPs | Theory | |
| | 3 | Object Oriented Methodology-2 :Classes and Objects, Abstraction and Encapsulation, Inheritace, Method overriding and Polymorphism | Theory+ Demo using LCD | |
| | 4 | UNIT-II Java Language Basics: Introduction to Java, Basic features of Java | Theory +Demo using LCD | |
| | 5 | Java Vertual Machine concepts,Primitive Data Types and variables | Theory+ Demo using LCD | Questions for Assignment related to UNIT-I Lab Assignment for topics of Unit-I |
| | 6 | Java Operators,Expressions | Theory +Demo using LCD | |
| | 7 | Java Statements and Arrays | Theory +Demo using LCD | |
| | 8 | Arrays continued | Theory +Demo using LCD | |
| Feb | 9 | Arrays Continued | Theory +Demo using LCD | |
| | 10 | Object Oriented Concepts: Class and Object, classfundamentals, Creating objects, Assigning object reference variables | Theory +Demo using LCD | |
| | 11 | Introducing Methods, Static members and Static | Theory +Demo | |

| | | methods | using LCD | | |
|-------|-------|---|---------------------------|----|---|
| | 12 | Constructors, Overloading Constructors | Theory +Demo using LCD | | |
| | 13 | This keyword, Using Objects as parameters, Arguments passing, Returning objects | Theory +Demo using LCD | | |
| | 14 | Method overloading, Garbage collection, The Finalize () method | Theory +Demo using LCD | | |
| | 15 | Inheritance and Polymorphism :Inheritance basics,Accesscontrol,MultilevelInheritance,Method Overriding | Theory +Demo using LCD | | |
| | 16 | Abstract classes,Polymorphism,Final keyword | Theory +Demo using LCD | | |
| | 17 | Unit-III Packages: Defining Package,CLASSPATH,Packagenaming,Accessbility of Packages using Package Members | Theory +Demo using LCD | 2) | Questions for Assignment related to UNIT-II Lab Assignment for topics of Unit-II |
| | 18 | Interfaces: Implementing interfaces, Interface and abstract classes, Extends and implements together | Theory +Demo using LCD | | |
| | 19-20 | Interfaces continued | Theory +Demo using LCD | | |
| March | 21-23 | Exception Handling : Exception, Handling of exception, Using try-catch | Theory +Demo using LCD | | |
| | 24-27 | Catching multiple exceptions, using finally clause | Theory +Demo using LCD | | |
| | 28-30 | Types of Exception, Throwing Exceptions, Writing Exception subclasses | Theory +Demo using LCD | | |
| | 31 | Unit-IV Multithreading: Introduction,The Main | Theory +Demo using LCD | | |

| | | thread,Thread Priorities | | | |
|-------|----|---|---------------------------|----|---|
| | 32 | Synchronization in Java,Inter thread communication | Theory +Demo using LCD | | |
| April | 33 | I/O in Java: I/O basics | Theory +Demo using LCD | | |
| | 34 | Stream and Stram classes, The predefined Streams | Theory +Demo using LCD | | |
| | 35 | Reading from and andWritingto ,Console Reading and Writing files | Theory +Demo using LCD | 2) | Questions for Assignment related to UNIT-III Lab Assignment for topics of Unit-III |
| | 36 | The transient and volatile modifiers, Using Instance of Native methods | Theory +Demo using LCD | | |
| | 37 | Strings and Characters: Fundamentals of characters and Strings | Theory +Demo using LCD | | |
| | 38 | The String class, Stringoperations, Data conversion using Value Of() methods, | Theory +Demo using LCD | | |
| | 39 | String Buffer class and methods. | Discussion | 2) | Questions for Assignment related to UNIT-IV Lab Assignment for topics of Unit-IV |
| | 40 | Revision of UNIT-I | Discussion | | <u> </u> |
| | 41 | Revision of UNIT-II | Discussion | | |
| | 42 | Revision of UNIT-III | Discussion | | |
| | 43 | Revision of Unit-IV | Discussion | | |

Subject code-307

Name of Institute: D. A. V Institute of Management

Name of teacher with designation: Deepika Kamboj, Assistant Professor Department: BBA(G)

Class time:1 hr.

| Month | S. No. | Date of class taken | Topic/ Chapter covered | Academic activity | Test/ Assignm ent | Deviation , if any |
|-------|-----------|---------------------------|---|---------------------------------|-------------------------|-----------------------|
| Jan | 1 | | Paradigms of programming Languages, Evolution of OO Methodology, Basic concepts of OO Approach, Comparison of object oriented and procedure oriented approaches | Lecture, Group Discussion | | |
| | 2 | | Introduction to common OO Language, applications and benefits of OOPS | Lecture | | |
| | 3 | | Object oriented methodology 2, classes and objects, Abstraction, Encapsulation, Inheritance, Method Overriding and polymorphism | Lecture | | |
| | 4 | | Introduction to java, Java's History, Creation, basic features | Lecture | | |
| | 5 | | JVM and platform Independence, Byte code, difference between JVM, JDK and JRE | Lecture | | |

| | 6 | Program structure of Java, First Java Program, Expression Statements | Lab, Demonstration | |
|-----|----|--|------------------------|------------|
| | 7 | Java class Library, Basic Programs for practice | Lab | |
| | 8 | Java: Data Types, Variables and Operators, operator precedence | Lecture | |
| | 9 | Control Structure (Statements)in Java, Programs | Lab, Demonstration | |
| | 10 | Defining Classes & Methods-syntax and programs, Assigning object reference variables | Lecture | |
| | 11 | C++ vs Java | Lecture | |
| | 12 | Arrays, syntax in java, types and programs | Lecture | |
| | 13 | 2 D and 3D Arrays | Lab, implementation | Assignment |
| Feb | 14 | Revision unit 1 | Test | |
| | 15 | Constructors- Importance, Why required, Types | Lecture | |

| 16 | Constructor | Lecture, |
|----|---|------------------------|
| | Overloading | Demonstration |
| 17 | Constructors Lab Programs | Implementation- Lab |
| 18 | Keywords in Java-New operator, this reference, static methods, finalize() | Lecture |
| 19 | Final Keyword in Java | Lecture, |
| | | Demonstration |
| 20 | Using objects as parameters, argument passing returning objects- Garbage collection | Lecture, Demonstration |
| 21 | Implementation- Keywords, Arrays and vectors | Lab Implementation |
| 22 | Revision unit 2 | Test |
| 23 | Strings in Java- String class, String Handling using String class, string operations | Lecture, Demonstration |
| 24 | SrtingBuffer class and methods, Difference between StringBuffer and String class, value of method | Lecture, Demonstration |

| | 25 | Strings programs | Lab, | |
|-------|----|---|---------------------------|------------|
| | | | Implementation | |
| | 26 | Inheritance- Reusability, class inheritance, basis, access control- Syntax | Lecture | |
| | 27 | Types of Inheritance- single level, super keyword | Lecture, Demonstration | Assignment |
| | 28 | Multilevel, hierarchal | Lab Implementation | |
| | 29 | Abstract classes | Lecture | |
| | 30 | Concept of Interface, Multiple Inheritance | Lecture, Demonstration | |
| March | 31 | Polymorphism, Function Overloading, method overriding. | Lecture, Demonstration | |
| | 32 | Interfaces, function overloading, Dynamic Binding | Lab, Implementation | |
| | 33 | Exception handling, Concept, Types of Exceptions, Try- Catch keywords, catching multiple exceptions | Lecture, Demonstration | |
| | 34 | Finally, Throw and Throws keywords | Lecture, Demonstration | |

| 35 | Creating own exceptions, writing exception subclass programs | Lab, Implementation | | |
|----|---|---------------------------|------------|--|
| 36 | Packages, Defining and creating packages | Lecture, Demonstration | | |
| 37 | Package naming, accessibility of packages, classpath | Lecture, Demonstration | | |
| 38 | Using package members, Packages programs | Lab, Implementation | Assignment | |
| 39 | Multithreading Programming: The Java Thread Model , The Main Thread | Lecture | | |
| 40 | Creating Multiple Thread- 2 methods, Programs | Lecture, Demonstration | | |
| 41 | Thread Priorities, synchronization, interthread communication | Lecture, Demonstration | | |
| 42 | Thread programs, Runnable Interface and Thread Class, Setting Priorities. | Lab, Implementation | | |
| 43 | Input/ Output in java, stream and stream classes, Predefined streams | Lecture | | |

| 44 | I/O classes, reading console input, writing | Lecture, Demonstration | |
|----|---|------------------------|--|
| | console output | | |
| 45 | Reading and writing on | Lab, | |
| | Files | Implementation | |
| 46 | The transient and volatile modifiers | Lecture | |
| 47 | Using instance of native methods. | Lecture | |
| 48 | Doubts& Revision | Revision | |
| 49 | Revision- previous year question papers | Revision | |
| 50 | Doubts | Revision | |

Note- 5 Lectures per week

<u>Lecture Plan for the semester starting (Jan 2025 – June 2025)</u> <u>Introduction to .NET – BCA6th Sem</u>

Name of the Institute: DAV Institute of Management, Faridabad

Name of teacher with designation: Ms. Deepika Pahuja (Assistant Professor)

Department: BCA

Class Time: 1Hr.

| Month | Class | Date of Class taken | Topic/Chapter Covered | Academic Activity | Test/Assignment | Deviation if any |
|-------|-------|---------------------------|--|----------------------|-----------------|------------------|
| | 1 | | Introduction to .net, Why .Net came into existence | | | |
| | 2 | | Building Blocks of .Net platform (CLR,CTS and CLS) | | | |
| | 3 | | Features of .NET | | | |
| | 4 | | Deploying .NET Runtime | | | |
| | 5 | | Architecture of .net | | | |
| | 6 | | (CLR, CLS, and CTS) | | | |
| | 7 | | Demo Lab with input and output parameters | | | |
| | 8 | | Evolution of Web Development | | | |
| | 9 | | Class libraries in .NET, Introduction to Assemblies and Manifest in .NET | | | |

| 10 | Metadata and attributes | | | |
|--------|--|-------------|--------------|--|
| 11 | Characteristicsof C#, Input and Output, Data types: Value type vs Reference Type, Default value, constants | | | |
| 12 | | Unit-1 Test | | |
| 13 | Variables, Scope of Variables, Boxing and Unboxing | | | |
| 14 | Operators and expressions, Operator precedence and associativity | | | |
| 15 | If, if-else, else-if ladder in C# | | | |
| 16 | Switch statement in C# | | | |
| 17 | For, for each loop statement in C# | | | |
| 18 | While, do-while in C# | | | |
| 19 | Classes and Methods | | | |
| 20 | Constructors, types of constructors | | | |
| 21 | Destructors | | Assignment 2 | |

| 22 | Operator overloading | |
|----|--|--------------|
| 23 | Function Overloading | |
| 24 | | Test |
| 25 | Inheritance, Types of Inheritance | |
| 26 | Overriding | |
| 27 | Interfaces | |
| 28 | Abstract Class and methods | |
| 29 | Sealed Classes and methods | Assignment 3 |
| 30 | Delegates and events | |
| 31 | Exceptional Handling | |
| 32 | Automatic Memory Management | |
| 33 | Introduction to ADO.Net | Assignment 4 |
| 34 | Demo Lab showing connectivity with SQL | Test |
| 35 | Revision | |
| 36 | Revision | |
| 37 | Revision | |
| 38 | Revision | |

| 39 | Revision | |
|----|-----------------------|--------------|
| | | |
| 40 | Doubts | |
| 41 | Previous year | Assignment 4 |
| | Question Paper | |
| 42 | Practical file Doubts | |
| 43 | Revision | |
| 44 | Revision | |
| 45 | Revision | |

Lesson Plan for the Semester starting w.e.f 15 January, 2025 ${\bf Artificial\ Intelligence,\ BCA\ 6^{th}\ Sem}$

Name of Institute: DAV Institute of Management

Name of Teacher with designation: Ms.Pooja Goyal(Assistant professor)

Department: BCA

Class Time: 1 Hour

| Mon | Hours | Date | Topic/Chapter Covered | Academic | Test/Assignm | Deviation (if |
|-----|------------------|------|---|------------|---------------|----------------------|
| th | | | | activity | ent | any) |
| | Lecture 1 | | Turing Test and Criticism faced by Turing Test | Theory | | |
| | Lecture 2 | | Intelligence and AI definition, Reasons behind vast development in AI, Importance of AI | theory | | |
| | Lecture 3 | | Difference between Conventional and AI Problems, | Theory | | |
| Jan | Lecture 4 | | AI Applications | THEORY | | |
| | Lecture 5- | | AI and its related field | THEORY | | |
| | Lecture 8- 9 | | Criteria for Success | THEORY | | |
| | Lecture 10 | | Problem and AI Problem Characteristics | THEORY | | |
| | Lecture 11-12 | | Problem Representation methods: State space representation | THEORY | | |
| | Lecture 13 | | Problem Reduction | Discussion | Assignment-I: | |

| | | | Prepare answers to question based on topics of UNIT-I Time given: One week | |
|------------------|--|--------|--|--|
| Lecture 14-15 | Unit -II Production System and its components | THEORY | | |
| Lecture 16-17 | Issues in the design of the search problem | THEORY | | |
| Lecture 18 | Hill Climbing Algorithm: Simple Hill Climbing | THEORY | | |
| Lecture 19-21 | Steepest Ascent Hill Climbing Algorithm Problems in Hill Climbing Algorithm and their Solutions | THEORY | | |
| Lecture 22-23 | Problems in Hill Climbing Algorithm and their Solutions, A* Algorithm | THEORY | | |
| Lecture 24 | Constraint Satisfaction, Knowledge Representation: Definition, Importance of Knowledge | THEORY | | |
| Lecture 25 | Level of knowledge, Types of Knowledge | THEORY | | |
| Lecture 26-28 | Knowledge Representation Schemes: Semantic Net and its Reasoning Process | THEORY | | |
| Lecture 29 | Frames and its Reasoning | THEORY |) | |

| | Process | | |
|------------------|---|--------|---|
| Lecture 30-31 | Script, Representing Simple facts in logic, Representing instances and is_a relationship, Computable function and predicate | THEORY | Assignment II: Prepare answers to questions based on topics of UNIT-III Time given: Four days |
| Lecture 32 | Unit-3 : Natural Language Processing: Introduction, syntactic processing, Semantic Processing | THEORY | |
| Lecture 33 | Discourse and pragmatic processing, Learning by taking advice, Learning in Problem solving | THEORY | |
| Lecture 34 | Learning from example- induction, Explanation based learning | THEORY | |
| Lecture 35 | Unit-4: Expert system : introduction and characteristics of Expert System | THEORY | |
| Lecture 36-37 | Examples of Expert System, Applications of Expert System | THEORY | Assignment III: Prepare answers to questions based on UNIT-III Time given: Four days |
| Lecture 38 | Benefits and Limitation of Expert System | THEORY | |

| Lecture 39-40 | Components of ExpertSystem: User interface, Knowledge Base and Inference Engine | THEORY | | |
|------------------|---|------------|--|--|
| Lecture 41-42 | Expert System Architecture | THEORY | Assignment IV: Prepare answers to questions based on unit IV Time given:Three days | |
| Lecture 43-45 | Expert System shells | THEORY | | |
| Lecture 46-50 | Unit-4 | Discussion | | |