

**KADI SARVA VISHWAVIDYALAYA - GANDHINAGAR**

Teaching & Examination scheme  
Effective from Academic Year June 2011 onwards

**BACHELOR OF COMPUTER APPLICATIONS**

**B C A SEMESTER-V**

Sr. No./ Subject Code	Subject Title	Credit	Teaching Scheme		Exam Scheme					
			Theory/ Practical	Tut	Theory		Practical		T.W +Sessional Marks	Total Marks
					Hrs.	Max Marks	Hrs	Max Marks		
BCA501	Internet Programming using JAVA	4	3	1	3	60	-	-	40	100
BCA502	Web Technologies – II (Asp.NET)	4	3	1	3	60	-	-	40	100
BCA503	Emerging Technologies & tools – I	4	3	1	3	60	-	-	40	100
BCA504	Computer Networks-II	4	3	1	3	60	-	-	40	100
BCA505	Mini Project – I (Development of project at institute level)	8	2	6*	-	-	3	120	80	200
BCA506	Practical ( 501)	2	2	-	-	-	3	30	20	50
BCA507	Practical (502)	2	2	-	-	-	3	30	20	50
BCA508	Practical ( 503 )	2	2	-	-	-	3	30	20	50
<b>Total</b>			<b>27</b>	<b>3</b>						<b>750</b>
<b>Total Hours</b>			<b>30</b>							
<b>Total Credits of semester</b>			<b>30</b>							

\* Project based learning hrs for project development.(Self Learning)

**KADI SARVA VISHWAVIDYALAYA**  
**BCA- Semester V**  
**BCA 501 Internet Programming using JAVA**

**Rationale:** To understand the useful concepts of Object Oriented Programming using Java & implementation of practical skills for future use.

**Learning Outcome:** Students will be able to

- Acquire knowledge of robust and platform independent features of java.
- Create multi threading applications,
- web based applications

**Teaching and Evaluation Scheme:** The objective of evaluation is not only to measure the performance of students, but also to motivate them for better performance. Students are evaluated on the basis of internal examinations which consist of class test, quizzes, class participation, home assignments, project reports, presentation, Regular Attendance (i.e Minimum 85% )

Sr. No./ Subject Code	Subject Title	Teaching Scheme			Exam Scheme					
		Th./ Tut	Pr.	Cr.	Theory		Practical		T.W + Sessional Marks	Total Marks
					Hrs	Max Marks	Hrs	Max Marks		
BCA 501	Internet Programming using JAVA	4		4	3	60			40	100
BCA 506		-	2	2	-	-	3	30	20	50

\*\*\* Internal 20 marks will be based on Mini Project

**Course Content:**

**UNIT 1: Java Introduction and Java language Overview**

**[25%]**

OOPS concepts, Features of Java Language, data types and variables, structure of a java program, command line arguments, expression and statements, type conversion, control statements, Defining a class, creating objects, defining methods, method overloading, concept of Inheritance.

**No of lectures : 8**

**UNIT 2: Packages and Interfaces**

**[20%]**

Java API packages, Defining a package, need of import statement, concept of interface, defining an interface, implementing an interface, Multiple inheritance in Java using interface.

**No of lectures : 7**

**UNIT 3: Multithreaded Programming**

**[20%]**

Importance of Threads, Creating Threads using Thread class and using Runnable interface, various states of Thread Life Cycle, controlling threads and executing threads using thread priorities

**No of lectures : 5**

**UNIT 4: Applet and Graphics Programming**

**[35%]**

Applet basics, difference between Applet and Applications, method of building an Applet (Applet life cycle), Applet tag, Displaying message on applet , running applet, using predefined and user defined Colors in applet, Graphics class and its functions, Drawing Lines, drawing rectangles,

drawing Circles, creation of different user interactive Applets using Mouse Listener, Mouse Motion Listener, Key Listeners, Action Listeners.

**No of lectures : 10**

**TOTAL NO OF LECTURES : [30]**

**Text Books :**

- (1) Programming in JAVA 2. Dr. K. Somasundaram (Jaico Pub House)
- (2) Programming with Java : E. Balagurusamy (TMH)

**Reference Books :**

- (1) Complete Reference Java2 (4<sup>th</sup> Edition) : Schilidit H. (TMH)
- (2) Programming with Java By. Dr. N. N. Jani, Ms. Mital Vora. (Bharat Pub)

**Instructional Strategies:**

- 1. Building Background & gain attention
- 2. Classroom Instructions
- 3. Review and check of Prior knowledge through interaction (Q&A)
- 4. Guided Practice through examples.
- 5. Independent Practice through assignments
- 6. Demonstration for visualization
- 7. Problem Solving methodologies
- 8. Use of graphics organizers for reference and output visualization
- 9. Problem Solving

**Teaching and Examination Scheme**

UNIT	Examination Scheme % weightage	Teaching Scheme No of Lectures	
		Th	Pr
1	25	8	
2	20	7	
3	20	5	
4	35	10	
<b>Total</b>	<b>100</b>	<b>30</b>	

**List of Practical**

- 1. Programs which gives Introduction to java language overview.
- 2. Examples of classes, objects, methods, keywords, looping structures, conditions.
- 3. Demonstration on types of Inheritance.
- 4. Examples of API packages.
- 5. Applications based on Multi Threading
- 6. Applications based on Applets.

**KADI SARVA VISHWAVIDYALAYA**  
**BCA- Semester V**

**BCA 502 Web Technologies – II (Asp.NET)**

**Rationale :** To understand the useful concepts of Web Technologies & implementation of practical skills for future use.

**Learning Objectives :**

At the end of this course student should able to .....

- Understand the web site development
- Create dynamic and interactive web page javascript based
- Apply programming concepts with web page and set of events.
- Understanding basic management foundations with business strategies.
- Different phases of E-commerce web site
- Creating E-commerce web site using ASP.NET 2.0
- Understanding & using ADO.NET
- Overview of content management s/w.
- Creating simple web site using 'joomla' an emerging trend of web site construction.

**Prerequisite :**

- Understanding of the principles of computer programming
- Basic understanding of ASP.NET 2.0 tool box

**Teaching and Evaluation Scheme:** The objective of evaluation is not only to measure the performance of students, but also to motivate them for better performance. Students are evaluated on the basis of internal examinations which consist of class test, quizzes, class participation, home assignments, project reports, presentation, Regular Attendance (i.e Minimum 85% )

Sr. No./ Subject Code	Subject Title	Teaching Scheme			Exam Scheme					
		Th./T ut	P r.	Cr.	Theory		Practical		T.W + Session al Marks	Total Marks
					Hr s	Max Mark s	Hr s	Max Mark s		
BCA 502	Web Technologies – II (Asp.NET)	4		4	3	60			40	100
BCA 507		-	2	2	-	-	3	30	20	50

<p><b><u>Part 1 : ( Introduction to Dynamic web site – Java Script)</u></b></p> <ul style="list-style-type: none"> <li>- Intro – how to – where to java script use – introduction to functions</li> <li>- Js statements (I/O) – comments – variables – operators</li> </ul> <p><b><u>Control statements &amp; Objects in JS</u></b></p> <ul style="list-style-type: none"> <li>- Decision making – looping – branching – exception handling</li> <li>- Objects ( string , date ,array, math , array)</li> <li>- Overview &amp; handing events in JS</li> </ul>	<p>[10%]</p> <p>[10%]</p>
<p><b><u>Part 2 : ( E-Commerce &amp; Website Development through ASP.NET)</u></b></p>	<p>[65%]</p>
<p><b><u>Introduction to E-commerce and it's infrastructure</u></b></p> <ul style="list-style-type: none"> <li>- Internet – intranet – extranet</li> <li>- Business transaction models ( B2B , B2C , C2C , B2G, E-Governance)</li> <li>- Traditional commerce V/s E-Commerce with history</li> <li>- Various economy in business transaction ( Transaction , Network hierarchy , Network Effect )</li> </ul> <p><b><u>B2B Strategies , Web – auction and E-commerce portals development</u></b></p> <ul style="list-style-type: none"> <li>- EDI &amp; Types of EDI</li> <li>- VAN (Value Added Network) &amp; VPN (Virtual Private Network)</li> <li>- Introduction to ASP.NET 3.0 with new features</li> <li>- Components of E-commerce development with various types of tools</li> <li>- Detail about authentication and authorization with log in control in ASP.NET</li> <li>- Catalog design and development – image uploading</li> <li>- Some validation &amp; overview of AJAX controls in ASP.NET</li> </ul> <p><b><u>Hardware , Software and Tools for Establishing E-commerce environment</u></b></p> <ul style="list-style-type: none"> <li>- Web site different types of web server (IIS , Apache ... etc )</li> <li>- Various types of hosting and it's comparison</li> <li>- Need , significance , utility of shopping cart , development for E-commerce web site</li> </ul> <p><b><u>Security and Payment issue in E-commerce</u></b></p> <ul style="list-style-type: none"> <li>- Need cyber security , Introduction to Cyber Crime and cyber law</li> <li>- Introduction of online payment , risk factor of it</li> <li>- Types of online payment with it's comparison</li> </ul>	<p>[10%]</p> <p>[35%]</p> <p>[10%]</p> <p>[10%]</p>
<p><b><u>Part 3 :Introduction to Content Management System through zoomla</u></b></p>	<p>[15%]</p>
<ul style="list-style-type: none"> <li>- What is content management system ? why we need it ?</li> <li>- List of Content Management Systems available</li> <li>- Installing &amp; overview of Joomla</li> <li>- Learn to Use Joomla</li> <li>- Start to create simple web site using 'Joomla'</li> </ul>	

**Practical :**

- **Javascript applications involving .....**Simple variable , control statement base application of java script
- Javascript involving events and functions with their interactions
- Simple master – content webpage in asp.net 2.0 and various designing layouts , with interaction of CSS with web page.
- Create login , validation , File - upload – download controls to web technology
- Interact with data base and e-commerce web site designing ( Catalog , Shopping cart , Pay pad ..etc )
- Creating simple web site with mechanism of authentication and authorization using zoomla.

**Textbooks :-**

- Fourth Edition E-Commerce [ Publish by :- Thomson , Author :- Gary P. Scneider]
- Black Book ASP.NET 2.0 [ Publish by :- Paraglyph Press , Author :- Belmaks Solution Team Dreamtech Software Team ]

**Other Reference book :**

- ASP.NET by Shyam Cahvda [ Publish by :- Nirav Publication ]

**Web Reference / Online References**

- [www.w3schools.com](http://www.w3schools.com)
- [http://docs.joomla.org/Main\\_page](http://docs.joomla.org/Main_page)
- [www.wikipedia.org](http://www.wikipedia.org)
- [www.dotnetspider.com](http://www.dotnetspider.com)

**KADI SARVA VISHWAVIDYALAYA**  
**BCA- Semester V**  
**BCA 503 EMERGING TECHNOLOGIES & TOOLS - I**

**Rationale:** The goal of the course is to have the awareness of latest technologies among the students. To understand the concepts and architecture of the new upcoming technologies. To get aware about the need of new technologies in the real world scenario.

**Learning Outcome:** Students will be exposed to various emerging technologies such as Cloud computing, Grid Computing, Data Warehouse and Data Mining.

**Teaching and Evaluation Scheme:** The objective of evaluation is not only to measure the performance of students, but also to motivate them for better performance. Students are evaluated on the basis of internal examinations which consist of Term Work such as class test, quizzes, class participation, home assignments, presentation, Regular Attendance (i.e. Minimum 85% ), Internal marks which consist of 40 (20 Term Work + 20 Sessional Exams) marks and External marks which consist of 60 for University examination.

Sr. No./ Subject Code	Subject Title	Teaching Scheme			Exam Scheme					
		Cr.	Th. /Pr	Tut	Theory		Practical		T.W +Sessional Marks (40)	Total Marks
					Hrs	Max Marks	Hrs	Max Marks		
BCA503	Emerging Technologies & Tools - I	4	3	1	3	60	-	-	40	100
BCA508	Practical (503)	2	2	-	-	-	3	30	20	50

**Course Content**

**UNIT 1: DATA WAREHOUSE AND DATA MINING (DW & DM) [30%]**

**DATA WAREHOUSE (DW):**

Definition of Concepts: Data Warehouse, Functional Requirements for DW, DW Characteristics ,OLAP & OLTP, Architecture of data warehousing.

**DATA MINING (DM):**

**Data Mining: introduction**

Definition of Concepts: Data Mining, Architecture of Typical Data Mining System, Functionalities or Techniques of DM (Data Classification, Prediction, Data Clustering, Association Rule, Outlier Analysis), Classification of DM, Applications of DM, Major Issues in DM

**No. of Lectures: [12]**

**UNIT 2: ENTERPRISE RESOURCE PLANNING (ERP) [25%]**

**ERP: Introduction**

ERP: An Overview, Benefits of ERP, ERP and Related Technologies: Business Process Reengineering (BPR), Supply Chain Management (SCM)

**ERP Implementation**

ERP Implementation: Lifecycle, Methodology, Hidden Costs

**ERP Modules**

Business Modules in ERP Packages: Finance, Manufacturing, Human Resources, Plant Maintenance, Materials Management, Quality Management, Sales & Distribution

**No. of Lectures: [8]**

**UNIT 3: MOBILE COMPUTING (MC)**

**[25%]**

**Introduction to Mobile Computing & Development Frameworks**

Mobile Computing: Concepts, Characteristics, Applications.  
Architecture: C/S, N- Tier, Peer-to-Peer, Mobile Agent

**Wireless Application Protocol (WAP)**

WAP: Architecture, Benefits of WAP, WAP Protocols

**Web Services & Mobile Web (WS & MW)**

Introduction to WS, SOAP, UDDI, WSDL, EDGE, Wi-Fi, WiMax, Introduction to MW

**No. of Lectures: [8]**

**UNIT 4: GRID COMPUTING AND CLOUD COMPUTING**

**[20%]**

**Grid Computing: An Overview**

Grid Computing: Definition and Concept, Architecture: Administrators Side, Users Side, Characteristics of Grid, Types of Grid, Components of Grid, Various Software used in Grid

**Cloud Computing: introduction**

Cloud Computing: Definition and Concept, Architecture of Cloud Computing, Types and Components of Cloud Computing, Feature of Cloud Computing

**No. of Lectures: [6]**

**TOTAL NO OF LECTURES : [34]**

**Reference Books:**

- (1) **An Introduction to Building the Data Warehouse, By IBM Corporation**
- (2) **Data Warehousing Fundamentals, Paulraj Ponniah Wiley India Edition**
- (3) **Data Mining Concepts and Techniques, Jiawei Han and Micheline Kamber**
- (4) **ERP Demystified, Second Edition By Alexis Leon Tata McGraw Hill**
- (5) **Mobile Computing Technologies and Applications, Dr. N.N. Jani**
- (6) **Grid Computing, By D Jankiram**

**Instructional Strategies:**

1. Building Background & gain attention
2. Classroom Instructions
3. Review and check of Prior knowledge through interaction (Q&A)
4. Guided Practice through examples.
5. Independent Practice through assignments



6. Demonstration for visualization
7. Problem Solving methodologies
8. Use of graphics organizers for reference and output visualization
9. Problem Solving

**Teaching and Examination Scheme:**

<b>UNIT</b>	<b>Examination Scheme % weightage</b>	<b>Teaching Scheme No. of Lecture</b>
<b>Unit-1</b>	<b>30</b>	<b>12</b>
<b>Unit-2</b>	<b>25</b>	<b>8</b>
<b>Unit-3</b>	<b>25</b>	<b>8</b>
<b>Unit-4</b>	<b>20</b>	<b>6</b>
<b>Total</b>	<b>100</b>	<b>34</b>

**List of practicals**

- 1) Overview of XLMiner
- 2) Plotting and analysis of data using statistical techniques Box Plot
- 3) Plotting and analysis of data using statistical techniques Histogram
- 4) Plotting and analysis of data using statistical techniques Matrix Plots
- 5) Data Partition Strategies for Data Mining Task
- 6) Sampling of the data for statistical inference
- 7) Missing Data Handlining in Data Mining
- 8) Analysis of time series data
- 9) Regression techniques for data prediction
- 10) Presentation on emerging trends in the field of computer science

**Rationale:-**Computer Networks-II focus on understanding of the current networking technologies, concepts of various protocols like DNS, SMTP, SNMP, active directory and the practical implementation of the same.

**Learning Outcome:** The student will be able to-

- Understanding of DNS,SMTP,SNMP
- Understanding of TCP Protocol suites
- Understanding of current networking technologies like WAN, mobile IP etc.
- Understanding of network security
- Understanding of various network operating systems

**Teaching and Evaluation Scheme:** The objective of evaluation is not only to measure the performance of students, but also to motivate them for better performance. Students are evaluated on the basis of internal examinations which consist of class test, class participation, home assignments, project reports, presentation, regular attendance (i.e. minimum 75%). Internal marks which consist of 40 (20 term work + 20 sessional exams) marks and university examination.

Sr. No./ Subject Code	Subject Title	Teaching Scheme			Exam Scheme					
		Th.	Pr.	Tut	Theory		Practical		T.W +Sessional Marks	Total Marks
					Hr s.	Max Marks	Hr s.	Max Marks		
BCA504	Computer Networks -II	3	-	1	3	60	-	-	40	100

**Course Content:**

**Unit :- 1 Introduction**

[10%]

**No. Of Lectures [02]**

Different types of networks LAN, WAN, MAN, CAN  
 Different Network Topologies  
 Difference between OSI Reference Model and TCP/IP Model  
 Different Network devices Repeaters, Hubs, Routers, Switches

**Unit :- 2 TCP / IP Protocol Suite-I**

[25%]

**No. Of Lectures [12]**

Address Resolution Protocol & Reverse Address Resolution Protocol ARP Packet Format, Encapsulation, Operation, Proxy ARP, Cache Table, Queues, Output Module, Input Module, Cache Control Module.  
 RARP Packet format, Encapsulation, Alternative Solution to RARP.

**Internet Protocol ( IP )**

Datagram, Fragmentation, Options, Checksum, IP package

**User Datagram Protocol ( UDP )**

Process to process communication, User Datagram, UDP Operation, Use of UDP

**Transmission Control Protocol ( TCP )**

Process to process communication, TCP services, Flow Control, Silly Window Syndrome, Error Control, TCP Timers, Segment, Options, Connection, State Transition Diagram

**Bootstrap Protocol ( BootP )**

Packet Format, Operation, UDP Format, Relay Agent, Error Control

### **Dynamic Host Configuration Protocol ( DHCP )**

Leasing, Packet Format, Transition States, Exchanging Messages

### **Unit :- 3 TCP / IP Protocol Suite-II**

**[20%]**

**No. Of Lectures [07]**

#### **Domain Name System ( DNS )**

Name Space, Domain Name Space, Distribution of Name Space, DNS in the Internet, Resolution, DNS

Messages, Types of Records, Compression.

#### **TELNET and Rlogin**

Concept, Network Virtual Terminal, NVT Character set, Embedding, Options, Option & Sub-option

Negotiation, Controlling The Server, Out-of-band signaling, Escape Character, Mode of Operation

#### **File Transfer Protocol ( FTP )**

Connection, Communication, Command Processing, File Transfer, User Interface, Anonymous FTP

#### **Simple Mail Transfer Protocol ( SMTP )**

User Agent, Addresses, Delayed Delivery, Aliases, Mail Transfer Agent, Commands and Responses, Mail

Transfer Phases, Mail Delivery, Mail Access Protocols.

#### **Simple Network Management Protocol ( SNMP )**

Concept, Management Components, SMI, MIB, SNMP, Messages.

### **Unit :- 4 Current Network Technologies**

**[25%]**

**No. Of Lectures [09]**

Private Networks, Virtual Privet Networks ( VPN )

Intranet, Extranet, Addressing, Achieving Privacy, VPN Technology, Address Translation, Translation Table,

NAT and ISP.

Mobile IP Addressing, Agents, Three Phases, Agent Discovery, Registration, Data Transfer, Inefficiency in Mobile IP

Wireless Access Protocol ( WAP )

Introduction to CDMA, VSAT, Blue Tooth, IPV6

**Unit :- 5 Case Studies**

**[20%]**

**No. Of Lectures [05]**

**Linux Network**

Connectivity through Telnet, Managing Users, Managing Security

**Windows 2003 Server Network**

Create a Domain, Manage a Domain Users, Managing Security

**Reference Books :**

1. TCP/IP Protocol Suite - Second Edition By : Behrouz A Forouzan Tata McGrawhill Edition
2. Guide to Wide Area Networks By : Tere Parnell Tata McGrawhill Edition

**Instructional Strategies:**

1. Building Background and gain attention
2. Classroom instructions
3. Review and check of prior knowledge through interaction (Q&A)
4. Guided practice through examples
5. Independent practice through assignments
6. Demonstration for visualization
7. Problem solving methodologies

**Teaching and Examination Scheme:**

<b>UNIT</b>	<b>Examination Scheme %weightage</b>	<b>Teaching Scheme No. of Lecture</b>
<b>Unit-1</b>	<b>10</b>	<b>2</b>
<b>Unit-2</b>	<b>25</b>	<b>12</b>
<b>Unit-3</b>	<b>20</b>	<b>7</b>
<b>Unit-4</b>	<b>25</b>	<b>9</b>
<b>Unit-5</b>	<b>20</b>	<b>5</b>
<b>Total</b>	<b>100</b>	<b>35</b>

**KADI SARVA VISHWAVIDYALAYA**  
**BCA- Semester V**  
**BCA 505 – Mini Project I**

**Rationale:**

The main motive behind this subject is to give practical exposure of the topics learnt in parts in various subjects of BCA course. It is an important part to get practical exposure by implementing the system in the field of choice.

**Learning outcomes:** The students will be able to have hands-on exercises to carry out the Project Work using various platforms and project tools which will provide practical experience. The objectives are to:

- Implement what is learnt during course
- Get real-life experience by working in real systems
- Understand the problems faced during project implementation.
- Enhance the problem solving ability by solving the real-time problems.
- Learn team work and appreciate role of each of the team members.

**Teaching and Evaluation Scheme:** The objective of evaluation is not only to measure the performance of students, but also to motivate them for better performance. Students are evaluated on the basis of internal examinations consisting of 80 marks (continuous evaluation based on project work done throughout the semester: 30 based on the continuous progress report and 50 from final internal presentation and viva) and External marks which consist of 120 for viva-voice presentation on Project Work in University Examination.

Sr. No./ Subject Code	Subject Title	Teaching Scheme				Exam Scheme					
		Cr.	Th.	Pr.	Tut.	Theory		Practical #		T.W +Sessional Marks	Total Marks
						Hrs	Max Marks	Hrs	Max Marks		
BCA 505	Mini Project I	8	-	2	6	-	-	3	120	80	200

**Mini project - I description:**

- A team of 3 to 4 students can be formed for this project and work together to learn working collaboratively.
- The team can choose the project area from the following:
  - Java based project
  - .Net based project
  - A project consisting analysis of an existing emerging technology based system
  - Network based project
  - e
- The team will be assigned an internal guide for the project, who will mentor the team during the project execution.
- The team has to take prior permission from the guide for any project that they have chosen.

- The team needs to report to the guide periodically and inform about the project progress. The timings for the reporting time will be informed at the beginning of the semester.

### **Mini project documentation format:**

Acknowledgement

Preface

Index:

1. Project definition
2. Objective and scope of the project
3. Existing system
  - a. Introduction
  - b. Problem analysis
    - i. Study operating problems
    - ii. Study informational problems
    - iii. Feasibility study
  - c. Present system model (Use any design tools / technique)
  - d. What's new in the proposed system (*if applicable*)
4. Proposed system
  - a. Functional requirements
  - b. Non-functional requirements
  - c. Project plan
5. Software requirement analysis and specification
  - a. General description
  - b. Specific functional and non-functional requirements
6. System design
  - a. Proposed system model (Use any design tools / technique)

*Development based projects:*

7. Development
  - a. Source code (for major processes)
8. Implementation
  - a. Implementation of the project
  - b. Screenshots of the interface
  - c. Post-implementation and software maintenance

**OR**

*Analysis based projects:*

9. Working outcomes of the existing system
10. Working outcomes of the proposed system
  - a. Predicted working outcomes of the proposed system
  - b. Comparison of working of proposed system and existing system
11. Technical and managerial lessons learnt
12. Future enhancement
13. References

### **Instructional Strategies:**

- The students' team will choose a project in the area of their choice. The team will be assigned weekly 2 hours practical lab.
- During the lab time, team is expected to work on the project and report to their internal guide to update about their work status, and solve the doubts (if any).
- The internal guide will monitor the project progress and update the data of the project completion every week.

**Instructions for the internal guide:**

- It is necessary for the student team to report to the internal guide once in every week on the decided day. Any day of the week can be decided by the internal guide and the student team mutually.
- The internal guide will fill in the data in the continuous progress report. The format for the continuous progress report will be provided separately at the beginning of the semester.
- The student team has to maintain a report of meetings arranged with the internal guide. The format for the meeting report will be provided separately at the beginning of the semester.
- The following has to be submitted from time to time to the internal guide (please refer to the index point numbers in the documentation format given with this syllabus):

<b>Index Point Number</b>	<b>Week Number</b>
1, 2	1
3	3
4, 5	5
6	8
7, 8	11
9, 10, 11	12

- Apart from the above list, the team will also have to submit the required reports / documents as and when asked for, by the internal guide.
- All faculties of the semester 5 are required to prepare a list of project definitions in innovative domains related to the subjects they are teaching and submit to the mini project in-charge for the particular academic semester.