

# HEMCHANDRACHARYA NORTH GUJARAT UNIVERSITY, PATAN

## B.C.A. Semester – V BCA-501: JAVA Programming

Teaching Scheme (per week)		Teaching Scheme (per semester)		Examination Scheme					
				INT		EXT		TOTAL	
Th. (hours)	Pr. (hours)	Total Hours	Credit	Th. (marks)	Pr. (marks)	Th. (marks)	Pr. (marks)	Th. (marks)	Pr. (marks)
4	--	40	4	30	--	70	--	100	--

### Unit – I

[18 MARKS]

#### **Fundamentals of Object Oriented Programming:**

**Basic Concepts of Object-Oriented Programming:** Object and Class, Data Abstraction and Encapsulation, Inheritance, Polymorphism, Dynamic Binding, Message Communication. Benefits and Applications of OOP.

#### **Basics of Java.**

History of Java, Java Features, JDK and its Components (Various Tools of JDK), Byte code and JVM, JAVA Program Structure.

**Building Blocks:** Tokens (Keywords, Identifier, Literals, Operators, Separators), Variables, Data Types, Type Conversion and Casting, Command Line Arguments .

#### **Control Statements:**

**Selection Statement:** if – else, nested if-else, else if ladder, switch Statements.

**Iteration statements:** while, do...while, for Statements

**Jump Statements:** break, continue.

**Arrays:** How to create array in java.

### Unit-2

[17 MARKS]

#### **Class Fundamentals:**

Defining Classes, Creating Objects, Static Members, Methods Overloading, Nesting of Methods

**Constructors:** Introduction, Default & Parameterized Constructors, Constructor Overloading.

**Inheritance:** Introduction, Single, Multilevel, Hierarchical Inheritance. Method Overriding, final Variable, final Methods & final Class, abstract Methods and Abstract Class.

**Access Modifiers (Visibility Controls)** – public, private, default, protected, private protected.

### Unit – 3

[18 MARKS]

**Interfaces:** Defining an Interfaces, Implementing Interfaces, Multiple interface.

**Packages:** Defining Package, List of Java API Packages and their classes, Creating, Accessing and Using packages ,adding a Class to Package.

Java.lang Package classes (Math, String).

Java.util Package classes (Stack, Vector).

**Multithreading :** Definition, Life Cycle of Thread (Thread states – Newborn, Runnable, Running, Blocked, Dead), Extending Thread Class, Implementing Runnable Interface, Various Thread Methods like yield(),stop(),sleep(), Threa d Priorities.

### Unit – 4

[17 MARKS]

**Exception Handling :** Exception & Exception Handling, Exceptions Types (Java’s Built-in Exceptions) – Checked and Unchecked Exceptions, Exception Handling using try, catch, finally, throw, throws etc., Nested try, Multiple catch, Throwing Your own Exception.

**Applets :** Introduction, Local and Remote Applets, Applet Lifecycle, Creating and executing Applet , Passing Parameters to Applet.

**Graphics Class :** Various methods of Graphics Class.

### TEXT BOOKS:

1. **Programming with JAVA**, E Balagurusamy, Tata McGraw Hill
2. **The Complete Reference JAVA**, Herbert Schildt, Tata McGraw Hill .
3. **Teach Yourself JAVA**. Joseph O’Neil & Herb Schildt, Tata McGraw Hill .

### Question Paper Scheme:

#### University Examination Duration: 3 Hours

Q-1 – Unit -1 (18 Marks)

- A. Objective / Short Questions
- B. Descriptive / Long Questions

Q-2 – Unit -2 (17 Marks)

- A. Objective / Short Questions
- B. Descriptive / Long Questions

Q-3– Unit -3 (18 Marks)

- A. Objective / Short Questions
- B. Descriptive / Long Questions

Q-4 – Unit -4 (17 Marks)

- A. Objective / Short Questions
- B. Descriptive / Long Questions

Note: All Objective/ Short Questions are compulsory, no option will be given.

# HEMCHANDRACHARYA NORTH GUJARAT UNIVERSITY, PATAN

## B.C.A. Semester – V

### BCA-502: .NET Frame Work Using C#

Teaching Scheme (per week)		Teaching Scheme (per semester)		Examination Scheme					
				INT		EXT		TOTAL	
Th. (hours)	Pr. (hours)	Total Hours	Credit	Th. (marks)	Pr. (marks)	Th. (marks)	Pr. (marks)	Th. (marks)	Pr. (marks)
4	--	40	4	30	--	70	--	100	--

#### Unit – I [18 MARKS] Introduction to Net Framework 4.0.

.Net framework Architecture, Feature of .Net, The .Net Languages, CLR, Language compilation in .net, .Net Class Library, Object of ASP

##### Introduction to C#

Data Types, Variable & Expression, Scope & Accessibility, Looping Statement, Functions & Sub routing, Delegates

#### Unit-2

[17 MARKS]

##### Basic about Classes & Objects

Namespaces and Assemblies, Difference of Web Based & Window Based Application, Introduction to Web Server, Installation of IIS, IIS request Handling Process, IIS manager & Creating Virtual Directory, Bin d irectory.

#### Unit – 3

[18 MARKS]

Server Controls & its type, Basic Web Controls (Label, Button, Textbox, checkbox, radio, hyperlink, link, image button, List box, dropdown-list, checkbox list, radio button list, panel, table, bulleted list), Code behind Class, Compile Code Behind, Introduction to Web.Config File, global.asax, master page, Themes, Auto post back, Web control Events, ASP.Net Application Life Cycle, ASP.Net Page Life Cycle

#### Unit – 4

[17 MARKS]

##### Overview of ADO.Net

Database Access in the Internet world, Characteristics of ADO.Net, Differences between ADO & ADO.Net, ADO.Net Architecture (Direct Data Access & DB Connected Data Access), ADO.Net Object model , ADO.Net Object , Data Source Interaction Objects, Retrieving and Manipulating of Data with SQL Server (Select, Insert, Update, Delete)

##### Overview of Data Binding

Single value Data Binding, Repeated Value Data Binding

**TEXT BOOKS:**

1. **The Beginning Asp.net 4 in c# 2010** APRESS
2. **The Complete Reference ASP.NET** TATA McGRAW-HILL
3. **ASP.NET Black Book**

**Question Paper Scheme:**

**University Examination Duration: 3 Hours**

Q-1 – Unit -1 (18 Marks)

- C. Objective / Short Questions
- D. Descriptive / Long Questions

Q-2 – Unit -2 (17 Marks)

- C. Objective / Short Questions
- D. Descriptive / Long Questions

Q-3– Unit -3 (18 Marks)

- C. Objective / Short Questions
- D. Descriptive / Long Questions

Q-4 – Unit -4 (17 Marks)

- C. Objective / Short Questions
- D. Descriptive / Long Questions

Note: All Objective/ Short Questions are compulsory, no option will be given.

# HEMCHANDRACHARYA NORTH GUJARAT UNIVERSITY, PATAN

## B.C.A. Semester – V BCA-503: Software Engineering

Teaching Scheme (per week)		Teaching Scheme (per semester)		Examination Scheme					
				INT		EXT		TOTAL	
Th. (hours)	Pr. (hours)	Total Hours	Credit	Th. (marks)	Pr. (marks)	Th. (marks)	Pr. (marks)	Th. (marks)	Pr. (marks)
4	--	40	4	30	--	70	--	100	--

### Unit – I

[18 MARKS]

#### Introduction to Software Engineering

Software , Definition of Software Engineering , Software Development Approach , Evolving Role of Software , Software Characteristics , Different between Software Engineering and Computer Science , Different between Software Engineering and System Engineering, Software Costs , Software Application , Evolution of Software Engineering, Software Crisis

– Problem and Causes , Software Myths , Professional and Ethical Responsibility , Software Process , Principal of Software Engineering , Software Quality Factors , User's Perspective , Software Quality Attributes ,Software Engineering Methods, Software Engineering Problems

#### Software Process Model

Software Process Model, Waterfall Model, Prototyping Model, Increment Model, The Spiral Model

### Unit-2

[17 MARKS]

#### Software Requirement Specification

Requirement Engineering Processes, Types of Requirement, SRS (System Requirement Specification), Software Eng. Benefits , Role of Management in Software Development , Role of Metrics and Measurement

#### System Design

Software Design Strategy Design Patterns, Becoming Master Designer, Implementing a Design, Evaluating a Design, Problem Partitioning, Abstraction, Strategy of Design, Function, Oriented vs. Object Oriented Approaches

### Unit – 3

[18 MARKS]

#### Coding

Programming Practices, Top Down Approach & Bottom Up Approach, Structure Programming, Information hiding , Programming Style,

#### Testing

Testing Fundamentals, Tops Down And Bottom Up Approaches, Test Cases and Test

criteria, Psychology of Testing, Regression testing, Functional Testing, Structure Testing, Equivalence Class Partitioning, Boundary Value Analysis, Cause – Effect Graphing, Types of Testing under White/Glass Box Testing Strategy, Driver and Stub Modules, Alpha , Beta and Gamma testing, Test cases, suites, scripts, and scenarios, Test plan, test case specification, A sample testing cycle

#### Unit – 4

[17 MARKS]

##### **Software Project Management**

Software Project Management , COCOMO Model , Project Scheduling , Software Configuration Management , Software Maintenance , Quality Assurance Plans , Verification and Validation , Project Monitoring Plans , Software Risk Management , Project Planning.

##### **Software Reliability and Quality Assurance**

Software Reliability , Reliability metrics , Reliability Growth Modeling , Objectives of Software quality Management , ISO-9000 Certification for software industry , Software measurement and metrics , Metrics of Functionality : Albrecht's Function Points , SEI Capability Maturing Model , Computer Aided Software Engineering CASE and its Scope, Business Process re-Engineering , Software Reverse Engineering , What is Risk ? Why Manage Risks Formally ? Risk and Uncertainty , Typical Software Risks , Risk Management and Schedule Estimation.

#### TEXT BOOKS:

1. **Software Engineering** - Roger S. Pressman
2. **Practical Approach of Software Engineering**  
- Munesh Trivedi, N.N.Jani, S.S.Sarangdevot, Avinash Dwivedi

#### Question Paper Scheme:

##### **University Examination Duration: 3 Hours**

Q-1 – Unit -1 (18 Marks)

- E. Objective / Short Questions
- F. Descriptive / Long Questions

Q-2 – Unit -2 (17 Marks)

- E. Objective / Short Questions
- F. Descriptive / Long Questions

Q-3– Unit -3 (18 Marks)

- E. Objective / Short Questions
- F. Descriptive / Long Questions

Q-4 – Unit -4 (17 Marks)

- E. Objective / Short Questions
- F. Descriptive / Long Questions

Note: All Objective/ Short Questions are compulsory, no option will be given.

# HEMCHANDRACHARYA NORTH GUJARAT UNIVERSITY, PATAN

## B.C.A. Semester – V

### BCA-504(Elective-III) : E-Commerce

Teaching Scheme (per week)		Teaching Scheme (per semester)		Examination Scheme					
				INT		EXT		TOTAL	
Th. (hours)	Pr. (hours)	Total Hours	Credit	Th. (marks)	Pr. (marks)	Th. (marks)	Pr. (marks)	Th. (marks)	Pr. (marks)
4	--	40	4	30	--	70	--	100	--

#### Unit – I

[18 MARKS]

##### **Fundamental of E-Commerce**

What is E – Commerce, Pure v/s Partial E- Commerce, Categories of E- Commerce: based on transactions, based on transacting parties, Brief history of e-commerce, Driving forces of e-commerce, **Benefits of e-commerce:** to business, to consumers, Limitations of e-commerce

**Model of E-Commerce:** B2B, B2C, C2B, C2C

#### Unit-2

[17 MARKS]

##### **E -Payment Systems**

Introduction, requirements of e-payment system, Credit card system, Debit Card, Smart Card, Electronic Fund transfer, Electronic Chaque, payment, electronic Cash, Payment gateways, Micro payments, EDI.

Case Studies: E- reservation (irctc.co.in)

E- Banking (hdfcbank.com, icicibank.com)

On- line book purchasing (amazon.com)

#### Unit – 3

[18 MARKS]

##### **Cryptographic Techniques**

Introduction, Plaintext and Cipher text, Substitution Techniques, Transposition techniques, Encryption & Decryption, Symmetric & Asymmetric cryptography, Digital Signature, Public Key, Private Key.

#### Unit – 4

[17 MARKS]

##### **Network Security**

Brief introduction to TCP/IP, Firewalls, IP security, Virtual Private Networks ,

**Secure Transport Protocol:** S-HTTP, SSL, **Secure Electronic Payment**

**Protocol:** SETP, Secure Electronic Transaction, Certification for Authentication.

#### TEXT BOOKS:

1. **Web Commerce Technology Hand Book** by: Daniel Minoli, Emma Minoli
2. **E – Commerce** Mamta Bhusry Firewall Media
3. **Cryptography & Network Security** Atul Kahate Tata McGraw Hill

**Question Paper Scheme:**

**University Examination Duration: 3 Hours**

Q-1 – Unit -1 (18 Marks)

- G. Objective / Short Questions
- H. Descriptive / Long Questions

Q-2 – Unit -2 (17 Marks)

- G. Objective / Short Questions
- H. Descriptive / Long Questions

Q-3– Unit -3 (18 Marks)

- G. Objective / Short Questions
- H. Descriptive / Long Questions

Q-4 – Unit -4 (17 Marks)

- G. Objective / Short Questions
- H. Descriptive / Long Questions

Note: All Objective/ Short Questions are compulsory, no option will be given.



# HEMCHANDRACHARYA NORTH GUJARAT UNIVERSITY, PATAN

## B.C.A. Semester – V

### BCA-504(Elective-III) : Management Information System

Teaching Scheme (per week)		Teaching Scheme (per semester)		Examination Scheme					
				INT		EXT		TOTAL	
Th. (hours)	Pr. (hours)	Total Hours	Credit	Th. (marks)	Pr. (marks)	Th. (marks)	Pr. (marks)	Th. (marks)	Pr. (marks)
4	--	40	4	30	--	70	--	100	--

#### Unit – I

[18 MARKS]

##### **Introduction to MIS, Information, Data & Communication**

**What is MIS? General System Concept :** Techniques & Applications of an MIS, IT & MIS, Concepts about data information and communication, Classification & Characteristics of information, Communication System, Communication Method, Information in an Organization

#### Unit-2

[17 MARKS]

##### **MIS – Planning & Time Mgt and fundamental Behavior**

###### **Planning & Time Mgt**

Planning & planning terms, Objectives, Problems, Types & Sources of planning information, **System concepts** - Structure, element, objectives & Types.

**Fundamental Behavior:** Working with people, Models of organization behavior, Social system & Organization Culture.

#### Unit – 3

[18 MARKS]

##### **Aspects of organization behavior**

Individual behavior, formal & Informal relation, Job Satisfaction, Chance – Its Resistance & Mgt.

#### Unit – 4

[17 MARKS]

##### **Elements of Control.**

Concepts of Controlling mgt, Control of Cycle, Different Feedback Loops, Principles of controlling, Multiple control factors, Scope of mgt.Control, Total quality control & mgt.

#### TEXT BOOKS:

1. **Lucey t.** : Management Information System , BPB Publications
2. **Agarwal R.D** : Organization and Management , Tata McGraw-Hill publishing Company Ltd
3. **Manccshkumar** : Business Information Systems, Vikas Publishing House Pvt.Ltd..

**Question Paper Scheme:**

**University Examination Duration: 3 Hours**

Q-1 – Unit -1 (18 Marks)

- I. Objective / Short Questions
- J. Descriptive / Long Questions

Q-2 – Unit -2 (17 Marks)

- I. Objective / Short Questions
- J. Descriptive / Long Questions

Q-3– Unit -3 (18 Marks)

- I. Objective / Short Questions
- J. Descriptive / Long Questions

Q-4 – Unit -4 (17 Marks)

- I. Objective / Short Questions
- J. Descriptive / Long Questions

Note: All Objective/ Short Questions are compulsory, no option will be given.

# HEMCHANDRACHARYA NORTH GUJARAT UNIVERSITY, PATAN

## B.C.A. Semester – V

### BCA-504(Elective-III) : Mobile Computing

Teaching Scheme (per week)		Teaching Scheme (per semester)		Examination Scheme					
				INT		EXT		TOTAL	
Th. (hours)	Pr. (hours)	Total Hours	Credit	Th. (marks)	Pr. (marks)	Th. (marks)	Pr. (marks)	Th. (marks)	Pr. (marks)
4	--	40	4	30	--	70	--	100	--

#### Unit – I

[18 MARKS]

##### **Introduction to wireless networks and mobile computing Wireless Transmission:**

Frequencies, signals, antennas (Omni directional and directional), signal propagation, Multiplexing (SDM, FDM, TDM, CDM), modulation (ASK, FSK, PSK), spread spectrum, cellular system

##### **Medium Access Control:**

Hidden/exposed terminals, near/far terminals, SDMA, FDMA, TDMA, CDMA

#### Unit-2

[17 MARKS]

##### **Wireless LANs:**

Infra red vs. radio transmission, infrastructure vs. ad-hoc networks IEEE 802.11: architecture, Synchronization, power management, roaming, IEEE 802.11a: 802.11b, Bluetooth overview

##### **Mobile IP:**

Overview, network elements, packet delivery, agent discovery, registration, Tunneling and encapsulation, optimization. IPv6, IP micro-mobility support, DHCP and mobile IP

#### Unit – 3

[18 MARKS]

##### **Mobile Transport Layer:**

**Traditional TCP:** Congestion Control, TCP Slow-start, TCP Fast Retransmit/ Fast Recovery, Implications on Mobility, Classical TCP: Indirect TCP, Snooping TCP, Mobile TCP, Fast Retransmit/fast recovery, Selective retransmission, and Transaction oriented TCP , WWW architectures for mobile computing.

#### Unit – 4

[17 MARKS]

##### **Wireless Telecomm Networks:**

Evolution of wireless telecomm networks; GSM : Mobile services, System architecture, Call Routing, Handover, Security, and New data services., GPRS : Architecture , classes Mobility management, Location update IS -95, CDMA-2000, W-CDMA

**Messaging Services:**

Short Message Services (SMS)-Architecture and benefit, Multimedia Message Services (MMS) Multimedia transmission over wireless.

**Pervasive computing:** Introduction and Applications.

**TEXT BOOKS:**

1. **Mobile communications** ( second edition ) by- Jochen Schiller
2. **Mobile Computing** by:- Dr. N N.JANI, Kamaljit Lakhtaria, Dr. Ashish Jani, Neeta Kanabar.

**Question Paper Scheme:****University Examination Duration: 3 Hours**

Q-1 – Unit -1 (18 Marks)

- K. Objective / Short Questions
- L. Descriptive / Long Questions

Q-2 – Unit -2 (17 Marks)

- K. Objective / Short Questions
- L. Descriptive / Long Questions

Q-3– Unit -3 (18 Marks)

- K. Objective / Short Questions
- L. Descriptive / Long Questions

Q-4 – Unit -4 (17 Marks)

- K. Objective / Short Questions
- L. Descriptive / Long Questions

Note: All Objective/ Short Questions are compulsory, no option will be given.

# HEMCHANDRACHARYA NORTH GUJARAT UNIVERSITY, PATAN

## B.C.A. Semester – V

### BCA-504(Elective-III) : Geographic Information System

Teaching Scheme (per week)		Teaching Scheme (per semester)		Examination Scheme					
				INT		EXT		TOTAL	
Th. (hours)	Pr. (hours)	Total Hours	Credit	Th. (marks)	Pr. (marks)	Th. (marks)	Pr. (marks)	Th. (marks)	Pr. (marks)
4	--	40	4	30	--	70	--	100	--

#### Unit – I

[18 MARKS]

##### Fundamentals of GIS

Defining GIS, components of GIS, spatial data, spatial data -maps, characteristics, spatial data modelling, attribute data management -database data model, GIS applications and developments in database.

#### Unit-2

[17 MARKS]

##### Input-Output and Data Analysis in GIS

Data input and editing– methods, editing, integration, Data analysis -measurements, queries, reclassification, buffering, map overlay, interpolation, analysis of surfaces, network analysis, spatial analysis, Analytical modeling in GIS -physical, environment and human processes, output from GIS –maps, non-cartographic output, spatial multimedia, decision support.

#### Unit – 3

[18 MARKS]

##### Issues in GIS

Development of computer methods for spatial data, Issues in GIS –data quality and errors, sources of errors, human and organizational issues, GIS project design and management – problem identification, designing a data model, project management, Implementation, evaluation, the future of GIS, Internet resources of GIS.

#### Unit – 4

[17 MARKS]

##### Remote Sensing and GPS

Principles of remote sensing, remote sensing system classification, Imaging characteristics, extraction of information from images – metric and thematic, Integration of RS and GIS, GPS, accuracy of GPS, differential GPS, applications GPS, Integration of GIS and GPS.

**TEXT BOOKS:**

1. **Heywood, Cornelius and Carver: An Introduction to Geographical Information Systems** - Person Education Asia 2000
2. **C.P.Lo and Albert Yeung : Concepts and techniques of Geographic Information Systems** -PHI, New Delhi.
3. **George korte: The GIS Book**, 5th edition, Onword Press, 2001.
4. **Razvi: ArcGIS Developer's Guide for Visual Basic Applications**  
- Onword Press, 2002
5. **Bruce Ralston: Developing GIS Solution with Map objects and Visual Basic**  
- Onword Press, 2002

**Question Paper Scheme:****University Examination Duration: 3 Hours**

Q-1 – Unit -1 (18 Marks)

- M. Objective / Short Questions
- N. Descriptive / Long Questions

Q-2 – Unit -2 (17 Marks)

- M. Objective / Short Questions
- N. Descriptive / Long Questions

Q-3– Unit -3 (18 Marks)

- M. Objective / Short Questions
- N. Descriptive / Long Questions

Q-4 – Unit -4 (17 Marks)

- M. Objective / Short Questions
- N. Descriptive / Long Questions

Note: All Objective/ Short Questions are compulsory, no option will be given.

# HEMCHANDRACHARYA NORTH GUJARAT UNIVERSITY, PATAN

## B.C.A. Semester – V BCA-505 JAVA Programming

Teaching Scheme (per week)		Teaching Scheme (per semester)		Examination Scheme					
				INT		EXT		TOTAL	
Th. (hours)	Pr. (hours)	Total Hours	Credit	Th. (marks)	Pr. (marks)	Th. (marks)	Pr. (marks)	Th. (marks)	Pr. (marks)
--	4	40	4	--	30	--	70	--	100

**University Examination Duration: 3 Hours (Per Batch)**

### (Practical List)

1. Write a Java Program find the area of circle.
2. Write a Java Program that will display factorial of the given number.
3. Write a Java Program that will find the largest no from the given two nos.
4. Write a Java Program that will find the largest no from the given three n os.
5. Write a Java Program that shows the use of switch Statement.
6. Write a Java Program to find the sum of the digits of given number.
7. Write a Java Program that will display the Sum of  $1+1/2+1/3+\dots+1/n$ .
8. Write a Java Program that check weather the giv en no is prime or not.
9. Write a Java Program that implements the use of break statement.
10. Write a Java Program that implements the use of continue statement.
11. Write a Java Program that will accept Command -line Arguments and display the same.
12. Write a Java Program to sort the elements of an array in Ascending Order.
13. Write a Java Program to create a Student class and generate result of student (Total, Per, Grade).
14. Write a Java Program to create an Employee class and generate Salary Slip for the employe e.
15. Write a java program which shows the use of Static Members.
16. Write a java program which shows the Nesting of Methods.
17. Write a java program which shows the use of Methods Overloading.
18. Write a java program which implements the Default Constructors.
19. Write a java program which implements the Parameterized Constructors.
20. Write a java program which implements the Overloading of Constructors.
21. Write a java program which explains the concept of Single Inheritance.
22. Write a java program which explains the concept of Multilevel Inheritance.
23. Write a java program which explains the concept of Hierarchical Inheritance.
24. Write a java program which shows the Method Overriding.
25. Write a Java Program to implement final class and final method.

26. Write a Java Program to implement abstract class and abstract method.
27. Write a java program which implements Interface.
28. Write a java program which implements Multiple Interfaces.
29. Write a java program which shows importing of classes from other packages.
30. Write a Java Program to implement the methods of Math Class.
31. Write a Java Program to implement the methods of String Class.
32. Write a Java Program to implement the methods of Vector Class.
33. Write a Java Program to implement the methods of Stack Class.
34. Write a Java Program which will read a text and count all occurrences of a particular word.
35. Write a Java Program which will read a string and rewrite it in the alphabetical order  
eg. The word "STRING" should be written a "GINRST".
36. Write a java program which creates threads using the Thread Class.
37. Write a java program which shows the use of yield(), stop() and sleep() Methods.
38. Write a java program which shows the Priority in Threads.
39. Write a java program which use of Runnable Interface.
40. Write a java program which uses try and catch for Exception Handling.
41. Write a java program which uses Multiple catch Blocks.
42. Write a java program which uses finally Statement.
43. Write a java program which uses Nested try Statements.
44. Write a java program which shows throwing our own Exception.
45. Create an Applet program that print Hello Applet.
46. Create an applet that use init(),start(),stop() and destroy() methods of applet.
47. write an applet program to implement the concept of passing parameter to applet.
48. Write a applet program to implement various methods of Graphics class.

**Practical Exam Scheme:**

<b>Program</b>	<b>Output</b>	<b>Viva</b>	<b>Journal</b>	<b>Total</b>
25 Marks	15 Marks	20 Marks	10 Marks	70 Marks



# HEMCHANDRACHARYA NORTH GUJARAT UNIVERSITY, PATAN

## B.C.A. Semester – V

### BCA-506: : .NET Frame Work Using C#

Teaching Scheme (per week)		Teaching Scheme (per semester)		Examination Scheme					
				INT		EXT		TOTAL	
Th. (hours)	Pr. (hours)	Total Hours	Credit	Th. (marks)	Pr. (marks)	Th. (marks)	Pr. (marks)	Th. (marks)	Pr. (marks)
--	4	40	4	--	30	--	70	--	100

**University Examination Duration: 3 Hours (Per Batch)**

#### (Practical List)

1. Write a Steps for configure IIS with Asp.Net
2. Write an Asp.Net Program to print a Message on web form.
3. Write an Asp.Net Program to Create Simple Web Application using two or more web form.
4. Write an Asp.Net Program to set a link for new Page.
5. Write an Asp.Net program using different namespaces.
6. Write an Asp.Net Program to demonstrate different common Control.
7. Write an Asp.Net Program to demonstrate Request, Response and Server Object.
8. Write a program using delegation in which addition and subtraction of two integer value Possible.
9. Write an Asp.Net program using while or for loop to print sum of first 100 ODD and Even Numbers.
10. Write an Asp.Net Program to add the value of Text Box in to Dropdown List and List box Controls.
11. Write an Asp.Net Program to Delete Items from Dropdown list and List box.
12. Write an Asp.Net Program to set Image on Image Control according to selection of image name from dropdown list.
13. Write an Asp.Net Program to demonstrate use of Master Page using Themes.
14. Write an Asp.Net Program to perform Insert and update operation in Database.
15. Write an Asp.Net program to perform Search and Delete operation in Database.
16. Write an Asp.net program to display the records from database using Data Reader Object.
17. Write an Asp.Net Program to demonstrate the various methods of Dataset Object.
18. Write an Asp.Net Program to demonstrate Login Page using Database.

#### Practical Exam Scheme:

Program	Output	Viva	Journal	Total
25 Marks	15 Marks	20 Marks	10 Marks	70 Marks