SACRED HEART COLLEGE (AUTONOMOUS)

Department of Computer Science

BSc Computer Applications

Course plan

Academic Year 2018-19

Semester V

COURSE STRUCTURE

Course Code	Title of The Course	No. Hrs./Week	Credits	Total Hrs./Sem
15U5CRCAP10	Java Programming and Dynamic Webpage Designing	4	4	72
15U5PRCAP5	Java Programming and Dynamic Webpage Designing (Lab)	3	2	54
15U5CRCMT05	MATHEMATICAL ANALYSIS	5	4	90
15U5CRCMT06	DIFFERENTIAL EQUATIONS	5	4	90
15U5CRCST06	STATISTICAL QUALITY CONTROL AND OPERATIONS RESEARCH	5	4	90
15U5CRCAP11	Open Course (Internet, Web Designing And Cyber Laws)	4	4	72

COURSE I - 15U5CRCAP10: JAVA PROGRAMMING AND DYNAMIC WEBPAGE

PROGRAMME	BSC COMPUTER APPLICATIONS	SEMESTER	5
COURSE CODE AND TITLE	15U5CRCAP10: JAVA PROGRAMMING AND DYNAMIC WEBPAGE	CREDITS	4
HOURS/WEEK	4	HOURS/SEM	72
FACULTY NAME	Dr. REGITHA M R		

COURSE OBJECTIVES
To understand the concept of OOP as well as the purpose and usage principles of inheritance, polymorphism, encapsulation and method overloading.
To create Java application programs using sound OOP practices (e.g., interfaces and APIs) and proper program structuring (e.g. by using access control identifies, automatic documentation through comments, error exception handling)
To create object-oriented, scalable, n-tier applications using Java Servlets and Java Server Pages.
To Learn how to integrate key components of the Java Enterprise Edition (Java EE).
To create dynamic data-driven web applications using servlets and JSP technologies.

SESSION	TOPIC	LEARNING RESOURCES	VALUE ADDITIONS	REMARKS
MODULE I: JAVA PROGRAMMING				
1	Data types, control structured	Lecture using PPT	Online Tutorial	
2	Arrays, constructors	Lecture using PPT		
3	Arrays, constructors	Lecture using PPT		
4	Function overloading, strings	Lecture using PPT		
5	Classes	Lecture using PPT	Video	
6	Inheritance	Lecture using PPT		
7	Inheritance	Lecture using PPT		

8	Inheritance	Lecture using PPT		
9	Function overriding	Lecture using PPT	e-resource	
10	Interface	Lecture using PPT		
11	Package	Lecture using PPT		
12	Exception Handling	Lecture using PPT		
13	Exception Handling	Lecture using PPT		
14	Exception Handling	Lecture using PPT		
15	Multithreaded programming	Lecture using PPT	e-resource	
16	Multithreaded programming	Lecture using PPT	Video	
17	Multithreaded programming	Lecture using PPT		
18	Priorities of Thread.	Lecture using PPT		
MODULE II – JAVA APPLETS				
19	AWT controls (Button, Labels) Combo box, list and other Listeners)	Lecture using PPT	Video	
20	AWT controls () Combo box, list	Lecture using PPT	Video	
21	CIA 1			
22	CIA 1			
23	CIA 1			
24	Listeners	Lecture using PPT		
25	Listeners	Lecture using PPT		
26	Layout Manager - Flow Layout	Lecture using PPT	e-resource	
27	Layout Manager - Border Layout	Lecture using PPT		
28	Layout Manager - Grid Layout	Lecture using PPT	e-resource	

29	String Handling (only main functions)	Lecture using PPT		
MODULE III - NETWORKING				
30	Datagram Socket and TCP/IP based server socket	Lecture using PPT		
31	Datagram Socket and TCP/IP based server socket	Lecture using PPT		
32	Event handling	Lecture using PPT	e-resource	
33	Event handling	Lecture using PPT		
34	JDBC: Introduction	Lecture using PPT		
35	JDBC: Introduction	Lecture using PPT		
36	JDBC Drivers	Lecture using PPT		
37	Establishing Connection, Connection Pooling.	Lecture using PPT		
38	Establishing Connection, Connection Pooling.	Lecture using PPT		
MODULE IV – JAVA SERVLETS				
39	Java Servlets: Introduction	Lecture using PPT		
40	Java Servlets: Introduction	Java Servlets: Introduction		
41	CIA 2			
42	CIA 2			
43	CIA 2			
44	CIA 2			
45	CIA 2			
46	HTTP Servlet Basics	Lecture using PPT	Online Tutorial	
47	Servlet Lifecycle	Lecture using PPT	Online Tutorial	
48	Servlet Lifecycle	Lecture using PPT	Online Tutorial	
49	Servlet Lifecycle	Lecture using PPT	Online Tutorial	

50	Servlet Lifecycle	Lecture using PPT	Online Tutorial	
51	Servlet Lifecycle	Lecture using PPT	Online Tutorial	
52	Retrieving Information	Lecture using PPT		
53	Retrieving Information	Lecture using PPT		
54	Sending HTML Information	Lecture using PPT	e-resource	
55	Sending HTML Information	Lecture using PPT		
56	Session Tracking	Lecture using PPT	e-resource	
57	Session Tracking	Lecture using PPT		
58	Database Connectivity	Lecture using PPT		
59	Database Connectivity	Lecture using PPT	e-resource	
MODULE V – JAVA SERVER PAGES				
60	Introducing Java Server Pages	Lecture using PPT	e-resource	
61	Introducing Java Server Pages	Lecture using PPT		
62	JSP Overview	Lecture using PPT	e-resource	
63	JSP Overview	Lecture using PPT		
64	Setting Up the JSP Environment	Lecture using PPT		
65	Setting Up the JSP Environment	Lecture using PPT		
66	Generating Dynamic Content	Lecture using PPT		
67	Using Custom Tag Libraries	Lecture using PPT		
68	Using Custom Tag Libraries	Lecture using PPT		
69	JSP Standard Tag Library	Lecture using PPT	e-resource	
70	JSP Standard Tag Library	Lecture using PPT	e-resource	
71	Processing Input and Output.	Lecture using PPT	e-resource	
72	Revision			

INDIVIDUAL ASSIGNMENTS/SEMINAR – DETAILS & GUIDELINES

	Date of completion	**Topic of Assignment & Nature of assignment (Individual/Group – Written/Presentation – Graded or Non-graded etc.)**
1	20-07-2018	Genesis of Java and its characteristics. Program structure: identifiers, operators, variables, literals. Byte code and JVM, data types and arrays.
2	20-07-2018	Control Statements, selection statements, iterative statements and jump statements with examples. Loops: while loop, do while loop and for loop with examples.
3	20-07-2018	Class declaration, object references and object instantiation, method declaration, method calling. Command-line arguments, constructors, method overloading, constructor overloading and method overriding.
4	20-07-2018	Inheritance and its different types.
5	20-07-2018	Final Variable, Final Method, Final class, static class and abstract class
6	20-07-2018	String class and its main functions.
7	20-07-2018	Packages: creating packages, using packages. Packages: User defined packages.
8	20-07-2018	Interfaces: creating interface and implements interface.
9	20-07-2018	Exception Handling: try, catch and finally with examples.
10	20-07-2018	Exception Handling: throw and throws with examples.
11	20-07-2018	Multithreading: life cycle and its states.
12	20-07-2018	Thread priorities with example.
13	20-07-2018	Event classes, sources of events and event listeners with examples.

14	20-07-2018	AWT controls: Label, Button, ComboBox, and List with examples.
15	20-07-2018	Layout Managers: Flow Layout, Border Layout with examples.
16	20-07-2018	Layout Managers: Flow Layout and Grid Layout with examples.
17	20-07-2018	Applet Fundamentals: Applet vs Application in detail, Applet life cycle.
18	20-07-2018	Network Basics, understanding IP address, knowing protocols, perception of port numbers, well known port numbers
19	20-07-2018	Socket and ServerSocket classes. Write client and server side programs using these classes.
20	20-07-2018	Four applications of TCP/IP protocol, client program, server program, Datagram.
21	20-07-2018	Advantages of JDBC and its architecture
22	20-07-2018	Drivers and JDBC driver types, Establishing Connection, Connection Pooling.
23	20-07-2018	Introduction: Servlet vs CGI, servlet vs Generic servlet vs HTTP Servlet, Servlet Lifecycle
24	20-07-2018	Servlets: Retrieving Information, Sending HTML Information, Session Tracking
25	20-07-2018	Servlets: Database Connectivity: program to connect database and select the data
26	20-07-2018	Introducing Java Server Pages, JSP Overview: JSP architecture
27	20-07-2018	Setting up the JSP Environment, Generating Dynamic Content.
28	20-07-2018	Custom Tag Libraries: Create "Hello" Tag, Accessing the Tag Body, Custom Tag Attributes
29	20-07-2018	**JSP Standard Tag Library:** Core Tags: <c:out>, <c:set>, <c:remove>, **Formatting tags:**

		<fmt:formatNumber>, <fmt:formatDate>, <fmt:parseNumber>, SQL tags: <sql:setDataSource>, <sql:query>, <sql:update>, <sql:param>,
30	20-07-2018	**XML tags:** <x:out>, <x:set >, <x:if >, **JSTL Functions:** fn:contains(), fn:indexOf(), fn:length(), fn:replace(), fn:substring(), Processing Input and Output.

GROUP ASSIGNMENTS/ACTIVITES – DETAILS & GUIDELINES

	Date of completion	**Topic of Assignment & Nature of assignment (Individual/Group – Written/Presentation – Graded or Non-graded etc.)**
1	15.09.2018	Swing programming

REFERENCES:

- Patrick Naughton and Herbertz Schildt, “Java-2 The Complete Reference” 199, TMH.
- Shelley Powers, “Dynamic Web Publishing” 2nd Ed. Techmedia, 1998.
- Ivor Horton, “Beginning Java-2” SPD Publication
- Jason Hunter, “Java Servlet Programming” O’Reilly
- Shelley Powers, “Dynamic Web Publishing” 2nd Ed. Techmedia, 1998
- Hans Bergsten, “Java Server Pages”, 3 Ed. O’reilly

Course 2- 15U5CRCMT05 MATHEMATICAL ANALYSIS

PROGRAMME	**BSC COMPUTER APPLICATION**	**SEMESTER**	**5**
COURSE CODE AND TITLE	**15U5CRCMT05 MATHEMATICAL ANALYSIS**	**CREDIT**	**4**
HOURS/WEEK	**5**	**HOURS/SEM**	**90**
FACULTY NAME	**SIMI T A**		

COURSE OBJECTIVES
To identify the basic properties of real numbers.
To compute the limit points of a set , the interior points of a set , closure of a set etc.
To test the convergence of sequence
To evaluate limit of sequence using important theorems.
To identify the problems related to monotonic sequences.
To understand the basic properties of complex numbers.

SESSION	**TOPIC**	**LEARNING RESOURCES**	**VALUE ADDITIONS**	**REMARKS**
MODULE 1				
1	Introductory Session	Discussion	Q & A Session	
2	Intervals	Lecture		
3	Bounded and unbounded sets	Lecture		
4	Problems	Lecture		
5	Supremum, Intimum	Lecture		
6	Problems	discussion		

7	Order completeness in R	Lecture		
8	Order completeness in R	Lecture		
9	Theorems	Lecture		
10	Archimedian property of real numbers	Lecture		
11	Theorems	Lecture		
12	DEdekinds form of completeness property	Lecture		
13	Theorems	Lecture		
14	Theorems	Lecture	Q & A Session	
MODULE 2				
15	Neighbourhood of a point	Lecture	Q & A Session	
16	theorems	Lecture		
17	Interior point of a set	discussion		
18	Problems	Lecture		
19	Open set	Lecture		
20	Theorems	Lecture		
21	Limit point of a set	Lecture		
22	Problems	Lecture		
23	Theorems	Lecture		
24	Bolzano weierstrass theorem for sets	Lecture		
25	Closed sets	Lecture		
26	Theorems	Lecture		

27	Theorems	Lecture		
28	Revision	Lecture		
29	**CIA – I**			
30	Answer discussion	discussion		
31	Closure of a set	Lecture	Q & A Session	
32	Problems	discussion		
33	Theorems	Lecture		
34	Dense sets	Lecture		
35	Problems	discussion		
36	Theorems	Lecture		
37	Countable and uncountable sets	Lecture		
38	Theorems	Lecture		
39	Theorems	discussion		
40	Theorems	Lecture		
MODULE 3				
41	Real sequences	Lecture	Q & A Session	
42	The range	Lecture		
43	Bounds of a sequence	Lecture		
	Problems	discussion		
44	Convergence of sequences	Lecture		
45	Some theorems	Lecture		
46	Theorems	Lecture		

47	Limit points of a sequence	Lecture		
48	Problems	Discussion		
49	Problems	discussion		
50	Bolzano Weierstrass theorem for sequences	Lecture		
51	Theorems	Lecture		
52	Limit interior and superior	Lecture		
53	Problems	Discussion	Q & A Session	
54	Theorems	Lecture		
55	Theorems	Discussion		
56	Theorems	Discussion		
57	Convergent sequences	Lecture		
58	Theorems	Lecture		
59	Cauchy's general principle of convergence	Lecture		
60	Cauchy's sequences	Lecture		
61	Theorems	Lecture		
62	Theorems	Discussion		
63	Theorems	Lecture		
64	Theorems	Discussion		
65	Monotonic sequences	Lecture		
66	Problems	Discussion		
67	Monotonic	Lecture		

	subsequences			
68	Problems	Lecture	Quiz	
69	Theorems	Discussion		
MODULE 4				
71	Sums and products	Lecture		
72	Problems	Discussion		
73	Basic algebraic properties. Further properties	Lecture		
74	Problems	Discussion		
75	Vectors and moduli	Lecture		
76	Problems	Discussion	Q & A Session	
77	Different representations	Lecture		
78	Problems	Discussion		
79	**CIA II**			
80	Answer discussion	Discussion		
81	Exponential forms	Lecture		
82	Problems	Lecture		
83	Problems	Lecture		
84	Arguments of products and quotients	Lecture	Q & A Session	
85	Problems	Discussion		
86	Product and powers in exponential form	Lecture		
87	Problems	Discussion		

88	Regions in the complex plane	Lecture		
89	Problems	Discussion		
90	Discussion on the CIA & REVISION	Discussion		

INDIVIDUAL ASSIGNMENTS/SEMINAR – Details & Guidelines

	Date of completion	**Topic of Assignment & Nature of assignment (Individual/Group – Written/Presentation – Graded or Non-graded etc)**
1	13/7/18	Problems on Limit point of a set,Derived set etc..
2	25/8/2018	Problems on Product and powers in exponential form

TEXT BOOKS & REFERNCES

1. S.C.Malik, Savitha Arora - Mathematical Analysis. RevisedSecond edition.
2. J.W. Brown and Ruel.V.Churchill - Complex Variables and Applications, 8^{th} edition. Mc.Graw Hill.

COURSE 3- 15U5CRCMT06,DIFFERENTIAL EQUATIONS

PROGRAMME	BSC COMPUTER APPLICATIONS	SEMESTER	5
COURSE CODE AND TITLE	15U5CRCMT06,DIFFERENTIAL EQUATIONS	CREDIT	4
HOURS/WEEK	5	HOURS/SEM	90
FACULTY NAME	SIMI TA & RENSI K RANJITH		

COURSE OBJECTIVES
To obtain an integrating factor which may reduce a given differential equation into an exact one and eventually provide its solution
To familarize the orthogonal trajectory and oblique trajectory
To find the complementary function and particular integrals of linear differential equation.
To describe power series solution,Frobenious method,Bessel eqaution and differential operator method
To describe the origin of partial differential equation,Lagranges method and solution of dx/P=dy/Q=dz/R

SESSION	TOPIC	LEARNING RESOURCES	VALUE ADDITIONS	REMARKS
MODULE I				
1.	Exact differential equations	Lecture	Q & A Session	
2.	Exact differential equations	Lecture		
3.	Problems	Lecture		
4.	integrating factors	Lecture		
5.	integrating factors	Lecture		
6.	integrating factors	Lecture		
7.	separable equations	Lecture		
8.	separable equations	Lecture		

9.	Problems	Lecture	Q & A Session	
10.	Homogenous equations	Lecture		
11.	Homogenous equations	Lecture		
12.	Problems	Lecture		
13.	linear equations	Lecture		
14.	linear equations	Lecture		
15.	Problems	Lecture		
16.	Bernoulli equations	Lecture		
17.	Bernoulli equations	Lecture		
18.	Problems	Lecture		
19.	special integrating factors	Lecture		
20.	special integrating factors	Lecture		
21.	special integrating factors	Lecture		
22.	Problems	Lecture		
23.	Orthogonal trajectories	Lecture		
24.	Orthogonal trajectories	Lecture		
25.	Problems	Lecture		
26.	oblique trajectories	Lecture		
27.	oblique trajectories	Lecture		
28.	Problems	Lecture		
29.	Revision			
MODULE II				
30.	Basic theory of linear differential equations	Lecture	Q & A Session	
31.	Basic theory of linear	Lecture		

	differential equations			
32.	The homogeneous linear equation with constant coefficients	Lecture		
33.	The homogeneous linear equation with constant coefficients	Lecture		
34.	The homogeneous linear equation with constant coefficients	Lecture		
35.	Problems	Lecture	Q & A Session	
36.	The method of undetermined coefficients	Lecture		
37.	The method of undetermined coefficients	Lecture		
38.	The method of undetermined coefficients	Lecture		
39.	The method of undetermined coefficients	Lecture		
40.	Problems	Lecture	Q & A Session	
41.	Variation of parameters	Lecture		
42.	Variation of parameters	Lecture		
43.	Variation of parameters	Lecture		
44.	Variation of parameters	Lecture		
45.	Problems	Lecture		
46.	The Cauchy – Euler equation	Lecture		
47.	The Cauchy – Euler equation	Lecture		
48.	The Cauchy – Euler equation	Lecture		

49.	Problems	Lecture		
50.	Revision			
	CIA-1			
MODULE III				
51.	Power series solution about an ordinary point	Lecture		
52.	Power series solution about an ordinary point	Lecture		
53.	Power series solution about an ordinary point	Lecture		
54.	Power series solution about an ordinary point	Lecture		
55.	Problems	Lecture		
56.	solutions about singular points	Lecture		
57.	solutions about singular points	Lecture		
58.	solutions about singular points	Lecture		
59.	Problems	Lecture		
60.	Differential operators and an operator method	Lecture		
61.	Differential operators and an operator method	Lecture		
62.	Differential operators and an operator method	Lecture		
63.	Problems	Lecture		
64.	the method of Frobenius	Lecture		
65.	the method of Frobenius	Lecture		
66.	the method of Frobenius	Lecture		

67.	Problems	Lecture		
68.	Revision	Lecture		
CIA II				
Module IV				
69.	Surfaces and Curves in three dimensions	Lecture		
70.	Surfaces and Curves in three dimensions	Lecture		
71.	Surfaces and Curves in three dimensions	Lecture		
72.	Solution of equation dx/P=dy/Q=dz/R	Lecture		
73.	Solution of equation dx/P=dy/Q=dz/R	Lecture		
74.	Solution of equation dx/P=dy/Q=dz/R	Lecture		
75.	Problems	Lecture		
76.	Origin of first order and second order partial differential equations	Lecture		
77.	Origin of first order and second order partial differential equations	Lecture		
78.	Origin of first order and second order partial differential equations	Lecture		
79.	Problems	Lecture		
80.	Linear equations of the first order	Lecture		
81.	Linear equations of the first	Lecture		

	order			
82.	Linear equations of the first order	Lecture		
83.	Lagrange's method	Lecture		
84.	Lagrange's method	Lecture		
85.	Lagrange's method	Lecture		
86.	Problems	Lecture		
87.	Problems	Lecture		
88.	Revision	Lecture		
89.	Revision	Lecture		
90	Revision	Lecture		

INDIVIDUAL ASSIGNMENTS/SEMINAR – Details & Guidelines

	Date of completion	Topic of Assignment & Nature of assignment (Individual/Group – Written/Presentation – Graded or Non-graded etc)
1	20/7/2018	Problems of nonhomogenous eqautions
2	8/8/2018	previous question paper

REFERENCES

1. Shepley L. Ross - Differential Equations, 3rd ed., (Wiley India).
2. Ian Sneddon – Elements of Partial Differential Equation (Tata Mc Graw Hill

Course 4- 19U5CRSTA06 :STATISTICAL QUALITY CONTROL AND OPERATIONS RESEARCH

PROGRAMME	**BSC COMPUTER APPLICATIONS**	**SEMESTER**	**5**
COURSE CODE AND TITLE	**15U5CRCST06 : STATISTICAL QUALITY CONTROL AND OPERATIONS RESEARCH**	**CREDIT**	**4**
HOURS/WEEK	**5**	**HOURS/SEM**	**90**
FACULTY NAME	**MS. RESHMI A.N AND RENSI K RANJITH**		

COURSE OBJECTIVES
To understand statistical techniques used in industry for quality control
To understand OC curve , probability limit, tolerance limit, 3 sigma limit and warning Limit
To understand process control and product control ,draw control chart for variables (mean,Range) and control chart for attributes(p,np and c chart)
To understand the concept of Operation Research
To solve Linear Programming Problem, Assignment and Transportation problems

SESSION	**TOPIC**	**LEARNING RESOURCES**	**VALUE ADDITIONS**	**REMARKS**
MODULE 1				
1	Syllabus Discussion	Lecture		
2	Bridge course	Lecture	Video	
3	Bridge course	Lecture		
4	Aims and Objectives of Statistical process control and product control	Lecture & PPT		
5	Statistical process control	Lecture		
6	Statistical process control	Lecture		

7	product control	Lecture		
8	Importance of SQC in Industry	Lecture		
9	Importance of SQC in Industry	Lecture		
10	Control limits 3 sigma limits	Lecture	Video	
11	PROBLEMS	Lecture		
12	Control limits 3 sigma limits	Lecture		
13	Problems	Lecture		
14	O.C curve	Lecture		
15	O.C curve	Lecture		
16	problems	Lecture		
17	Tolerance limits	Lecture		
18	problems	Lecture		
19	Unit Revision	Lecture		
20	Class test	Lecture		
21	Control chart for variables	Lecture & PPT		
22	Problems on Control chart for variables	Lecture		
23	Control chart for Mean	Lecture		
24	Control chart for Mean	Lecture		
25	problems	Lecture		
26	Control Chart for Range	Discussion		
27	Extra problems	Lecture		
28	Test paper	Lecture		
29	CIA 1			
MODULE 2				
30	Control chart for fraction	Lecture		

	Defective			
31	Control chart for fraction Defective	Lecture		
32	Control Chart for number of defective	Lecture		
33	Questions	Lecture		
34	Control chart for number of defects	Lecture		
35	Questions	Lecture	Video	
36	O.R	Lecture& PPT		
37	Problems	Lecture		
38	Introduction,applications,a	Lecture		
39	Disadvantages And disadvantages	Lecture		
40	Linear Programming problems	Discussion		
41	Linear Programming problems	Lecture		
42	Graphic method	Lecture		
43	Problems	Lecture		
44	Revision	Lecture		
45	Class test			
MODULE 3				
46	Simplex Method	Lecture		
47	Simplex Method	Lecture		
48	Example problems	Lecture		
49	Simplex Method	Lecture& PPT	Video	
50	Example problems	Lecture		
51	Duality	Lecture& PPT		

52	Duality	Lecture		
53	Duality	Lecture& PPT		
54	Duality	Lecture		
55	PROBLEMS	Lecture		
56	Transportation problem	Discussion		
57	Transportation problem	Lecture		
58	PROBLEMS	Lecture		
59	Extra problems	Lecture		
MODULE 4				
60	Vogel's Method	Lecture		
61	Vogel's Method	Lecture		
62	Problems	Lecture		
63	UV Method	Lecture& PPT		
64	Assignment Problem	Lecture		
65	Assignment Problem	Lecture		
66	PROBLEMS	Lecture		
67	PROBLEMS	Lecture		
68	PROBLEMS	Lecture		
69	Game Theory Introduction	Lecture		
70	Problems on Game Theory Introduction	Lecture		
71	Two Person Zero sum game	Lecture& PPT	Video	
72	Two Person Zero sum game	Lecture		
73	problems	Lecture		

74	Pure Strategies,Mixed Strategies	Lecture & PPT	Video	
75	Saddle point Solution	Lecture & PPT		
76	Saddle point Solution	Lecture		
77	CIA 2			
78 - 90	Revision	Discussion		

INDIVIDUAL ASSIGNMENTS/SEMINAR – Details & Guidelines

	Dates of assignment	**Topic of Assignment & Nature of assignment (Individual/Group – Written/Presentation – Graded or Non-graded etc)**
1	12-8-2018	Problem on control charts
2	25-9-2018	Problems on Game Theory
3	27-1-2019	Assignment Problem
4	16-2-2019	Transportation problem

CORE REFERENCE

1. S.C. Gupta and V.K. Kapoor: Fundamentals of Applied Statistics, Sultan Chand and Sons
2. M.Mahajan Statistical Quality Control
3. R.C Gupta: Statistical Quality Control

COURSE 5- 15U5OCCAP1 : INTERNET WEB DESIGNING AND CYBER LAW

PROGRAMME	**BSc COMPUTER APPLICATIONS**	**SEMESTER**	**5**
COURSE CODE AND TITLE	**15U5OCCAP1, INTERNET WEB DESIGNING AND CYBER LAW**	**CREDIT**	**3**
HOURS/WEEK	**4**	**HOURS/SEM**	**72**
FACULTY NAME	**RENSI K RANJITH & FR.NIJO**		

COURSE OBJECTIVES
To understand the basic concepts related to internet and its standard protocols
To understand the basic concepts of internet services.
To understand about E-commerce and business
To design web pages using HTML
To understand key terms and concepts in cyber crimes

SESSION	**TOPIC**	**LEARNING RESOURCES**	**VALUE ADDITIONS**	**REMARKS**
MODULE I				
1	Internet – Introduction	PPT	video	
2	Basic Communication	PPT/Lecture		
3	Local Area Network	PPT/Lecture		
4	Packet Switching	PPT/Lecture		
5	Packet Switching	PPT/Lecture		
6	Internet: A Network of Networks	PPT/Lecture		
7	ISPs and Network Connections	Lecture		
8	Transmission Control Protocol (TCP)	Lecture		

9	Internet access Methods	Lecture		
10	Internet access Methods	Lecture		
11	IP Address	PPT/Lecture		
12	IP Address	PPT/Lecture		
13	Domain Names	PPT/Lecture		
14	Revision			
MODULE II				
15	Internet Services	Lecture		
16	Internet Services	Lecture		
17	Electronic mail	Lecture		
18	Bulletin Board Service (Network News)	Lecture		
19	browsing the World Wide Web	Lecture		
20	Automated Web Search (Search Engines)	Lecture		
21	Automated Web Search (Search Engines)	Lecture		
22	Audio and Video Communication,	Lecture	video	
23	Audio and Video Communication,	Lecture		
24	Faxes and Files (FTP)	Lecture		
25	Remote Login	Lecture		
26	Revision			
MODULE III				
27	E-Commerce	PPT/Lecture		
28	E-Commerce	PPT/Lecture		
29	Facilities for Secure Communication	Lecture		

30	Facilities for Secure Communication	Lecture	Quiz	
31	Facilities for Secure Communication	Lecture		
32	Electronic Commerce and Business	Lecture		
33	Electronic Commerce and Business	Lecture		
34	Types of Ecommerce	PPT/Lecture		
35	Types of Ecommerce	PPT/Lecture	Q & A Session	
36	E-business	Lecture		
37	E payment systems	Lecture		
38	E payment systems	Lecture		
39	Revision			
Module IV				
40	Web Programming	Lecturing using system		
41	Introduction to Html	Lecturing using system		
42	Creating Web Pages	Lecturing using system		
43	Creating Web Pages	Lecturing using system		
44	Formatting Tags	Lecturing using system		
45	Formatting Tags	Lecturing using system		
46	Font	Lecturing using system		
47	Font	Lecturing using system		

48	Lists	Lecturing using system		
49	Lists	Lecturing using system		
50	Table	Lecturing using system		
51	Table	Lecturing using system		
52	Form	Lecturing using system		
53	Form	Lecturing using system		
54	Marquee	Lecturing using system		
55	Creation of simple Web Sites	Lecturing using system		
56	Creation of simple Web Sites	Lecturing using system		
57	Creation of simple Web Sites	Lecturing using system		
58	Revision			
Module V				
59	Cyber crimes	PPT/Lecture	Group discussion	
60	Computer crimes	PPT/Lecture		
61	Nature of crimes	PPT/Lecture		
62	Hacking	Lecture		
63	Penalty for damage to Computer	Lecture		
64	Penalty for damage to Computer	Lecture		

65	Computer system, tampering with Computer Source Documents	Lecture		
66	Computer Related Offences	Lecture		
67	Computer Related Offences	Lecture		
68	Theft	Lecture		
69	The Language of Cyberspace.	Lecture		
70	Revision			
71	Revision			
72	Revision			

INDIVIDUAL ASSIGNMENTS/SEMINAR – Details & Guidelines

	Date of completion	Topic of Assignment & Nature of assignment (Individual/Group – Written/Presentation – Graded or Non-graded etc)
1	26/7/2018	Internet Advantages and Disadvantages
2	8/8/2018	Design Webpages

GROUP ASSIGNMENTS/ACTIVITES – Details & Guidelines

	Date of completion	Topic of Assignment & Nature of assignment (Individual/Group – Written/Presentation – Graded or Non-graded etc)
1	11/7/2018	Cyber crimes (Group Discussion)

REFERENCES

- "Internet Complete Reference", Harley Hahn
- "The Internet", Douglas E. Comer, Prentice –Hall of India, Third Edition.
- HTML Black Book
- "Cyber Law Crimes", Barkha and U. Rama Mohan, Asia Law House, New Edition.