BHAKTA KAVI NARSINH MEHTA UNIVERSITY JUNAGADH

(Gujarat) INDIA

CURRICULUM FOR

(Bachelor of Computer Application)

BCA

(Semester - 5)

Effective from June – 2020

BHAKTA KAVI NARSINH MEHTA UNIVERSITY

Bachelor of Computer Application – Semester – 5

[3 Years– Six Semester Full Time Program]

Semester – 5

Code	Course Name	No. Of Lectures/ Lab (Per Week)	Credit
CS – 25	Advance Java Programming (J2EE)	5	**5**
CS – 26	Programming with ASP.NET	5	**5**
CS – 27	Basic Python	5	**5**
CS – 28	Practical – 1 (based on CS – 25)	-	**5**
CS – 29	Practical – 2 (based On CS – 26 & CS – 27)	-	**5**
CS – 30	Project – Viva	-	**5**
		Total Credits of Semester – 5	**30**

CS – 25 Advanced Java Programming (J2EE)

Unit : 1

- Introduction to J2EE
- Enterprise Architecture Styles:
  - o Two-Tier Architecture
  - o Three-Tier Architecture
  - o N-Tier Architecture
- Enterprise Architecture
- The J2EE Platform
- Introduction to J2EE APIs (Servlet, JSP, EJB, JMS, JavaMail, JSF, JNDI)
- Introduction to Containers
- Tomcat as a Web Container
- Introduction of JDBC
- JDBC Architecture
- Data types in JDBC
- Processing Queries
- Database Exception Handling
- Discuss types of drivers
- JDBC Introduction and Need for JDBC
- JDBC Architecture
- Types of JDBC Drivers
- JDBC API for Database Connectivity (java.sql package)
- Statement, PreparedStatement
- CallableStatement
- ResultSetMetaData
- DatabaseMetaData
- Other JDBC APIs
- Connecting with Databases (MySQL, Access, Oracle)

Unit : 2 – RMI Servlet

- RMI overview
- RMI architecture
- Stub and Skeleton
- Developing and Executing RMI application
- Servlet Introduction
- Architecture of a Servlet
- Servlet API (Javax.servlet and avax.servlet.http)
- Servlet Life Cycle
- Developing and Deploying Servlets
- Handling Servlet Requests and Responses
- Reading Initialization Parameters
- Session Tracking Approaches (URL Rewriting, Hidden Form Fields, Cookies, Session API)
- Servlet Collaboration
- Servlet with JDBC

Unit : 3 – JSP, Java Beans

- Introduction to JSP and JSP Basics
- JSP vs. Servlet
- JSP Architecture
- Life cycle of JSP
- JSP Elements: Directive Elements, Scripting Elements, Action Elements
  - Directives Elements (page, include, taglib)
  - Scripting Elements (Declaration, scriptlet, expression)
  - Action Elements (JSP:param, JSP:include, JSP:Forward, JSP:plugin)
- JSP Implicit Objects
- JSP Scope
- Including and Forwarding from JSP Pages
- include Action
- forward Action
- Working with Session & Cookie in JSP
- Error Handling and Exception Handling with JSP
- JDBC with JSP
- JavaBean Properties
- JavaBean Methods
- Common JavaBean packaging

Unit : 4 – MVC Architecture, EJB, Hibernate

- Introduction to MVC
- Implementation of MVC Architecture
- Introduction
- Types of EJB, Benefits of EJB, Restriction on EJB
- Session Beans
- Entity Beans
- Message-driven beans
- Timer service
- Introduction to Hibernate
- Need for hibernate
- Features of hibernate
- Disadvantages of Hibernate
- Exploring Hibernate Architecture
- Downloading and Configuring and necessary files to Hibernate in Eclipse
- Jars files of hibernate.
- Hibernate Configuration file
- Hibernate Mapping file
- Basic Example of Hibernate
- Annotation
- Hibernate Inheritance
- Inheritance Annotations
- Hibernate Sessions

Unit : 5 - Spring, Struts

- Introduction of Spring Framework
- Spring Architecture
- Spring Framework definition
- Spring & MVC
- Spring Context definition
- Inversion of Control (IoC) in Spring
- Aspect Oriented programming in Spring (AOP)
- Understanding Struts Framework
- Comparision with MVC using RequestDispatcher and the EL
- Struts Flow of Control
- Processing Requests with Action Objects
- Handling Request Parameters with FormBeans
- Prepopulating and Redisplaying Input Forms
- Using Properties Files

	Class Room	Seminar	Expert Talk	Test	Total
No. Of Lecture	**60**	**05**	**05**	**05**	**75**

Reference Books :

1) The Complete Reference Java 2 - Herbert Schildt and Patrick Naughton
2) Java Server Programming For Professionals, Ivan Bayross, Sharanam Shah – Shroff Publication
3) Advanced Java Programming [ISBN: 978 - 93 - 81786 - 91 – 8] by Bharat & Company
4) Developing Java Servlets – Techmedia
5) JSP Beginner's Guide – Tata McGraw Hill by Gary Bolling, Bharathi Nataragan
6) Spring and Hibernate, K. Santosh Kumar, - Tata McGraw-Hill
7) Hibernate Made Easy: Simplified Data Persistence with Hibernate and JPA (Java Persistence API) Annotations by Cameron Wallace McKenzie, Kerri Sheehan
8) Spring Framework: A Step by Step Approach for Learning Spring Framework - CreateSpace Independent Publishing Platform
9) Beginning Hibernate Second Edition By Jeff Linwood, Dave Minte – APress

Reference Website

1) https://www.w3schools.com/java
2) https://www.javatpoint.com/java-tutorial
3) https://www.tutorialspoint.com/java
4) https://www.guru99.com/java-tutorial.html
5) https://beginnersbook.com/java-tutorial-for-beginners-with-examples

CS – 26 Programming with ASP.NET

Unit : 1 - Framework & Web Contents Validation Controls

- Overview of Asp.NET Framework
- Client Server Architecture
- ASP.NET Life Cycle
- Application Web Servers
- Installation of IIS server
- Types of Files in Asp.NET
- Types of controls in Asp.NET
- Page Architecture
- Introduction to standard Controls (Buttons, Textbox, Checkbox, Lable, Panel, Listbox, Dropdownlist FileUpload , AdRotator,CheckBoxList, RadioButtonList , ImageMap,Wizard , Calendar)
- Running an Asp.Net Application, File Upload Control
- What is Validation?
- Client Side Validation
- Server Side Validation
    - Types (RequieredField Validator, Range Validator, CompareField Validator, RegularExpression Validator, Custom Validator, ValidationSummery Control)

Unit: 2 - Ajax and State Management

- Setting up Ajax
- ASP.NET Ajax Control Toolkit With Basic Control
- What is State?
- Why is it Required in Asp.Net?
- Client Side State Management
- Server Side State Management
- Various State Management Techniques
    - View State,
    - Query String,
    - Cookie,
    - Session State,
    - Application State

Unit : 3 - ADO.NET & Database

- Architecture of ADO.NET
- Connected Architecture
- DisConnected Architecture
- ADO.NET Classes (Connection, Command,
- DataReader, DataAdapter, DataSet, DataColumn, DataRow, DataConstraints, DataView etc.)
- The Gridview Control, The Repeater Control
- Binding Data to DataBound Controls,
- Diplaying Data in a webpage using SQLDataSource Control
- DataBinding Expressions

Unit : 4 – Master Pages, Theme Caching, Application Pages & Data

- What is Master Page ?
- Requirement Of a Master Page in an Asp.NET application
- Overview of CSS3
- Designing Website with Master Page, Theme and CSS
- Overview
- Page Output Caching
- Partial Page Caching, Absolute Cache Expiration
- Sliding Cache Expiration
- Data Caching.

Unit : 5 Working with XML ASP.NET Application Configuration & Deployment of Application

- Reading Datasets From XML
- Writing DataSets With XML
- WebServices (Introduction, HTTP, SOAP, UDDI,XML, Creating a Web Service)
- Introduction To Web.Config
- Common Configuration Sections
- AppSettings
- Tracing
- Custom Errors
- Authentication And Authorization
- Deployment of Application in web server

	Class Room	Seminar	Expert Talk	Test	Total
No. Of Lecture	**60**	**05**	**05**	**05**	**75**

Reference Books :
1) Asp.Net – Unleashed
2) Asp.Net – Wrox Publication
3) Programming With ASP.NET [ISBN: 978 - 81 - 909634 - 7 – 3] by Bharat & Company
4) Beginning.ASP.NET.3.5.in.C.Sharp.2008.From.Novice.to.Professional – Apress

Reference Website
1) https://www.tutorialspoint.com/asp.net/
2) https://www.guru99.com/asp-net-tutorial.html
3) https://www.javatpoint.com/asp-net-tutorial
4) https://www.w3schools.com/asp/
5) https://docs.microsoft.com/en-us/aspnet/tutorials
6) https://www.tutorialsteacher.com/core
7) https://www.tutorialsteacher.com/mvc/asp.net-mvc-tutorials
8) http://www.pragimtech.com/free-aspnet-video-tutorial.aspx
9) www.ajaxcontroltoolkit.net/
10) https://www.aspsnippets.com/Categories/AJAX-Control-Toolkit.aspx

CS – 27 Basic Python

Unit : 1 – Introduction to Python

- Python History, Features & Installation
- Basic Syntax, Indentation, Reserved Words, Naming Conventions
- Python Variables & Data Types
- Literals
- Operators
- Comments
- Simple Input and Output, print() function
- Python Conditional Statements
- Python Loops : for loop, while loop, break statement, continue statement
- Executing Python from the Command Line, IDLE, Editing Python Files
- Python Functions
- Defining Your Own Functions, Parameters, Keyword and Optional Parameters
- Python Modules

Unit : 2 – File Handling & Data Types

- Python Files I/O
- Python Strings
- Python Lists
- Python Tuples
- Python Sets
- Python Dictionary

Unit : 3 – OOP using Python, Sorting & Searching with Python

- Handling Exceptions
- Exceptions as a control flow mechanism
- Assertions
- Abstract Data Types and Classes
- Inheritance
- Encapsulation and Information Hiding
- Search Algorithms (Linear, Binary)
- Sorting Algorithms (Selection, Bubble, Insertion, Shell, Quick)
- Hashtables

Unit : 4 - Regular Expressions

- Special Symbols and Characters
- Regexes and Python
- A Longer Regex example
- Text Processing:
  - Comma Separated Values (CSV files)
  - JavaScript Object Notation (JSON)
  - Python and XML

Unit : 5 - Python with MySQL

- Environment Setup
- Database Connection
- Creating New Database
- Creating Tables
- Insert Operation
- Read Operation
- Update Operation
- Join Operation
- Performing Transactions

	Class Room	Seminar	Expert Talk	Test	Total
No. Of Lecture	**60**	**05**	**05**	**05**	**75**

Reference Books :

1) Python: The Complete Reference
2) Python Programming Fundamentals- A Beginner's Handbook
3) Core Python Programming

Reference Website

1) https://www.tutorialspoint.com/python
2) https://www.w3schools.com/python
3) https://docs.python.org/3/tutorial
4) https://www.guru99.com/python-tutorials.html
5) https://www.programiz.com/python-programming/tutorial
6) https://www.learnpython.org
7) https://realpython.com/tutorials/python

CS – 28   **100 Marks**

PRACTICAL – 1 (Based on CS – 25)

CS – 25 – Advance Java Programming (J2EE) [100 Marks]

- Each session is of 3 hours for the purpose of practical Examination.
- Practical examination may be arranged before or after theory exam

CS – 29   **100 Marks**

PRACTICAL – 2 (Based on CS – 26 & CS – 27)

CS – 26 – Programming with ASP.NET [50 Marks]
CS – 27 – Basic Python [50 Marks]

- Each session is of 3 hours for the purpose of practical Examination.
- Practical examination may be arranged before or after theory exam

CS – 30   **100 Marks**

PROJECT – VIVA

- Project must be developed in the computer laboratory of concern institute under the supervision of faculties of concern institute on any subject of previous semester or current semester. (At the time of Project-Viva examination student must show all the Workouts, SDLC, Documentation, Program codes and project in running mode)

Note :
- Project must be submitted before two week of commencement of theory exam.
- Project viva examination may be arranged before or after theory exam.
- During the project viva examination project must be run.

BHAKTA KAVI NARSINH MEHTA UNIVERSITY

Bachelor of Computer Application

[3 Years - Six Semester Full Time Program]
Semester – 5

Paper Style

Unit : 01

Question : 1 (A)	Answer The Following Question	(Only Three)	03
Question : 1 (B)	Answer The Following Question	(Any Two out of Four)	06
Question : 1 (C)	Answer The Following Question	(Any One out of Two)	05

Unit : 02

Question : 2 (A)	Answer The Following Question	(Only Three)	03
Question : 2 (B)	Answer The Following Question	(Any Two out of Four)	06
Question : 2 (C)	Answer The Following Question	(Any One out of Two)	05

Unit : 03

Question : 3 (A)	Answer The Following Question	(Only Three)	03
Question : 3 (B)	Answer The Following Question	(Any Two out of Four)	06
Question : 3 (C)	Answer The Following Question	(Any One out of Two)	05

Unit : 04

Question : 4 (A)	Answer The Following Question	(Only Three)	03
Question : 4 (B)	Answer The Following Question	(Any Two out of Four)	06
Question : 4 (C)	Answer The Following Question	(Any One out of Two)	05

Unit : 05

Question : 5 (A)	Answer The Following Question	(Only Three)	03
Question : 5 (B)	Answer The Following Question	(Any Two out of Four)	06
Question : 5 (C)	Answer The Following Question	(Any One out of Two)	05

BHAKTA KAVI NARSINH MEHTA UNIVERSITY JUNAGADH

(Gujarat) INDIA

CURRICULUM FOR

(Bachelor of Computer Application)

BCA

(Semester - 6)

Effective from November – 2020

BHAKTA KAVI NARSINH MEHTA UNIVERSITY

Bachelor of Computer Application – Semester – 6

[3 Years– Six Semester Full Time Program]

Semester – 6

Code	Course Name	No. Of Lectures/ Lab (Per Week)	Credit
CS – 31	Mobile Computing using Android and iPhone	5	5
CS – 32	Data Warehousing with SQL Server 2012	5	5
CS – 33	Programming in Advance Python – 2	5	5
CS – 34	Practical – 1 (based on CS – 31)	-	5
CS – 35	Practical – 2 (based On CS – 32 & CS – 33)	-	5
CS – 36	Project – Viva	-	5
	Total Credits of Semester – 5		**30**

CS – 31 Mobile Computing using Android and iPhone

Unit : 1
Introduction to Android & Android Application Design

- The Open Handset Alliance
- The Android Platform, Android SDK
- Building a sample Android application
- Anatomy of an Android applications
- Android terminologies
- Application Context, Activities, Services, Intents
- Receiving and Broadcasting Intents
- Android Manifest File and its common settings
- Using Intent Filter, Permissions
- Managing Application resources in a hierarchy
- Working with different types of resources

Unit : 2 – Android User Interface Design

- User Interface Screen elements
  - Button
  - EditText
  - TextView
  - DatePicker
  - TimePicker
  - ProgressBar
  - ListView
  - GridView
  - RadioGroup
  - ImageButton
  - Fragement
- Designing User Interfaces with Layouts
  - Relative Layout
  - Linear Layout
  - Table Layout
  - GridLayout etc
- Dialogs
- Drawing and Working with Animation
  - Frame By Frame Animation
  - Twined Animation
    - Fade In
    - Fade Out
    - Cross Fading
    - Blink
    - Zoom In
    - Zoom Out
    - Rotate
    - Move
    - Slide Up
    - Slide Down
    - Bounce
    - Sequential
    - Together

Unit : 3 - Database Connectivity Using SQLite and Content Provider

- Using Android Data and Storage APIs
- Managing data using SQLite and Perform (insert update delete and select operation)
- Sharing Data Between Applications with Content Providers
- Introduction to rest api
- Introduction to Retrofit

Unit : 4 – Location Based Services (LBS) Common Android API Notifications Services Deployment of applications

- Using Global Positioning Services (GPS)
- Geocoding Locations
- Mapping Locations
- Generate marker
- Many more with location based services
- Android networking API
- Android web API
- Android telephony API
- Notifying the user Notifying with the status bar
- Vibrating the phone
- Blinking the lights
- Customizing the notifications Services
- Application development using JSON in MySQL
- Publish android application

Unit : 5 – Introduction To iPhone

- Introduction To X-Code (IDE)
- What is Storyboard
- Framework Design User Interface for button text view text field etc.
- Creating And Building Simple Application
- Cocoa Touch And MVC

Notes : Android application must be developed using ANDROID STUDIO.

Reference Books :

1) Android Wireless Application Development By Lauren Darcey and Shane Conder Pearson Education 2nd ed. (2011)
2) Beginning iOS 6 Development By David Mark Jack Nutting Jeff LaMarche Fredrik Olsson Apress Publication.
3) Using SQLite By Jay A. Kreibich Publisher: O'Reilly Media
4) Mobile Computing using Android & iPhone [ISBN: 978-93-81786-93–2] by Bharat & Company
5) Professional Android 2 Application Development Reto Meier Wiley India Pvt Ltd (2011)
6) Beginning Android Mark L Murphy Wiley India Pvt Ltd

Reference Websites:

1) https://www.tutorialspoint.com/android/
2) https://www.javatpoint.com/android-tutorial
3) https://developer.android.com/guide
4) https://developer.android.com/training/basics/firstapp
5) https://www.studytonight.com/android/

CS – 32 Data Warehousing with SQL Server 2012

Unit : 1
Introduction to Data Warehousing

- What Is a Data Warehouse?
- Data Warehousing Today
    - Business intelligence
    - Customer Relationship Management
    - Data Mining
- Future Trends in Data Warehousing.
    - Unstructured Data
    - Search
    - service oriented architecture (SOA)
    - Real-time data warehousing
- Data Warehouse Architecture
    - Data flow architecture
    - System architecture

Unit : 2
Designing and Implementation of Data Warehousing

- Logical Design for data warehouse
    - Data Warehousing Schemas
        - Star Join (Star Schema) and Snowflake structure
- Physical Design for data warehouse
    - Physical Design Structures
        - Tablespaces
        - Tables and Partitioned Tables
        - Views
        - Integrity Constraints
        - Dimensions
- Design dimension table fact table for data warehouse
- Design and implement effective physical data structure for data warehouse

Unit : 3
Creating ETL Solutions with SSIS Implementing Control Flow in SSIS

- Introduction to ETL with SSIS
- Introduction to SQL Server Data Tools
- Implementing data flow using SSIS
    - Configuring the Data Flow
        - Sources
        - Transformations
            - Derived Column
            - Conditional Split

- ▪ Destinations
- Introduction to Control Flow
  - o SSIS Tasks
- SSIS Containers
  - o For Loop Container
  - o Foreach Loop Container
    - ▪ Foreach File enumerator
    - ▪ Foreach Item enumerator
    - ▪ Foreach SMO enumerator
    - ▪ Foreach Nodelist enumerator
    - ▪ Foreach ADO enumerator
    - ▪ Foreach ADO.NET Schema
    - ▪ Foreach From Variable enumerator
  - o Sequence Container
- Create Dynamic Packages Using Containers

Unit : 4
Enforcing Data Quality Extending SQL Server Integration Services

- Introduction to Data Quality
  - o Installing and setting up the DQS
  - o Creating a Knowledge Base
- Using Data Quality Service to cleanse data
- Using Data Quality Service to match data
- Using Scripts in SSIS
  - o Script Task
    - ▪ The Script Task Dts Object
  - o Script Component
- Using Custom components in SSIS

Unit : 5
Deploying & Configuring SSIS Packages Consuming Data in Data Warehouse

- Overview of SSIS Development
  - o Packages
  - o Control Flow vs. Data Flow
  - o Package Functionality Extension Objects
- Deploying SSIS Projects
  - o Deploying Packages to SQL Server Integration Services Catalog
  - o Deployment Models In SSIS
- Planning SSIS Package Execution
- Introduction to Business Intelligence
- Introduction to Reporting
  - o Basic Reports in SQL Reporting Services
  - o Parameters in Reporting Services
  - o Charts in SSRS

- SQL Server Reporting Services Configuration Manager (For Deploy Project in Report Server)
- Introduction to Data Analysis
- Create Cube and Dimensions Using Data Analysis

Notes : For Lab Practice : Microsoft SQL Server 2012 or Higher version

Reference Books :

1) Implementing a Data Warehouse with Microsoft® SQL Server® 2012 Dejan Sarka Matija Lah Grega Jerkič
2) Building a Data Warehouse: With Examples in SQL Server – Vincent Rainardi-Apress (2014)
3) Data mining Explained A manager's guide to customer centric business intelligence by
4) Data mining by Pieter Adriaans Dolf Zantinge
5) Data warehousing in the real world A practical guide for business DSS by Sam Anahory

Reference Websites :

1) https://www.tutorialgateway.org/ssis/
2) https://www.tutorialspoint.com/ms_sql_server/ms_sql_server_integration_services.htm
3) https://www.guru99.com/ssis-tutorial.html

CS – 33 : Programming in Advance Python – 2

Unit : 1 – Python Tkinter

- Python Tkinter
- Tkinter Button
- Tkinter Canvas
- Tkinter Checkbutton
- Tkinter Entry
- Tkinter Frame
- Tkinter Label
- Tkinter Listbox
- Tkinter Menubutton
- Tkinter Menu

- Tkinter Message
- Tkinter Radiobutton
- Tkinter Scale
- Tkinter Scrollbar
- Tkinter Text
- Tkinter Toplevel
- Tkinter Spinbox
- Tkinter PanedWindow
- Tkinter LabelFrame
- Tkinter MessageBox

Unit : 2 – Python Numpy

- NumPy Introduction
- Environment Setup
- NumPy Ndarray
- NumPy Data Types
- NumPy Array Creation
- Array From Existing Data
- Arrays within the numerical range
- NumPy Broadcasting
- NumPy Array Iteration

- NumPy Bitwise Operators
- NumPy String Functions
- NumPy Mathematical Functions
- Statistical Functions
- Sorting & Searching
- Copies and Views
- Matrix Library
- NumPy Linear Algebra

Unit : 3 – Plotting using PyLab & Multithreading

- Plotting using PyLab
- extended examples
- Thread
- Starting a thread

- Threading module
- Synchronizing threads
- Multithreaded Priority

Unit : 4 – Interaction with Database

- Configuring database
- defining model
- basic data access

- inserting and updating data
- selecting objects
- deleting objects

Unit : 5 – Introduction to web Framework Django

- Introduction to Django
- MVC Design Pattern

- Django installation
- starting project
- Django project architecture
- HTTP Client-Server Request – Response, concept of web framework and web application.

Reference Books :

1) John V Guttag. "Introduction to Computation and Programming Using Python", Prentice Hall of India
2) Wesley J Chun, Core Python Applications Programming, 3rd Edition. Pearson
3) Michael Bowles, Machine Leaning in Python, Essential techniques for predictive analysis, Wiley
4) Allen Downey, Jeffrey Elkner and Chris Meyers "How to think like a Computer Scientist, Learning with Python", Green Tea Press
5) Alex Martelli, Python Cookbook, O'REILLY

Reference Websites :

1) https://www.geeksforgeeks.org/python-gui-tkinter
2) https://www.tutorialspoint.com/python/python
3) https://www.javatpoint.com/python
4) https://www.numpy.org/
5) https://www.djangoproject.com/start/
6) https://www.tutorialspoint.com/django
7) https://www.javatpoint.com/django

CS – 34   100 Marks
PRACTICAL – 1 (Based on CS – 31)
CS – 31 – Mobile Computing using Android & iPhone [100 Marks]

- Each session is of 3 hours for the purpose of practical Examination.
- Practical examination may be arranged before or after theory exam

CS – 35   100 Marks
PRACTICAL – 2 (Based on CS – 32 & CS – 33)
CS – 32 – Data Warehousing with SQL Server 2012 [50 Marks]
CS – 33 – Programming in Advance Python – 2 [50 Marks]

- Each session is of 3 hours for the purpose of practical Examination.
- Practical examination may be arranged before or after theory exam

CS – 36   100 Marks
PROJECT – VIVA

- Project must be developed in the computer laboratory of concern institute under the supervision of faculties of concern institute on any subject of previous semester or current semester. (At the time of Project-Viva examination student must show all the Workouts, SDLC, Documentation, Program codes and project in running mode)

Note :

- Project must be submitted before two week of commencement of theory exam.
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- During the project viva examination project must be run.

Bachelor of Computer Application

[3 Years - Six Semester Full Time Program]

Semester – 6

Paper Style

Unit : 01
Question : 1 (A)	Answer The Following Question	(Only Three)	03
Question : 1 (B)	Answer The Following Question	(Any Two out of Four)	06
Question : 1 (C)	Answer The Following Question	(Any One out of Two)	05

Unit : 02
Question : 2 (A)	Answer The Following Question	(Only Three)	03
Question : 2 (B)	Answer The Following Question	(Any Two out of Four)	06
Question : 2 (C)	Answer The Following Question	(Any One out of Two)	05

Unit : 03
Question : 3 (A)	Answer The Following Question	(Only Three)	03
Question : 3 (B)	Answer The Following Question	(Any Two out of Four)	06
Question : 3 (C)	Answer The Following Question	(Any One out of Two)	05

Unit : 04
Question : 4 (A)	Answer The Following Question	(Only Three)	03
Question : 4 (B)	Answer The Following Question	(Any Two out of Four)	06
Question : 4 (C)	Answer The Following Question	(Any One out of Two)	05

Unit : 05
Question : 5 (A)	Answer The Following Question	(Only Three)	03
Question : 5 (B)	Answer The Following Question	(Any Two out of Four)	06
Question : 5 (C)	Answer The Following Question	(Any One out of Two)	05