

SARDAR PATEL UNIVERSITY B. Voc (Software Development) Semester: VI
Syllabus with effect from: June 2021

Paper Code: Code: US06FBVS51	Total Credits:3
Title Of Paper: Fundamental Concepts of Information Security	

Unit	Description in detail	Weightage (%)
1	Introduction to Information Security <ul style="list-style-type: none"> - An overview of information security: confidentiality, integrity, and availability - Security policies, security mechanisms, assurance 	25%
2	Cryptography concepts <ul style="list-style-type: none"> - Introduction - Conventional encryption principles - Basic terms : plaintext, ciphertext, cryptography, cryptanalysis - Substitution ciphers vs. transposition ciphers - Types of attack on encrypted messages - Introduction to public key cryptography - Applications for public-key cryptosystems 	25%
3	: Concept of System Security <ul style="list-style-type: none"> - Intruders - Viruses and related threats : trap doors, logic bombs, trojan horses, viruses, worms, bacteria - The nature of viruses - Types of viruses - Antivirus approaches : detection, identification and removal 	25%
4	Concept of Network Security <ul style="list-style-type: none"> - Digital signatures - Firewalls : introduction, design principles, characteristics, types, configuration 	25%
	Practical:	
	The students are required to do Dictation, Narration, Listening Comprehension, Note Making/Note Taking as given by concerned faculty	

MAIN REFERENCE BOOKS :

1. William Stallings: Network Security Essentials (Applications and Standards), Pearson Education India, 2001.
2. Tanenbaum A. S., Computer Networks, Prentice-Hall of India Pvt. Ltd., New Delhi, 1997.

SARDAR PATEL UNIVERSITY
B. Voc (Software Development)
Semester: VI
Syllabus with effect from: June 2021

Paper Code: US06FBVS52	Total Credits:3
Title Of Paper: Application Development	

Unit	Description in detail	Weightage (%)
1	Introduction to Mobile Apps and Android <ul style="list-style-type: none"> - Why we Need Mobile Apps - Different Kinds of Mobile Apps - Briefly about Android - History Behind Android Development - What is Android?, Pre-requisites to learn Android - Brief Discussion on Java Programming 	25%
2	Android Architecture and Deep Overview in Android Stack <ul style="list-style-type: none"> - Overview of Android Stack - Android Features - Introduction to OS layers - Linux Kernel - Libraries - Android Runtime - Application Framework - Dalvik VM 	25%
3	Installing Android Machine and creating first Android Application <ul style="list-style-type: none"> - Configuring Android Stack - Creating Eclipse Environment - Integrating Android with Eclipse IDE - Exploring Eclipse IDE - Creating Android Project - Debugging Application through DDMS - Setting up environment, AVD Creation - Executing Project on Android Screen 	25%

4	Android Components and Hello World App <ul style="list-style-type: none"> - Android Components : Activities, Services, Broadcast Receivers, Content Providers - Creating your first project - The manifest file - Layout resource - Running your app on Emulator 	25%
	Practical:	
	The students are required to do Dictation, Narration, Listening Comprehension, Note Making/Note Taking as given by concerned faculty	

Reference Books

1. "Hello, Android Introducing Google's Mobile Development Platform" by Ed Burnette
2. Meier Reto : Professional Android 2 Application Development, Wiley Publishing, Inc., 2010
3. Conder Shane, Darcey Lauren : Android Wireless Application Development, 2nd Edition, Addition Wesley, 2011

SARDAR PATEL UNIVERSITY
B. Voc (Software Development)
Semester: VI
Syllabus with effect from: June 2021

Paper Code: US06FBVS53	Total Credits:3
Title Of Paper: Technology Trends in IT	

Unit	Description in detail	Weightage (%)
1	Internet of Things (IoT) And Big Data Analytics:- Definition of IoT, History of IoT, IoT vs. similar concepts, Application/Segment overview, Technology overview., Concepts, examples of big data analytics, benefits of big data analytics, Technologies, and Applications, requirements for being successful with big data analytics. Big data analytics tools.	25%
2	Cloud Computing:- Cloud Computing – Introduction, Why cloud services are popular, advantages, Characteristics, Service models, Deployment of cloud services, Potential privacy risks	25%
3	Cyber Security:- Cyber Security – Introduction, risks, Malicious code, Hacker, attacker or intruder, Cyber security Principles, Information Security (IS) within Lifecycle Management, Risks & Vulnerabilities, Incident Response, Future Implications& Evolving Technologies.	25%
4	Wearable Technologies:- Wearable Technologies – Introduction, Applications of Wearable Technology, Challenges to Wearable Technology, various Wearable devices.	25%

MAIN REFERENCE BOOKS:-

Name of Authors	Title of the Book	Publisher
A. Ravichandran	Computer Today	Khanna Publishing House
Reference Books		
Jeeva Jose	Internet of Things	Khanna Publishing House
V.K. Jain	Big Data and Hadoop	Khanna Publishing House
V.K. Jain	Data Sciences and Analytics	Khanna Publishing House

SARDAR PATEL UNIVERSITY
B. Voc (Software Development)
Semester: VI
Syllabus with effect from: June 2021

Paper Code: US06FBVS54	Total Credits:3
Title Of Paper: Server Side Programming	

Uni	Description in detail	Weightage (%)
1	Introduction <ul style="list-style-type: none"> - ASP.NET – Introduction, overview of ASP.NET framework - Understanding ASP.NET controls - Understanding ASP.NET pages - Advantages of ASP.NET - Web Servers – introduction and role - Internet Information Server (IIS) – introduction - ASP.NET application- introduction - Creating ASP.NET page, understanding the ASP.NET page execution - The Page class 	25%
2	ASP.NET Standard Controls and Validation Controls <ul style="list-style-type: none"> - Using standard controls : Label, TextBox, CheckBox, Button, Radio Button, Link button, Image Button - Client side validations. server side validation - Overview of the validation controls - Using Required Field Validator control, Range Validator control, Compare Validator control, Regular Expression Validator control Custom Validator control, Validation Summary control, Introduction to various controls 	25%
3	State Management and Advanced Concepts <ul style="list-style-type: none"> - Introduction - View State : example, making view state secure, retaining member variables, storing custom objects - Transferring information, custom cookies, session state, session state configuration, application state - The Global.asax Application file - Login Controls - Site Navigation and Site Maps 	25%
4	Database Processing and Security (using C#) <ul style="list-style-type: none"> - ADO.NET Architecture - connected and disconnected - ADO.NET basics – data provider, connection, command, DataReader, DataSet, DataAdapter - Data Binding - Introduction to data controls – GridView, DetailsView, FormView, Repeater, DataList, Website Security 	25%
	Practical	
	The students are required to do Dictation, Narration, Listening Comprehension, Note Making/Note Taking as given by concerned faculty	

MAIN REFERENCE BOOKS :

1. Matthew MacDonald : Beginning ASP.NET 2.0 in VB 2005 by Apress, First Indian Reprint 2006
2. Stephen Walther : ASP.NET 2.0 Unleashed by Sams Publication
3. Scott Mitchell : Teach Yourself ASP.NET 2.0 in 24 Hours by Sams Publication

SARDAR PATEL UNIVERSITY
B. Voc (Software Development)
Semester: VI
Syllabus with effect from: June 2021

Paper Code: Code: US06CBVS51	Total Credits:3
Title Of Paper: Advanced Java Programming Lab	

Part	Description in detail	Weightage (%)
1	<input type="checkbox"/> Advanced Java Programming Lab	100%

SARDAR PATEL UNIVERSITY
B. Voc (Software Development)
Semester: VI
Syllabus with effect from: June 2021

Paper Code: Code: US06CBVS52	Total Credits:3
Title Of Paper: In house Project	

Part	Description in detail	Weightage (%)
1	<input type="checkbox"/> In house Project	100%