A.S.D.Government Degree College for Women
An Autonomous Institution
Jagannaickpur, Kakinada, Andhra Pradesh-533002
Affiliated to Adikavi Nannaya University, Rajamahendravaram

INTERNAL QUALITY ASSURANCE CELL

2.6.1. The institution has stated learning outcomes (programme and course outcome)/graduate attributes which are integrated into the assessment process and widely publicized through the website and other documents and the attainment of the same are evaluated by the institution.

COMPUTER APPLICATIONS

COURSE OUTCOMES

(2018-23)

B.Com (CA) – I Year I Semester
Computer Fundamentals & Photoshop

Course Code: CFP1204   **No. of Hours/Week: 5**

Course Outcomes:
At the end of the course the student will be able to

1. Understand the vocabulary of key terms related to the computer and able to identify the components of a personal computer system.
2. Identify the working principles of input and output devices and basics of different types of memories.
3. Work with the Photoshop workspace
4. Make use of Photoshop tools to modify and adjust images.
5. Create new layers; perform other basic layer functions and usage of filters.

B.Com (CA) – I Year II Semester
Course: ENTERPRISE RESOURCE PLANNING

Course Code: ERP2204   **No. of Hours/Week: 5**

Course Outcomes:
At the end of the course the student will be able to

1. To understand concepts of reengineering and how they relate to ERP system implementations.
2. To understand the steps and activities in the ERP life cycle.
3. To be able to map business processes using process mapping techniques.
4. Make basic use of Enterprise software, and its role in integrating business functions.
5. Discuss recent extensions of ERP.

B.Com (CA) – II Year III Semester
Course: OFFICE AUTOMATION TOOLS

Course Code: OAT3204   **No. of Hours/Week: 5**

Course Outcomes:
At the end of the course the student will be able to

1. Know the basic concepts of MS-Excel
2. Understand the usage of different functions in MS-Excel.
3. Usage of different types of charts and macros
4. Know the basic concepts of MS-Access
5. Usage of queries and reports in MS-Access.

B.Com (CA) – II Year IV Semester
Course: PROGRAMMING IN C

Course Code: PC4204   **No. of Hours/Week: 5**

Course Outcomes:
At the end of the course the student will be able to

1. Understand the fundamentals of C programming.
2. Make use of loops, decision making statements and functions to solve the problem.
3. Implement different Operations on Arrays.
4. Understand Pointers, Structures and Unions.

B.Com (CA) – III Year V Semester
Course: PROGRAMMING IN C

Course Code: PC5206   **No. of Hours/Week: 5**

Course Outcomes:
At the end of the course the student will be able to

1. Understand the fundamentals of C programming.
2. Make use of loops, decision making statements and functions to solve the problem.
3. Implement different Operations on Arrays.
4. Understand Pointers, Structures and Unions.

B.Com (CA) – III Year V Semester
Course: DATA BASE MANAGEMENT SYSTEMS

Course Code: DBM5208   **No. of Hours/Week: 5**

Course Outcomes:
At the end of the course the student will be able to

1. Understand DBMS concepts, data models and Architecture.
2. Understand ER concepts and ER mapping to relational model
3. Improve the database design by normalization.
4. Make use of SQL to retrieve and maintain relational database.
5. Illustrate various constructs in PL/SQL.

B.Com (CA) – III Year V Semester
Course: WEB TECHNOLOGIES

Course Code: WT5209   **No. of Hours/Week: 5**

Course Outcomes:
At the end of the course the student will be able to
1. Write well-structured, easily maintained, standards-compliant, accessible HTML code to design a web page.
2. Design well-structured, easily maintained CSS code to present HTML pages in different ways.
3. Know the basics of java script to perform client side programming
4. Build dynamic web pages using JavaScript.

B.Com (CA) – III Year VI Semester
Course: E-COMMERCE

Course Code: ECE6209   **No. of Hours/Week: 5**

Course Outcomes:

At the end of the course the student will be able to

1. Recognize the fundamental principles of e-Business and e-Commerce
2. Describe scenarios for B2B e-commerce.
3. Identify the role of internet and extranet in E-Commerce.
4. Explain policy and regulatory issues in E-commerce.
5. Identify the necessary infrastructure for implementing E-Commerce.

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KAKINADA

A.S.D. GOVERNMENT DEGREE COLLEGE FOR WOMEN (A)

DEPARTMENT OF COMPUTER APPLICATIONS

ACADEMIC YEAR: 2019-2020

COURSE OUTCOMES

B.Com (CA) – I Year I Semester
Course: COMPUTER FUNDAMENTALS & PHOTOSHOP

Course Code: CFP1204   **No. of Hours/Week: 5**

Course Outcomes:

At the end of the course the student will be able to

1. Understand the vocabulary of key terms related to the computer and able to identify the components of a personal computer system.
2. Identify the working principles of input and output devices and basics of different types of memories.
3. Work with the Photoshop workspace
4. Make use of Photoshop tools to modify and adjust images.
5. Create new layers; perform other basic layer functions and usage of filters.

B.Com (CA) – I Year II Semester
Course: ENTERPRISE RESOURCE PLANNING

Course Code: ERP2204   **No. of Hours/Week: 5**

Course Outcomes:

At the end of the course the student will be able to

6. To understand concepts of reengineering and how they relate to ERP system implementations.
7. To understand the steps and activities in the ERP life cycle.
8. To be able to map business processes using process mapping techniques.
9. Make basic use of Enterprise software, and its role in integrating business functions.
10. Discuss recent extensions of ERP.

B.Com (CA) – II Year III Semester
Course: OFFICE AUTOMATION TOOLS

Course Code: OAT3204   **No. of Hours/Week: 5**

Course Outcomes:

At the end of the course the student will be able to

6. Know the basic concepts of MS-Excel
7. Understand the usage of different functions in MS-Excel.
8. Usage of different types of charts and macros
9. Know the basic concepts of MS-Access
10. Usage of queries and reports in MS-Access.

B.Com (CA) – II Year IV Semester
Course: PROGRAMMING IN C

Course Code: PC4204   **No. of Hours/Week: 5**

Course Outcomes:

At the end of the course the student will be able to

5. Understand the fundamentals of C programming.
6. Make use of loops, decision making statements and functions to solve the problem.
7. Implement different Operations on Arrays.
8. Understand Pointers, Structures and Unions.

B.Com (CA) – III Year V Semester
Course: DATA BASE MANAGEMENT SYSTEMS

Course Code: DBM5208   **No. of Hours/Week: 5**

Course Outcomes:

At the end of the course the student will be able to

6. Understand DBMS concepts, data models and Architecture.
7. Understand ER concepts and ER mapping to relational model
8. Improve the database design by normalization.
9. Make use of SQL to retrieve and maintain relational database.
10. Illustrate various constructs in PL/SQL.

B.Com (CA) – III Year V Semester
Course: WEB TECHNOLOGIES

Course Code: WT5209   **No. of Hours/Week: 5**

Course Outcomes:

At the end of the course the student will be able to

5. Write well-structured, easily maintained, standards-compliant, accessible HTML code to design a web page.
6. Design well-structured, easily maintained CSS code to present HTML pages in different ways.
7. Know the basics of java script to perform client side programming
8. Build dynamic web pages using JavaScript.

B.Com (CA) – III Year VI Semester
Course: E-COMMERCE

Course Code: ECE6209   **No. of Hours/Week: 5**

Course Outcomes:

At the end of the course the student will be able to

6. Recognize the fundamental principles of e-Business and e-Commerce
7. Describe scenarios for B2B e-commerce.
8. Identify the role of internet and extranet in E-Commerce.
9. Explain policy and regulatory issues in E-commerce.
10. Identify the necessary infrastructure for implementing E-Commerce.

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A.S.D. GOVERNMENT DEGREE COLLEGE FOR WOMEN (A)
DEPARTMENT OF COMPUTER APPLICATIONS
ACADEMIC YEAR: 2020-2021

B.COM(CA) - COURSE OUTCOMES

B.Com (CA) – I Year I Semester
Course: Information Technology

Course Code: IT201204   **No. of Hours/Week: 3**
Paper I

Course Outcomes:
At the end of the course, the student is expected to demonstrate the following cognitive abilities (thinking skill) and psycho-motor skills.

A. *Remembers and states in a systematic way (Knowledge)*
1. Describe the fundamental hardware components that make up a computer's hardware and the role of each of these components
2. Understand the difference between an operating system and an application program, and what each is used for in a computer
3. Use technology ethically, safely, securely, and legally
4. Use systems development, word-processing, spreadsheet, and presentation software to solve basic information systems problems

B. *Explains (Understanding)*
5. Apply standard statistical inference procedures to draw conclusions from data
6. Retrieve information and create reports from databases
7. Interpret, produce, and present work-related documents and information effectively and accurately

C. *Critically examines, using data and figures (Analysis and Evaluation**)*
8. Analyze compression techniques and file formats to determine effective ways of securing, managing, and transferring data
9. Identify and analyze user needs and to take them into account in the selection, Creation, integration, evaluation, and administration of computing based systems.
10. Analyses a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions.
11. Identify and analyze computer hardware, software

D. Working in 'Outside Syllabus *Area' under a Co-curricular Activity* (Creativity)
Design, implement, and evaluate a computing-based solution to meet a given set of Computing requirements in the context of the program's discipline.

E. Efficiently learn and use Microsoft Office applications.

B.Com (CA) – I Year I Semester
Course: Information Technology Lab

Course Code: IT201204P   **No. of Hours/Week: 2**
Course Outcomes:

At the end of the course student will be able to
- to perform documentation using MS Word
- to enter and manipulate data in Excel
- to perform presentation skills
- to manage databases using MS Access

B.Com (CA) – I Year II Semester
Course: E-COMMERCE AND WEB DESIGNING

Course Code: EC202204   **No. of Hours/Week: 3**
Paper II

Course Outcomes:
At the end of the course, the students is expected to demonstrate the following cognitive abilities (thinking skill) and psychomotor skills.
A.Remembers and states in a systematic way (Knowledge)
1. Understand the foundations and importance of E-commerce
2. Define Internet trading relationships including Business to Consumer, Business to Business, Intra-organizational
3. Describe the infrastructure for E-commerce
4. Discuss legal issues and privacy in E-Commerce
5. Understand the principles of creating an effective web page, including an in-depth Consideration of information architecture

B. Explains (Understanding)
6. Recognize and discuss global E-commerce issues
7. Learn the language of the web: HTML and CSS.

C. Critically examines, using data and figures (Analysis and Evaluation)
8. Analyze the impact of E-commerce on business models and strategy
9. Assess electronic payment systems
10. Exploring a web development framework as an implementation example and create dynamically generated web site complete with user accounts, page level security, modular design using css

D. Working in 'Outside Syllabus *Area' under a Co-curricular Activity*(Creativity)

Use the Systems Design Approach to implement websites with the following steps:
- Define purpose of the site and subsections
- Identify the audience
- Design and/or collect site content
- Design the website theme and navigational structure
- Design & develop web pages including: CSS Style Rules, Typography, Hyperlinks, Lists, Tables, Frames, Forms, Images, Behaviours, CSS Layouts

E. Build a site based on the design decisions and progressively incorporate tools and techniques covered.

Course Code: EC202204P   **No. of Hours/Week: 2**

Course Outcomes:
   At the end of the course the student will be able to
   1. Make use of HTML tags to design Web pages.
   2. Develop dynamic Web pages

B.Com (CA) – II Year III Semester
Course: OFFICE AUTOMATION TOOLS

Course Code: OAT3204   **No. of Hours/Week: 5**

Course Outcomes:
At the end of the course the student will be able to

   11. Know the basic concepts of MS-Excel
   12. Understand the usage of different functions in MS-Excel.
   13. Usage of different types of charts and macros
   14. Know the basic concepts of MS-Access
   15. Usage of queries and reports in MS-Access.

B.Com (CA) – II Year IV Semester
Course: PROGRAMMING IN C

Course Code: PC4204   **No. of Hours/Week: 5**

Course Outcomes:
At the end of the course the student will be able to

   9. Understand the fundamentals of C programming.
   10.   Make use of loops, decision making statements and functions to solve the problem.
   11.   Implement different Operations on Arrays.
   12.   Understand Pointers, Structures and Unions.

B.Com (CA) – III Year V Semester
Course: DATA BASE MANAGEMENT SYSTEMS

Course Code: DBM5208   **No. of Hours/Week: 5**

Course Outcomes:
At the end of the course the student will be able to

   11. Understand DBMS concepts, data models and Architecture.
   12. Understand ER concepts and ER mapping to relational model
   13. Improve the database design by normalization.
   14. Make use of SQL to retrieve and maintain relational database.
   15. Illustrate various constructs in PL/SQL.

B.Com (CA) – III Year V Semester
Course: WEB TECHNOLOGIES

Course Code: WT5209   **No. of Hours/Week: 5**

Course Outcomes:

At the end of the course the student will be able to

9. Write well-structured, easily maintained, standards-compliant, accessible HTML code to design a web page.
10. Design well-structured, easily maintained CSS code to present HTML pages in different ways.
11. Know the basics of java script to perform client side programming
12. Build dynamic web pages using JavaScript.

B.Com (CA) – III Year VI Semester
Course: E-COMMERCE

Course Code: ECE6209   **No. of Hours/Week: 5**

Course Outcomes:

At the end of the course the student will be able to

11. Recognize the fundamental principles of e-Business and e-Commerce
12. Describe scenarios for B2B e-commerce.
13. Identify the role of internet and extranet in E-Commerce.
14. Explain policy and regulatory issues in E-commerce.
15. Identify the necessary infrastructure for implementing E-Commerce.

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DEPARTMENT OF COMPUTER APPLICATIONS
ACADEMIC YEAR: 2021-2022

COURSE OUTCOMES

B.Com (CA) – I Year I Semester
Course: Information Technology

Course Code: IT201204   **No. of Hours/Week: 3**
Paper I

Course Outcomes:
At the end of the course, the student is expected to demonstrate the following cognitive abilities (thinking skill) and psycho-motor skills.

B. Remembers and states in a systematic way (Knowledge)
1. Describe the fundamental hardware components that make up a computer's hardware and the role of each of these components
2. Understand the difference between an operating system and an application program, and what each is used for in a computer
3. Use technology ethically, safely, securely, and legally
4. Use systems development, word-processing, spreadsheet, and presentation software to solve basic information systems problems

B. Explains (Understanding)
5. Apply standard statistical inference procedures to draw conclusions from data
6. Retrieve information and create reports from databases
7. Interpret, produce, and present work-related documents and information effectively and accurately

C. Critically examines, using data and figures (Analysis and Evaluation**)
8. Analyze compression techniques and file formats to determine effective ways of securing, managing, and transferring data
9. Identify and analyze user needs and to take them into account in the selection, Creation, integration, evaluation, and administration of computing based systems.
10. Analyses a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions.
11. Identify and analyze computer hardware, software

D. Working in 'Outside Syllabus *Area' under a Co-curricular Activity* (Creativity)
Design, implement, and evaluate a computing-based solution to meet a given set of Computing requirements in the context of the program's discipline.

E. Efficiently learn and use Microsoft Office applications.

B.Com (CA) – I Year I Semester
Course: Information Technology Lab

Course Code: IT201204P   **No. of Hours/Week: 2**

Course Outcomes:

At the end of the course student will be able to
- to perform documentation using MS Word
- to enter and manipulate data in Excel
- to perform presentation skills
- to manage databases using MS Access

B.Com (CA) – I Year II Semester
Course: E-COMMERCE AND WEB DESIGNING

Course Code: EC202204   **No. of Hours/Week: 3**

Paper II

Course Outcomes:

At the end of the course, the students is expected to demonstrate the following cognitive abilities (thinking skill) and psychomotor skills.

A.Remembers and states in a systematic way (Knowledge)
1. Understand the foundations and importance of E-commerce
2. Define Internet trading relationships including Business to Consumer, Business to Business, Intra-organizational
3. Describe the infrastructure for E-commerce
4. Discuss legal issues and privacy in E-Commerce
5. Understand the principles of creating an effective web page, including an in-depth Consideration of information architecture

B. Explains (Understanding)
6. Recognize and discuss global E-commerce issues
7. Learn the language of the web: HTML and CSS.

C. Critically examines, using data and figures (Analysis and Evaluation)
8. Analyze the impact of E-commerce on business models and strategy
9. Assess electronic payment systems
10. Exploring a web development framework as an implementation example and create dynamically generated web site complete with user accounts, page level security, modular design using css

D. Working in 'Outside Syllabus *Area' under a Co-curricular Activity*(Creativity)

Use the Systems Design Approach to implement websites with the following steps:
- Define purpose of the site and subsections
- Identify the audience
- Design and/or collect site content
- Design the website theme and navigational structure
- Design & develop web pages including: CSS Style Rules, Typography, Hyperlinks, Lists, Tables, Frames, Forms, Images, Behaviours, CSS Layouts

E. Build a site based on the design decisions and progressively incorporate tools and techniques covered.

Course: E-COMMERCE AND WEB DESIGNING LAB

Course Code: EC202204P   **No. of Hours/Week: 2**

Course Outcomes:

At the end of the course the student will be able to
3. Make use of HTML tags to design Web pages.
4. Develop dynamic Web pages

B.Com (CA) II Year – III Semester
Course: Programming with C & C++

Course Code: PC203204   **No. of Hours/Week: 3**
Paper : III

Course Outcomes:

At the end of the course, the student is expected to demonstrate the following abilities (thinking skill) and psychomotor skills.

A. Remembers and states in a systematic way (Knowledge)

1. Develop programming skills
2. Declaration of variables and constants use of operators and expressions
3. learn the syntax and semantics of programming language
4. Be familiar with programming environment of C and C++
5. Ability to work with textual information (characters and strings) & arrays

B. Explains (Understanding)
6. Understanding a functional hierarchical code organization
7. Understanding a concept of object thinking within the framework of functional model
8. Write program on a computer, edit, compile, debug, correct, recompile and run it
9. Choose the right data representation formats based on the requirements of the problem
10. Analyze how C++ improves C with object-oriented features
11. Evaluate comparisons and limitations of the various programming constructs andchoose correct one for the task in hand.

C. Critically examines, using data and figures (Analysis and Evaluation)
D. Working in 'Outside Syllabus Area' under a Co-curricular Activity(Creativity) Planning of structure and content, writing, updating and modifying computer programs for user solutions
E. Exploring C programming and Design C++ classes for code reuse (Practical skills***)

B.Com(CA) II Year – III Semester
Course: Programming with C & C++ LAB

Course Code: PC203204P   **No. of Hours/Week: 2**

Course Outcomes:

At the end of the course the student will be able to
1. Implement programs using fundamental features of C Language.
2. Solve problems with the use of loops, decision making statements and functions.
3. Implement programs performing various Operations on Arrays
4. Implement programs using constructor.
5. Implement programs to implement inheritance
6. Implement programs for operator overloading

Course: Database Management Systems

Course Code: DBMS204207   **No. of Hours/Week: 3**
Paper : III

Course Outcomes:
At the end of the course, the students is expected to demonstrate the following abilities (thinking skill) and psychomotor skills.

A.   Remembers and states in a systematic way (Knowledge)

1. Understand the role of a database management system in an organization.
2. Understand basic database concepts, including the structure and operation of therelational data model.
3. Understand and successfully apply logical database design principles, including E-R diagrams and database normalization
4. Understand Functional Dependency and Functional Decomposition

B. Explains (Understanding)

5. To design and build a simple database system and demonstrate competence with thefundamental tasks involved with modeling, designing, and implementing a DBMS.
6. Perform PL/SQL programming using concept of Cursor Management, ErrorHandling, Packages

C. *Critically examines, using data and figures (Analysis and Evaluation)*
7. Apply various Normalization techniques
8. Model an application's data requirements using conceptual modeling tools like ER diagrams and design database schemas based on the conceptual model

D. Working in 'Outside Syllabus *Area' under a Co-curricular Activity*(Creativity)
Design and implement a small database project

E. Construct simple and moderately advanced database queries using Structured Query Language (SQL)(Practical skills)

B.Com (CA) II Year – IV Semester
Course: Database Management Systems Lab

Course Code: DBMS204207P   **No. of Hours/Week: 2**

Course Outcomes:
At the end of the course the student will be able to
1. Design database for the real world scenarios
2. Make use of SQL and PL/SQL to efficiently retrieve and maintain relational database.

B.Com (CA) II Year – IV Semester
Course: Object Oriented Programming with Java

Course Code: OPJ204208   **No. of Hours/Week: 3**
Paper V

Course Outcomes:

At the end of the course, the student will able to;

1. Understanding the meaning and necessity of audit in modern era

2. Comprehend the role of auditor in avoiding the corporate frauds

3. Identify the steps involved in performing audit process

4. Determine the appropriate audit report for a given audit situation

5. Apply auditing practices to different types of business entities

6. Plan an audit by considering concepts of evidence, risk and materiality

B.Com (CA) II Year – IV Semester
Course: Object Oriented Programming with Java Lab

Course Code: OPJ204208P   **No. of Hours/Week: 3**
Paper V

Course Outcomes:
At the end of the course the student will be able to

1. Implement programs using fundamental features of Java Language.
2. Solve problems with the use of loops, decision making statements and functions.
3. Implement programs performing various Operations on Arrays

B.Com (CA) – III Year V Semester
Course: DATA BASE MANAGEMENT SYSTEMS

Course Code: DBM5208   **No. of Hours/Week: 5**

Course Outcomes:
At the end of the course the student will be able to

16. Understand DBMS concepts, data models and Architecture.
17. Understand ER concepts and ER mapping to relational model
18. Improve the database design by normalization.
19. Make use of SQL to retrieve and maintain relational database.
20. Illustrate various constructs in PL/SQL.

B.Com (CA) – III Year V Semester
Course: WEB TECHNOLOGIES

Course Code: WT5209   **No. of Hours/Week: 5**

Course Outcomes:

At the end of the course the student will be able to

13. Write well-structured, easily maintained, standards-compliant, accessible HTML code to design a web page.
14. Design well-structured, easily maintained CSS code to present HTML pages in different ways.
15. Know the basics of java script to perform client side programming
16. Build dynamic web pages using JavaScript.

B.Com (CA) – III Year VI Semester
Course: E-COMMERCE

Course Code: ECE6209   **No. of Hours/Week: 5**

Course Outcomes:

At the end of the course the student will be able to

16. Recognize the fundamental principles of e-Business and e-Commerce
17. Describe scenarios for B2B e-commerce.
18. Identify the role of internet and extranet in E-Commerce.
19. Explain policy and regulatory issues in E-commerce.
20. Identify the necessary infrastructure for implementing E-Commerce.

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A.S.D. GOVERNMENT DEGREE COLLEGE FOR WOMEN (A), KAKINADA
DEPARTMENT OF COMPUTER APPLICATIONS
ACADEMIC YEAR: 2022-2023

B.COM(CA) COURSE OUTCOMES

B.Com (CA) – I Year I Semester
Course: Information Technology

Course Code: IT201204 No. of Hours/Week: 3
Paper I

Course Outcomes:
At the end of the course, the student is expected to demonstrate the following cognitive abilities (thinking skill) and psycho-motor skills.

C. Remembers and states in a systematic way (Knowledge)
1. Describe the fundamental hardware components that make up a computer's hardware and the role of each of these components
2. Understand the difference between an operating system and an application program, and what each is used for in a computer
3. Use technology ethically, safely, securely, and legally
4. Use systems development, word-processing, spreadsheet, and presentation software to solve basic information systems problems

B. Explains (Understanding)
5. Apply standard statistical inference procedures to draw conclusions from data
6. Retrieve information and create reports from databases
7. Interpret, produce, and present work-related documents and information effectively and accurately

C. Critically examines, using data and figures (Analysis and Evaluation**)
8. Analyze compression techniques and file formats to determine effective ways of securing, managing, and transferring data
9. Identify and analyze user needs and to take them into account in the selection, Creation, integration, evaluation, and administration of computing based systems.
10. Analyses a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions.
11. Identify and analyze computer hardware, software

D. Working in 'Outside Syllabus *Area' under a Co-curricular Activity* (Creativity)
Design, implement, and evaluate a computing-based solution to meet a given set of Computing requirements in the context of the program's discipline.

E. Efficiently learn and use Microsoft Office applications.

B.Com (CA) – I Year I Semester
Course: Information Technology Lab

Course Code: IT201204P   **No. of Hours/Week: 2**

Course Outcomes:

At the end of the course student will be able to
- to perform documentation using MS Word
- to enter and manipulate data in Excel
- to perform presentation skills
- to manage databases using MS Access

B.Com (CA) – I Year II Semester
Course: E-COMMERCE AND WEB DESIGNING

Course Code: EC202204   **No. of Hours/Week: 3**

Paper II

Learning Outcomes:

At the end of the course, the students is expected to demonstrate the following cognitive abilities (thinking skill) and psychomotor skills.

A. Remembers and states in a systematic way (Knowledge)
1. Understand the foundations and importance of E-commerce
2. Define Internet trading relationships including Business to Consumer, Business to Business, Intra-organizational
3. Describe the infrastructure for E-commerce
4. Discuss legal issues and privacy in E-Commerce
5. Understand the principles of creating an effective web page, including an in-depth Consideration of information architecture

B. Explains (Understanding)
6. Recognize and discuss global E-commerce issues
7. Learn the language of the web: HTML and CSS.

C. Critically examines, using data and figures (Analysis and Evaluation)
8. Analyze the impact of E-commerce on business models and strategy
9. Assess electronic payment systems
10. Exploring a web development framework as an implementation example and create dynamically generated web site complete with user accounts, page level security, modular design using css

D. Working in 'Outside Syllabus *Area' under a Co-curricular Activity*(Creativity)

Use the Systems Design Approach to implement websites with the following steps:
- Define purpose of the site and subsections
- Identify the audience
- Design and/or collect site content
- Design the website theme and navigational structure
- Design & develop web pages including: CSS Style Rules, Typography, Hyperlinks, Lists, Tables, Frames, Forms, Images, Behaviours, CSS Layouts

E. Build a site based on the design decisions and progressively incorporate tools and techniques covered.

Course Code: EC202204P　　　　　　　　　　　　　**No. of Hours/Week: 2**

Course Outcomes:

At the end of the course the student will be able to

5. Make use of HTML tags to design Web pages.
6. Develop dynamic Web pages

B.Com (CA) II Year – III Semester
Course: Programming with C & C++

Course Code: PC203204　　　　　　　　　　　　　**No. of Hours/Week: 3**
Paper : III

Course Outcomes:
At the end of the course, the student is expected to demonstrate the following abilities (thinking skill) and psychomotor skills.

A. Remembers and states in a systematic way (Knowledge)

1. Develop programming skills
2. Declaration of variables and constants use of operators and expressions
3. learn the syntax and semantics of programming language
4. Be familiar with programming environment of C and C++
5. Ability to work with textual information (characters and strings) & arrays

F. Explains (Understanding)

12. Understanding a functional hierarchical code organization
13. Understanding a concept of object thinking within the framework of functional model
14. Write program on a computer, edit, compile, debug, correct, recompile and run it
15. Choose the right data representation formats based on the requirements of the problem
16. Analyze how C++ improves C with object-oriented features
17. Evaluate comparisons and limitations of the various programming constructs andchoose correct one for the task in hand.

G. Critically examines, using data and figures (Analysis and Evaluation)

H. Working in 'Outside Syllabus Area' under a Co-curricular Activity(Creativity) Planning of structure and content, writing, updating and modifying computer programs for user solutions

I. Exploring C programming and Design C++ classes for code reuse (Practical skills***)

B.Com(CA) II Year – III Semester
Course: Programming with C & C++ LAB

Course Code: PC203204P　　　　　　　　　　　　　**No. of Hours/Week: 2**
Course Outcomes:
At the end of the course the student will be able to

7. Implement programs using fundamental features of C Language.
8. Solve problems with the use of loops, decision making statements and functions.
9. Implement programs performing various Operations on Arrays
10. Implement programs using constructor.
11. Implement programs to implement inheritance
12. Implement programs for operator overloading

B.Com(CA) II Year – IV Semester
Course: Database Management Systems

Course Code: DBMS204207   **No. of Hours/Week: 3**
Paper : III

Course Outcomes:
At the end of the course, the students is expected to demonstrate the following abilities (thinking skill) and psychomotor skills.

D. Remembers and states in a systematic way (Knowledge)

1. Understand the role of a database management system in an organization.
2. Understand basic database concepts, including the structure and operation of therelational data model.
3. Understand and successfully apply logical database design principles, including E-R diagrams and database normalization
4. Understand Functional Dependency and Functional Decomposition

E. Explains (Understanding)

7. To design and build a simple database system and demonstrate competence with thefundamental tasks involved with modeling, designing, and implementing a DBMS.
8. Perform PL/SQL programming using concept of Cursor Management, ErrorHandling, Packages

F. Critically examines, using data and figures (Analysis and Evaluation)
7. Apply various Normalization techniques
8. Model an application's data requirements using conceptual modeling tools like ER diagrams and design database schemas based on the conceptual model

F. Working in 'Outside Syllabus *Area' under a Co-curricular Activity*(Creativity) Design and implement a small database project

G. Construct simple and moderately advanced database queries using Structured Query Language (SQL)(Practical skills)

B.Com (CA) II Year – IV Semester
Course: Database Management Systems Lab

Course Code: DBMS204207P   **No. of Hours/Week: 2**

Course Outcomes:
At the end of the course the student will be able to
3. Design database for the real world scenarios
4. Make use of SQL and PL/SQL to efficiently retrieve and maintain relational database.

B.Com (CA) III Year – V Semester
Paper: VIA, Course: BIG DATA ANALYTICS USING R

Course Code: BDA205207   **No. of Hours/Week: 3**

Paper : VIA

Course Outcomes:

Upon successful completion of the course, a student will be able to:

1. Understand data and classification of digital data.
2. Understand Big Data Analytics.
3. Load data in to R.
4. Organize data in the form of R objects and manipulate them as needed.
5. Perform analytics using R programming.

B.Com (CA) III Year – V Semester
Paper: VIIA Course: DATA SCIENCE USING PYTHON

Course Code: DSP205208   **No. of Hours/Week: 3**

Paper : 7A

Course Outcomes:

Upon successful completion of the course, a student will be able to:

1. Understand basic concepts of data science

2. Understand why python is a useful scripting language for developers.

3. Use standard programming constructs like selection and repetition.

4. Use aggregated data (list, tuple, and dictionary).

5. Implement functions and modules.

Signature of the HOD
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