

PROPOSED SYLLABUS FOR THREE YEARS VOCATIONAL COURSE  
IN  
COMPUTER APPLICATION WITH EFFECT FROM SESSION 2003.

3RD YEAR :

MAX. MARKS:

THEORY:

PAPER A = 50 MARKS

PAPER B = 50 MARKS

PRACTICAL

INTERNAL = 25 MARKS

EXTERNAL = 25 MARKS

PAPER- A ( PROGRAMMING IN C )      MAX. MARKS = 50

SESSION 2003

UNIT I: HISTORICAL DEVELOPMENT OF C, GETTING STARTED WITH C, THE C CHARACTER SET, CONSTANTS, VARIABLES AND KEYWORDS, TYPES OF C CONSTANTS, TYPES OF C VARIABLES, C KEYWORDS, C INSTRUCTION, TYPE DECLARATION INSTRUCTION, ARITHMETIC INSTRUCTION, INTEGER AND FLOAT CONVERSIONS, TYPE CONVERSIONS IN ASSIGNMENTS, HIERARCHY OF OPERATIONS, THE FIRST C PROGRAM, CONTROL INSTRUCTION IN C.

~~UNIT II~~

THE DECISION CONTROL STRUCTURES . THE IF STATEMENT, MULTIPLE STATEMENT WITHIN *IF*, THE *IF-ELSE* STATEMENT, NESTED

*IF-ELSE* STATEMENT , NESTED *IF-ELSE* , FORMS OF *IF*, USE OF LOGICAL OPERATORS , HIERARCHY OF LOGICAL OPERATORS.

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UNIT II

THE LOOP CONTROL STRUCTURES

LOOPS . THE WHILE LOOP, THE FOR LOOP- NESTING OF LOOPS, MULTIPLE INITIALISATION IN THE FOR LOOP,

THE BREAK STATEMENT . THE CONTINUE STATEMENT, THE DO WHILE LOOP.

THE CASE CONTROL STRUCTURE

DECISIONS USING *switch*, THE GOTO STATEMENT.

#### UNIT III

FUNCTIONS - PASSING VALUES BETWEEN THE FUNCTIONS, SCOPE - RULE OF FUNCTIONS, ADVANCED FEATURES OF FUNCTIONS - FUNCTION DECLARATION AND PROTOTYPES, CALL BY VALUES AND CALL BY REFERENCE, AN INTRODUCTION TO POINTERS, POINTER NOTATION, RECURSIONS.

#### UNIT IV

ARRAYS :

WHAT ARE ARRAYS, ARRAY INITIALIZATION, BOUNDS CHECKING, PASSING AN ENTIRE ARRAY TO A FUNCTION, MORE THAN ONE DIMENSION - INITIALIZING A 2 DIMENSIONAL ARRAY, THREE DIMENSIONAL ARRAYS.

STRUCTURES, DECLARING A STRUCTURES, ACCESSING STRUCTURES ELEMENTS, HOW STRUCTURES ELEMENTS ARE STORED, ARRAY OF STRUCTURES,, USES OF STRUCTURES. INTRODUCTION TO FILES.

STRUCTURED SYSTEM ANALYSIS AND DESIGN,(SAD), AND  
MANAGEMENT INFORMATION SYSTEM (MIS)

UNIT I:-

INTRODUCTION TO INFORMATION SYSTEM DEVELOPMENT SYSTEM  
ANALYST-CATEGORIES OF INFORMATION

SYSTEM- SYSTEMS DEVELOPMENT STRATEGY –CLASSICAL SYSTEM  
DEVELOPMENT LIFE CYCLE-STRUCTURED ANALYSIS DEVELOPMENT  
METHOD –TOOLS FOR SYSTEM DEVELOPMENT.

MEANING THE APPLICATION DEVELOPMENT PORTFOLIO-  
INFORMATION SYSTEM PLANNING METHODOLOGIES-MEANING  
PROJECT REVIEW AND SELECTION –PRELIMINARY INVESTIGATION –  
SELECTING THE PROJECT DEVELOPMENT STRATEGY.

~~UNIT I~~ UNIT II

REQUIREMENTS ANALYSIS AND DETERMINATION: ACTIVITIES AND  
REQUIREMENTS DETERMINATION-BASIC REQUIREMENTS-USER  
TRANSACTION REQUIREMENTS-0 USER DECISION REQUIREMENTS-  
ORGANIZATION WIDE REQUIREMENTS –FACT FINDING TECHNIQUES-  
TOOLS FOR DOCUMENTING PROCEDURE AND DECISIONS.

STRUCTURED ANALYSIS DEVELOPMENT STRATEGY-FEATURES OF  
DATA FLOW STRATEGY –TOOLS OF DATA FLOW STRATEGY –  
DEVELOPING DATA FLOW DIAGRAMS –FEATURES OF DATA  
DICTIONARY: APPLICATION PROTOTYPE DEVELOPMENT STRATEGY  
:COMPUTER AIDED SYSTEMS TOLLS.

~~UNIT III~~

CASE STUDIES TO ILLUSTRATE THE THEORIES COVERED IN THIS  
PAPER : A-III- MANUFACTURING FIRM A SERVICE ORGANIZATION,  
SUPER MARKET .SYSTEM. AND AN EDUCATIONAL INSTITUTION.

~~UNIT III~~ unit-III

INTRODUCTION TO MANAGEMENT INFORMATION SYSTEM  
EVOLUTION OF MIS- MIS AS AN EVOLVING CONCEPT- WHY MIS IS A  
SUBJECT OF GREAT INTEREST - NEED OF MIS - DEFINITION OF MIS-  
BENEFITS OF MIS- MIS FUNCTIONS -OBJECTIVES OF MIS-  
CHARACTERISTICS OF MIS- THE ROLE OF AN MIS- INFORMATION

FLOW IN A TYPICAL MANUFACTURING COMPANY, COMPONENTS OF AN INFORMATION SYSTEM, MANAGEMENT MISINFORMATION SYSTEM

UNIT ~~IV~~ MIS APPLICATION- FINANCE MANAGEMENT, MARKETING MANAGEMENT, MATERIAL MANAGEMENT, PRODUCTION MANAGEMENT, PERSONAL MANAGEMENT

PRACTICAL-I:

LAB WORK BASED ON C- PROGRAMMING

PRACTICAL -II

EACH AND EVERY STUDENT HAS TO PRESENT THE INDIVIDUAL

**PROJECT REPORT** TAKING ANY OF THE INDUSTRY/INSTITUTE AS THE CASE STUDY.

BOOKS :

PROGRAMMING IN C : BY YASHWANT KENTIKAR

SAD : BY AWARD

MIS : BY C.S.V MURTHY.

MIS : BY DAVIS AND ALSON