CONTENTS

1. INFORMATION TECHNOLOGY IN BUSINESS MANAGEMENT

INTRODUCTION; CHANGING ENVIRONMENT AND ITS IMPACT ON BUSINESS; INFORMATIONN AND TECHNOLOGY; IMPORTANCE OF INFORMATION TECHNOLOGY (IT); DEFINITIONS OF IT; TYPES OF INFORMATION SYSTEM (IS); TRANSACTION PROCESSING SYSTEMS (TPS); DECISION SUPPORT SYSTEM (DSS); EXECUTIVE INFORMATION SYSTEM (EIS); MANAGEMENT INFORMATION SYSTEMS (MIS); WORK FLOW SYSTEM (WFS); ENTERPRISE RESOURCE PLANNING (ERP); EXPERT SYSTEMS (ES); BUSINESS PERSPECTIVE OF IT; MANUFACTURING; FINANCE AND ACCOUNTING; SALES AND MARKETING; HUMAN RESOURCE MANAGEMENT; PROJECT MANAGEMENT; DATA ANALYSIS; INTERNET AND ITS BUSINESS APPLICATIONS; INFORMATION SYSTEMS AND FUNCTIONAL AREA APPLICATION; COMPUTER AIDED DECISION MAKING; ORGANIZATION; DEFINITION OF ORGANIZATION; FUNCTIONS OF ORGANISATION; PRINCIPLES OF ORGANISATION; NATURE OR CHARACTERISTICS OF ORGANISATION; IMPORTANCE OF ORGANISATION OR ADVANTAGES OF ORGANISATION; TYPES OF ORGANISATION; IMPORTANCE OF ORGANISING; ORGANISATIONAL MANUALS; INTERNAL ORGANISATION STRUCTURE; FUNCTIONAL ORGANISATION; LINE AND STAFF ORGANISATION; MATRIX ORGANISATION; AN INCIDENT - MATRIX ORGANISATION; COMMITTEES IN ORGANISATION; FORMS OF BUSINESS ORGANISATION; PROPRIETARY CONCERNS SOLD TRADING CONCERNS; MERITS OF SOLE TRADING CONCERNS; PARTNERSHIP FIRM; MAIN FEATURES OF PARTNERSHIP; IDEAL PARTNERSHIP; COMPANIES; MAIN FEATURES OF JOINT STOCK COMPANY; BASIC DOCUMENTS OF JOINT STOCK COMPANIES; PROSPECTUS; STATEMENT IN LIEU OF PROSPECTUS; CO-OPERATIVES; JOINT SECTOR; GOVERNMENT UNDERTAKINGS; FOREIGN COLLABORATIONS; MANAGER - MANAGEMENT; FUNCTIONS AND ACTIVITIES OF MANAGER: LEVELS OF MANAGEMENT; CONCLUSIONS; STUDY QUESTIONS.

2. FUNDAMENTALS OF INFORMATION TECHNOLOGY

INTRODUCTION; CENTRAL PROCESSING UNIT (CPU); STORAGE AND STORAGE DEVICES; MAIN MEMORY; TYPES OF MAIN MEMORY; RAM (RANDOM ACCESS MEMORY); DRAM (DYNAMIC RANDOM ACCESS MEMORY); SRAM (STATIC RANDOM ACCESS MEMORY); ROM (READ ONLY MEMORY); PROM (PROGRAMMABLE READ ONLY MEMORY); EPROM (ERASABLE PROGRAMMABLE READ ONLY MEMORY); SECONDARY MEMORY; CACHE; INPUT/OUTPUT DEVICES; INPUT DEVICES; NETWORKING AND NETWORKING DEVICES; NETWORK DEVICES; PLUG AND PLAY DEVICES;

COMMUNICATION TECHNOLOGY; TYPES OF COMPUTERS; NETWORK COMPUTER; NETWORKING TECHNOLOGIES; COMPONENTS OF A NETWORK; TYPES OF NETWORKS; LOCAL AREA NETWORK (LAN); WIDE AREA NETWORK (WAN); INTERNET; (DNS) DOMAIN NAME SERVICE PROTOCOL; WORLD WIDE WEB (WWW); (FTP) FILE TRANSFER PROTOCOL; CLIENT/SERVER ARCHITECTURE; CONCLUSIONS; STUDY QUESTIONS.

3. COMPUTER SOFTWARE

INTRODUCTION; SYSTEM SOFTWARE; OPERATING SYSTEMS; FUNCTIONS OF OPERATING SYSTEM; COMMON HARDWARE FUNCTIONS; USER INTERFACE; HARDWARE INDEPENDENCE; MEMORY MANAGEMENT; PROCESSING TASK; NETWORKING CAPABILITY; ACCESS TO SYSTEM RESOURCES; FILE MANAGEMENT; LANGUAGE TRANSLATORS; DIFFERENCE BETWEEN COMPILER AND INTERPRETER; DISADVANTAGES OF INTERPRETER OVER COMPILER; UTILITY PROGRAMS; APPLICATION SOFTWARE; PROGRAMMING LANGUAGES; FORTRAN (FORmula TRANSlation); OBJECT ORIENTED LANGUAGES; OPEN SOURCE SOFTWARE; ACQUIRING APPLICATION SOFTWARE; CONCLUSION; STUDY QUESTIONS.

4. COMPUTER PROGRAMMING AND LANGUAGE

INTRODUCTION; PROGRAMMING VOCABULARY; CONTROL STATEMENT OR CONTROL STRUCTURE; OVERVIEW AND FEATURES OF VISUAL BASIC; OVERVIEW AND FEATURES OF HYPERTEXT MARKUP LANGUAGE; OVERVIEW AND FEATURES OF COBOL; OVERVIEW AND FEATURES OF EXCEL; OVERVIEW AND FEATURES OF EXCEL.

5. NETWORKING TECHNOLOGIES

INTRODUCTION; COMPONENTS OF A NETWORK; TYPES OF NETWORKS; LOCAL AREA NETWORK (LAN); WIDE AREA NETWORK (WAN); INTERNET; ADVANTAGES OF USING INTRANET AND INTERNET; THE LAYERED ARCHITECTURE AND COMMUNICATION PROTOCOL; TCP/IP (TRANSMISSION CONTROL PROTOCOL/INTERNET PROTOCOL); (DNS) DOMAIN NAME SERVICE PROTOCOL; WORLD WIDE WEB (WWW); (FTP) FILE TRANSFER PROTOCOL; CLIENT/SERVER ARCHITECTURE; CONCLUSIONS; STUDY QUESTIONS.

6. MANAGEMENT INFORMATION SYSTEMS (MIS)—AN INTRODUCTION

INTRODUCTION; HISTORICAL BACKGROUND; STATUS OF MIS IN ORGANIZATIONS; FRAMEWORK FOR UNDERSTANDING MIS; CONCLUSION; STUDY QUESTIONS.

7. INFORMATION SYSTEMS

INTRODUCTION; DATA, INFORMATION AND KNOWLEDGE; VALUE AND COST OF INFORMATION; IDENTIFICATION OF IT COSTS; INFORMATION SYSTEMS: SUCCESS AND FAILURE; CONCLUSION; STUDY QUESTIONS.

8. MANAGEMENT INFORMATION AND CONTROL SYSTEMS

INTRODUCTION; SYSTEMS VIEW; SYSTEM CONCEPTS; HIERARCHY OF SYSTEMS; ROLE OF MIS AT VARIOUS MANAGEMENT LEVELS; MIS AS A TECHNIQUE FOR MAKING PROGRAM DECISIONS; DECISIONS ASSISTING INFORMATION SYSTEMS; SYSTEM VULNERABILITY AND ABUSE; AUDITED INFORMATION SYSTEM; CONCLUSION; STUDY OUESTIONS.

9. INFORMATION SYSTEM SECURITY

INTRODUCTION: ETHICS IN INFORMATION; INFORMATION RIGHTS, PRIVACY AND

FREEDOM IN AN INFORMATION SOCIETY; PROTECTING COMPUTER EQUIPMENT AND FILES; LIMITING LOGICAL ACCESS TO COMPUTER SYSTEMS; DISASTER RECOVERY PLAN; COMPUTER VIRUS AND PREVENTION; CONCLSION; STUDY QUESTIONS.

10. INFORMATIONSYSTEMS AND FUNCTIONAL AREA APPLICATION

INTRODUCTION; INFORMATION FROM DATA; TYPES OF INFORMATION; INFORMATION IN MANAGERIAL FUNCTIONS; INFORMATION NEEDS; INFORMATION SOURCE: INTERNET; INFORMATION SYSTEMS IN MANAGEMENT; SYSTEM DEVELOPMENT: A STRATEGIC PLANNING PROCESS; SYSTEM LIFE CYCLE; PROGRAMMED AND NON-PROGRAMMED DECISIONS; ENVIRONMENTAL AND COMPETITIVE INFORMATION SYSTEM; INFORMATION SYSTEMS IN FUNCTIONAL AREAS AND DECISION-MAKING; OPERATIONS MANAGEMENT; INVENTORY MANAGEMENT; WAREHOUSE MANAGEMENT; FINANCIAL MANAGEMENT; HUMAN RESOURCE MANAGEMENT; CONCLUSION; STUDY OUESTIONS.

11. TRANSACTION PROCESSING SYSTEMS-1— HUMAN RESOURCE AND MARKETING MANAGEMENT

INTRODUCTION; HUMAN RESOURCE MANAGEMENT; RECRUITMENT; RETENTION/SERVICE CONDITIONS; MARKETING MANAGEMENT SUB-SYSTEM; SALES MANAGEMENT; MARKET RESEARCH; USE OF COMPUTERS IN MARKETING MANAGEMENT; STUDY QUESTIONS.

12. TRANSACTION PROCESSING SYSTEMS-II— OPERATIONS AND FINANCIAL MANAGEMENT

INTRODUCTION; TRANSACTION PROCESSING SYSTEMS; PRODUCTION/OPERATION SYSTEMS; INVENTORY MANAGEMENT SYSTEMS; COMPUTERIZED MAINTENANCE MANAGEMENT; CORRECTIVE MAINTENANCE AND WORK ORDER MODULE; SPARE PARTS CONTROL MODULE; CONDITION MONITORING MODULE; FINANCIAL INFORMATION SYSTEMS; FUNCTIONS OF FINANCIAL SYSTEMS; FINANCIAL MANAGEMENT SOFTWARE; GENERAL LEDGER; COMPUTERIZED GENERAL LEDGER SYSTEMS; OTHER FINANCIAL SYSTEMS; COMPUTER AIDED FINANCIAL PLANNING; CONCLUSION; STUDY QUESTIONS.

13. INTEGRATED APPLICATIONS

INTRODUCTION; INTEGRATED SOFTWARE APPLICATIONS; ADVANTAGES AND BUSINESS UTILITY; THE COMPETITION; BUSINESS SOFTWARE SOLUTIONS FROM SAP; BUSINESS SOFTWARE SOLUTIONS FROM PEOPLE SOFT; BUSINESS SOFTWARE SOLUTIONS FROM ORACLE; BUSINESS SOLUTIONS FROM MICROSOFT; CONCLUSION; STUDY QUESTIONS.

14. BUILDING INFORMATION SYSTEMS

INTRODUCTION; COMPUTER BASED INFORMATION SYSTEMS AND ITS CLASSIFICATION; TYPES OF INFORMATION SYSTEM; OFFICE AUTOMATION SYSTEMS; COMMUNICATION SYSTEMS; REDESIGNING THE ORGANIZATION WITH INFORMATION SYSTEMS; BUSINESS VALUES OF INFORMATION SYSTEM; OUTSOURCING INFORMATION SYSTEMS; ENSURING QUALITY WITH INFORMATION; CONCLISION; STUDY QUESTIONS.

15. SYSTEM ANALYSIS AND DESIGN

INTRODUCTION: TRADITIONAL SYSTEM LIFE CYCLE; SYSTEMS LIFE CYCLE; SYSTEMS

x/A Comprehensive Approach To Management Information Systems

ANALYSIS; SYSTEMS DESIGN; IMPLEMENTATION AND MAINTENANCE.

16. CHOICE OF INFORMATION TECHNOLOGY

INTRODUCTION; STRATEGIC DECISION DIMENSION OF INFORMATION TECHNOLOGY; CONFIGURATION DESIGN; EVALUATION; INFORMATION TECHNOLOGY IMPLEMENTATION PLAN; CHOICE OF THE 'INFORMATION TECHNOLOGY' AND THE 'MANAGEMENT INFORMATION SYSTEM'; CONCLUSION; STUDY QUESTIONS.

17. DATABASE RESOURCE MANAGEMENT

INTRODUCTION; DATA AS ORGANIZATIONAL RESOURCE; ORGANIZING DATA; DATABASE MANAGEMENT SYSTEMS AND ITS COMPONENTS; COMPONENTS OF DBMS; MODELING DATA; DATATYPES; DEVELOPMENTS IN DATABASE TECHNOLOGY; DATABASE ADMINISTRATOR AND THE ROLE; CRITICAL SUCCESS FACTOR OF DATA WARE HOUSING; CONCLUSIONS; STUDY QUESTIONS.

18. DATA WAREHOUSING AND DATA MINING

INTRODUCTION; OPERATIONAL AND INFORMATIONAL DATABASES; THE DATA WAREHOUSE; DATA WAREHOUSE SCHEMA; METADATA; DATA WAREHOUSE AND THE WEB; ON-LINE ANALYTICAL PROCESSING (OLAP); DATA MINING; CONCLUSIONS; STUDY QUESTIONS.

19. TACTICAL AND STRATEGIC INFORMATION MANAGEMENT: DSS AND EIS

INTRODUCTION; DSS PHILOSOPHY; DIFFERENCE BETWEEN DSS, MIS AND EIS; COMPONENTS OF DSS; GROUP DSS; TERMS USED IN GDSS; SOFTWARE TOOL SELECTION; BUILDING DSS/EIS IN AN ORGANIZATION; STUDY OUESTIONS.

20. ENTERPRISE SYSTEMS

INTRODUCTION; INTEGRATING FUNCTIONS AND BUSINESS PROCESSES; ENTERPRISE SYSTEMS OR ENTERPRISE RESOURCE PLANNING (ERP); BENEFITS AND CHALLENGES OF ENTERPRISE SYSTEMS; CHALLENGES OF ENTERPRISE SYSTEMS; SUPPLY CHAIN PLANNING AND EXECUTION SYSTEMS; CUSTOMER RELATIONSHIP MANAGEMENT (CRM); KNOWLEDGE MANAGEMENT SYSTEMS IN THE ENTERPRISES; E-GOVERNANCE; CONCLUSION; STUDY QUESTIONS.

21. INTELLIGENT SUPPORT SYSTEMS

INTRODUCTION; ARTIFICIAL INTELLIGENCE; EXPERT SYSTEMS; NEURAL NETWORKS; GENETIC ALGORITHMS; CONCLUSSIONS; STUDY QUESTIONS.

22. SECURITY AND ETHICAL CHALLENGES

INTRODUCTION; A MODEL FOR THINKING ABOUT ETHICAL, SOCIAL, AND POLITICAL ISSUES; MORAL DIMENSIONS OF THE INFORMATION AGE; KEY TECHNOLOGY TRENDS THAT RAISE ETHICAL ISSUES; ETHICS IN AN INFORMATION SOCIETY; BASIC CONCEPTS: RESPONSIBILITY, ACCOUNTABILITY, AND LIABILITY; PROCESS TO CONDUCT AN ETHICAL ANALYSIS; CANDIDATE ETHICAL PRINCIPLES; PROFESSIONAL CODES OF CONDUCT; ORGANIZATIONS; PROPERTY RIGHTS: INTELLECTUAL PROPERTY; ACCOUNTABILITY, LIABILITY, AND CONTROL; SYSTEM QUALITY: DATA QUALITY AND SYSTEM ERRORS; QUALITY OF LIFE: EQUITY, ACCESS, AND BOUNDARIES; STEPS IN EFFECTIVE RE-ENIGNEERING; A CORPORATE CODE OF ETHICS; ERGONOMICS; CYBER TERRORISM; CONCLUSION; STUDY QUESTIONS.

23. EMERGING TRENDS IN INFORMATION TECHNOLOGY

INTRODUCTION; COMPETITIVENESS OF ICT; TECHNOLOGY FOR CONVERGENCE: HARDWARE AND SOFTWARE ISSUES; CONVERGENCE OF IT AND ELECTRONICS: EMERGING TRENDS; E-COMMERCE: ESSENTIAL COMPONENTS AND FUTURE ISSUES; E-COMMERCE DESIGN ISSUES; PRIVACY IN THE CONTEXT OF; CONCLUSION; STUDY QUESTIONS.

Glossary

Bibliography

Index