

SACRED HEART COLLEGE (AUTONOMOUS)

Tirupattur – 635 601, Tamil Nadu, S.India

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Ready for Every Good Work

A Don Bosco Institution of Higher Education, Founded in 1951 * Affiliated to Thiruvalluvar University, Vellore * Autonomous since 1987

Accredited by NAAC (4th Cycle – under RAF) with CGPA of 3.31 / 4 at 'A+' Grade

Sacred Heart College (Autonomous), Tirupattur District

1.2.1 List of New Courses

BCA

SEMESTER	PART	SUBJECT	L	P	CD
	I	Tamil Paper – I	5		3
II		English Paper – I	5		3
		Communicative English I			1
	III Mathematical Foundations – I		6		4
I	III	Problem Solving Techniques Using C	4		4
	III	Web Design Technology	4		4
	III	Practical-I: Web Design Technology and C		2	2
	IV	Foundation Course I : Personal Skills	2		1
	IV	Ethics / Religion	2		1
			28	2	23
	I	Tamil Paper – II	5		3
	II	English Paper – II	5		3
	II	Communicative English II			1
	III	Mathematical Foundations – II	6		4
	III	Computer Organization and Architecture	4		4
	III	Object Oriented Programming Using C++	4		4
	III	Practical-II: Object Oriented Programming Using C++		2	2
II	IV	Foundation Course – II: Social Skills	2		1
	IV	Ethics / Religion	2		1
	PART	SUBJECT	L	P	CD
	III	Data Structures	4		4
	III	Programming Using JAVA	4		3
	III	Operating System	4		4
	III	Financial Accounting I	6		4
	III	Discipline Specific Elective I	4		3

III	Practical-III: Data Structures Using C++		2	2
III	Practical-IV : Programming Using JAVA		2	2
IV	Foundation Course III: Employability Skills – I	2		1
IV	Environmental Science	2		1
VI	Certificate Course - I			2#
		26	4	24 + 2#

SEMESTER	PART	SUBJECT	L	P	CD
	Ш	Data Structures	4		4
	Ш	Programming Using JAVA	4		3
	Ш	Operating System	4		4
	III	Financial Accounting I	6		4
III	III	System Analysis and Design	4		<mark>3</mark>
] 111	Ш	Practical-III : Data Structures Using C++		2	2
	Ш	Practical-IV: Programming Using JAVA		2	2
	IV	Foundation Course III: Employability Skills – I	2		1
	IV	Environmental Science	2		1
	VI	Certificate Course - I			2#
			26	4	24 + 2#

SEMESTER	PART	SUBJECT	L	P	CD
	III	Software Engineering	4		4
	III	Windows Application Using .NET	4		3
	III	Relational Database Management System	4		4
	III	Financial Accounting II	6		4
	III	Computer Graphics	4		3
IV	III	Practical-V: Windows Application using .NET		2	2
I V	Ш	Practical -VI: Relational Database Management System		2	2
	IV	Foundation Course IV: Employability Skills – II	2		1
	IV	Human Rights	2		1
	V	DEEDS			2
	V	SHELTERS			2
	VI	Certificate Course - II			2#
			26	4	28 + 2#

SEMESTER	ER PART SUBJECT			L	P CD
			26	4	28 + 2#
	Ш	Computer Networks	5		4
	Ш	E -Commerce	5		4
	Ш	Enterprise Java Programming	5		4
	Ш	Web Programming Using PHP	5		4
V	III	Self Study Paper I : Industry Interface	-		1*
	Ш	Practical-VII : Enterprise Java Programming		4	4
	Ш	Practical-VIII : Web Programming Using PHP		4	4
	IV	Non Major Elective –I : Introduction to Information Technology	2		1
			22	8	25 + 1*
	Ш	Cloud Computing	5		4
	Ш	Discipline Specific Elective II	4		3
	Ш	Project Work		6	4
VI	III	Web Application Using .NET	5		5
VI	Ш	R Programming	4		4
	III	Self Study Paper II: Software Documentation	-		1*
	III	Practical-IX: Programming Using .NET and R		4	4
	IV	Non Major Elective – II : Multimedia	2		1
			20	10	25+1*
		TOTAL	180		148 +2*+4#

Allied B.Com (CA)

SEMESTER	PART	SUBJECT		P	CD	I	S	TOT
T	III	Office Automation	4		3	30	70	100
1	III	Practical -I : Office Automation		2	1	40	60	100
	III	Web Design Technology	4		3	30	70	100
II		Practical -II: Web Design Technology		2	1	40	60	100
Ш	III	Programming with C	4		3	30	70	100
111	III	Practical -III: Programming with C		2	1	40	60	100
IV	III	Relational Database Management System	4		3	30	70	100
	III	Practical -IV: Relational Database		2	1	40	60	100

		Management System						
	III	Computer Organization	4		4	30	70	100
V	III	Web Programming Using PHP	4		4	30	70	100
•	III	Practical -V: Web Programming Using PHP		2	2	40	60	100
VI	III	Management Information System	4		<mark>4</mark>	<mark>30</mark>	<mark>70</mark>	100
		TOTAL	28	10	30	410	790	1200

Sacred Heart College (Autonomous), Tirupattur District

1.2.1 List of New Courses

Department: BCA

SYLLABUS

Semester III

SYSTEM ANALYSIS AND DESIGN - CA310B

S. No	Course Code	Course Name
1.	CA310B	System Analysis and Design
2.	CA310C	Management and Information System

1. Learning Objectives

- To learn the system development design strategies.
- To understand structured analysis development methods.
- To know computer input and output design strategies.
- To design online dialogue and auxiliary storage devices.
- To understand the Systems engineering and quality assurance concepts.

2. Blue Print of the Question Paper

Section	Unit – I	Unit – II	Unit – III	Unit – IV	Unit – V	
Section- A	1-2	3-4	5-6	7-8	9-10	
Section- B	11.a)Theory (or) b) Theory	12.a)Theory (or) b) Theory	(or) b) Theory	14.a)Theory (or) b) Theory	15.a) Theory (or) b) Theory	
Section-C	16.Theory	17.Theory	18.Theory	19.Theory	20.Theory	

3. Course Outline

UNIT - I: INTRODUCTION TO SYSTEM ANALYSIS AND DESIGN

Introduction to Information System Development: System Analysis and design-Business system concepts – Categories of Information systems – System Development Strategies - Managing the application development portfolio.

UNIT - II: SYSTEM REQUIREMENT AND STRATEGIES

Tools for determining system requirement: Requirements determination – Fact finding techniques Tools for documenting procedure and decision. Structured Analysis development strategies: Structured analysis – Developing Data flow diagram. Computer Aided systems tools: Role of tools – Categories of automated tools – CASE Tools – Benefits of CASE.

UNIT - III: DESIGN TRANSITION

The Analysis to design transition: Specifying application requirements – Objectives in designing Information systems – Features - Design of computer output: How to identify computer Output needs – Designing visual Display output. Design of input and control: What concerns guide input design – Capturing data for input – Input validation.

UNIT – IV : DESIGN OF ONLINE DIALOGUE AND AUXILIARY STORAGE DEVICES

Design of online dialogue: Online difference – Interface – Designing dialogue – Dialogue strategy – Data entry dialogues- Design of files and use of auxiliary storage devices: Basic file terminology – Data structure Diagrams – Types of files – Methods of file organization.

UNIT - V: SYSTEMS ENGINEERING AND QUALITY ASSURANCE

Systems engineering and Quality assurance: Design objectives – Program structure charts – Design of software – Managing Quality assurance – Managing testing practices. Managing system implementation: Training Conversion – post Implementation review, Managing information systems development: Estimation and management of development time –Estimation Personnel and development management. Hardware and Software selection: Hardware selection – Software Selection.

4. Teaching Resources

i. Text

1. James A.Senn, "Analysis and Design of Information Systems", Second Edition, TMH, New Delhi.

Unit – I : Ch. 1 Unit – II : Ch. 3 – 6 Unit – III : Ch. 7 – 9 Unit – IV : Ch. 10, 11 Unit – V : Ch. 14 – 17

ii. References

- 1. I.T. Hawryszkiewycz, "Introduction to System Analysis and Design", Third edition, Prentice Hall India, New Delhi.
- 2. Elias M. Awad, "System Analysis and Design", Second edition, Galgotia Publications (P) Ltd., 1999.

iii. Web References

Online Tutorial

- 1. www.w3computing.com/systemsanalysis/
- 2. <u>www.tutoruniverse.com/system-analysis-design-online-tutoring.html</u>

Online Quiz

- 1. <u>www.indiabix.com > Engineering > Computer Science</u>
- 2. http://withoutbook.com/OnlineTestStart.php?quizId=42

5. Supplement Learning

- Web based Development Design
- Structured Analysis and Design
- Temporal Semantic Data Models
- Financial Information System Design
- System Security Analysis and Design

6. Course Outcomes

Upon successful completion of this course, the students should be able to:

- Learn the system development design strategies.
- Understand structured analysis development methods.
- Know computer input and output design strategies.
- Design online dialogue and auxiliary storage devices.
- Exemplify Systems engineering and quality assurance concepts.

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Semester III

MANAGEMENT AND INFORMATION SYSTEM - CA310C

1. Learning Objectives

- To demonstrate effective communication with individuals, teams and large groups.
- To demonstrate effective analytical and critical thinking skills.
- To distinguish and analyze ethical problems that occurs in business and society.
- To apply leadership skills and competencies in business situations.
- To demonstrate an understanding of the major functional areas of Business.

2. Blue Print of the Question Paper

Section	Unit – I	Unit – I Unit – II Unit – II		Unit – IV	Unit – V	
Section- A	1-2	3-4	5-6	7-8	9-10	
Section-B	11.a)Theory (or) b) Theory	12.a)Theory (or) b) Theory	13.a)Theory (or) b) Theory	14.a)Theory (or) b) Theory	15.a) Theory (or) b) Theory	
Section-C	16.Theory	17.Theory	18.Theory	19.Theory	20.Theory	

3. Course Outline

UNIT-I: INFORMATION AND SYSTEM CONCEPTS

Information: A definition - Types of information - Dimension of information - System: a definition - Kinds of System - System related concepts - Elements of a System - Human as an Information Processing system - Information System for competitive advantages: introduction - changing concept - competitive advantages - Information System Strategies for dealing with competitive force - Porters value chain model - Strategic Information System(SIS).

UNIT-II: MANAGEMENT INFORMATION SYSTEMS

A frame work - Importance of MIS - Management Information System: A Concept - MIS: A definition - Nature and Scope of MIS - Structure and Classification of MIS: Structure of MIS - MIS classification.

UNIT-III: ERP AND DECISION SUPPORT SYSTEMS

Business Application: E-commerce: Introduction- E-commerce - Decision Support Systems: Decision Making: A Concept - Simon's Model of Decision Making - Types of Decisions Decision System Support System - Characteristic and Capabilities of DSS.

UNIT-IV: INFORMATION SYSTEM PLANNING

Information System Planning - Planning Terminology - Information System Planning - The Nolan Stage Model - Four stage Model of Planning - Selection a methodology - Information Resource Management - Acquisition : Acquisition of Information system - Acquisition of Hardware and Software.

UNIT-V: SYSTEM IMPLEMENTATION

Implementation process - Organizational Change - IS Security and Control: IS Security Threats - Protecting Information System - IS Security Technology - The Disaster Recovery Plan.

4. Teaching Resources

i. Text

1. DP Goyal, "Management Information Systems: Managerial Perspective", 3rd Edition, Macmillan Publishers India Ltd, 2010.

Unit-I : Ch. 3, 4. Unit-II : Ch. 1, 2.

Unit-III : Ch. 9, 10. Unit-IV : Ch. 12, 13. Unit-V : Ch. 14, 16.

ii. References

- 1. Uma G. Gupta, "Management Information Systems Managerial Perspective", Macmillan Publishers India Ltd, 2002.
- 2. P.T.Joseph, S.J and Sanjay Mohapatra, "Management Information Systems in Knowledge Economy", PHI Leaning Private Ltd, 2009.

iii. Web references

Online Tutorial

1.

 $\underline{http://www.openlearningworld.com/innerpages/Fundamentals\%20of\%20MIS.h}\underline{tm}$

2. https://www.tutorialspoint.com/management information system/index.htm

Online Quiz

1. http://highered.mheducation.com/sites/0073376752/student_view0/chapter1/multiple-choice-quiz.html

5. Supplement Learning

- Enterprise Architecture
- System Analysis and Design
- E-Business Strategy Architecture and Design
- Interface Design
- Networks and Communications

6. Course Outcomes

Upon successful completion of this subject students should be able to:

- Use analytical and reflective skills in decision making.
- Communicate effectively both orally and in writing.
- Recognize legal and ethical issues confronting them.
- Contribute to the performance of a group within a business setting.
- Develop, control, and manage projects.