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Minutes of 34th Meeting Board of Studies in Computer Science
SACRED HEART COLLEGE (AUTONOMOUS), TIRUPATTUR, VELLORE DT
Date: 9th April, 2022 Time: 10:30am Venue: DMT Hall

I. Constitution of the Board

- | | |
|---|----------------------------|
| 1. Dr. L. Ravi | Chairperson – UG & M.Phil. |
| 2. Dr. S. Sagayaraj | Chairperson – PG |
| 3. Mr. J. John Arokiaraj | Member |
| 4. Dr. M. Maria Dominic | Member |
| 5. Mrs. A. Josephine Sahaya Mala | Member |
| 6. Mrs. R. Sandrilla | Member |
| 7. Mrs. M. Poovizhi | Member |
| 8. Mr. P. Karthick | Member |
| 9. Mr. S. John Bosco | Member |
| 10. Miss D. Gajalakshmi | Member |
| 11. Dr. R. Denis | Member |
| 12. Mr. M. Sarlinraj | Member |
| 13. Mr. S. Mohanraj | Member |
| 14. Mr. C. Sathishkumar | Member |
| 15. Dr. M. Santhoshkumar | Member |
| 16. Dr. E. George Dharma Prakash Raj Associate Professor, School of Computer Science and Engineering, Bharathidasan University, Tiruchirapalli, Tamil Nadu, India. Cell: 9443191790 Email: georgeprakashraj@yahoo.com | University Nominee |
| 17. Dr. D. I. George Amalarethnam Associate Professor Department of Computer Science Jamal Mohamad College (Autonomous) Tiruchirapalli – 620 020 Tamilnadu, India Cell: 9443179535 Email: di_george@ymail.com | Subject Expert |
| 18. Ms. Sorna Project Assistant NPTEL office, 3 rd Floor ICSR Building IIT Madras, Chennai 600036 Cell: 9976099905 sorna@nptel.iitm.ac.in | Alumni Representative |

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|--|-------------------------|
| 19. K Bhuvaneshwari Technical Lead Mindtree Limited Bangalore Cell: 9626032108 Email: bhuvanathen@gmail.com | Industry Representative |
| 20. Mr. MD Irfan H (BP200501) II M.Sc. Computer Science md31irfan@gmail.com | Student Member |
| 21. Mr. S. Kalaiyaran (AU190508) III B.Sc. Computer Science kalaijeeva127@gmail.com | Student Member |
| 22. Mr. B. Faizudeen (BU190523) III B.Sc. Computer Science faizudeen4395@gmail.com | Student Member |

II. Agenda

1. Prayer of Invocation
2. Welcome Address – Dr. S. Sagayaraj
3. Minutes of the 3rd meeting of the Board of Studies in Computer Science –Prof. R. Sandrilla
4. Business to be transacted
 - a. Feedback of courses of I year in the B.Sc. Programme for the Curriculum introduced in the year 2021-2022
 - b. Approval of the syllabi & Regulations for Non-Major Elective Courses offered to other major students in the V & VI Semesters with effect from the academic year 2021-2022– Dr.M.Maria Dominic &Dr.M.Santhoshkumar
 - i. Internet Fundamentals
 - ii. Web Design
 - c. Approval of the syllabi & Regulations for Courses offered to BBA programme in the V & VI Semesters with effect from the academic year 2021-2022–Prof. R. Sandrilla
 - i. Computer Applications in Business
 - ii. Practical I: Computer Applications in Business
 - iii. E-commerce and its Applications
 - iv. Practical II : E-commerce and its Applications
 - d. Review of OBE Framework for B.Sc. Computer Science Programme
 - e. Panel of External Examiners
5. Concluding Remarks by the external members.
6. Vote of thanks – Prof. A. Josephine Sahaya Mala

III. Proceedings

1. The meeting started with a prayer song.
2. Dr. S. Sagayaraj welcomed the members of the Board.

3. Mr. J. John Arockiaraj (Member) was not present for the meeting. He has communicated to Chairperson (UG) about his inability to attend.
4. Mrs. R. Sandrilla read the minutes of 32nd Board of Studies meeting and it was approved.
5. Reviewed the Feedback of courses of I year in the B.Sc. Programme for the Curriculum introduced in the year 2021-2022
6. Dr.M.Maria Dominic, Dr.M.Santhoshkumar presented the syllabi & Regulations for Non-Major Elective Courses offered to other major students in the V & VI Semesters. Dr. E. George Dharma Prakash Raj suggested that cloud storage can be included in the course Internet Fundamentals. Dr. D. I. George Amalarethinam suggested for providing practical sessions for students in non-major elective courses. It can be done in the lab or students can practice using a laptop or mobile during the class time. It was also suggested to have workshop type inputs for NME courses. Dr. E. George Dharma Prakash Raj proposed to include as a reference book written by C.Xavier's on Web Technology.
7. Prof. R. Sandrilla presented the syllabi & Regulations for Courses offered to BBA programme in the V & VI Semesters. Dr. E. George Dharma Prakash Raj recommended for changing the title.

IV. Resolutions

1. Resolved to recommend syllabus and regulations for the Non-Major elective courses offered to other major students.
 - i. Internet Fundamentals
 - ii. Web Design
2. Resolved to recommend syllabus and regulations for the theory and practical courses offered to BBA programme.
 - i. Computer Applications in Business
 - ii. Practical I: Computer Applications in Business
 - iii. E-commerce and its Applications
 - iv. Practical II : E-commerce and its Applications
3. Resolved to recommend the OBE Framework for the B.Sc. Computer Science.

V. CONTENTS OF THE SYLLABUS
[SEMESTER V]

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NON – MAJOR ELECTIVE:INTERNET FUNDAMENTALS

1. Course Objectives

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

| S. No. | Course Outcomes | Blooms Taxonomy |
|--------|---|-----------------|
| 1 | Compute Fundamentals of Internet and Web Server | Knowledge |
| 2 | Relate and Contrast Search Engines | Understanding |
| 3 | Reach E-Mailing Abilities | Applying |
| 4 | Distinguish Types of Networks and Study Web Communication Tools | Analyzing |
| 5 | Review Social Media Tools | Evaluating |
| 6 | Generalize Various Internet Services Effectively | Creating |

2. Course Outline

UNIT - I: Internet Fundamentals

Internet: Fundamentals of Internet – How to Connect to Internet – URLs and Domain Name System – Principles of Web pages and Web sites.

Web Browsers: Functions of Web browsers – Settings of Web Browser- Connect to and access the Internet

UNIT - II: Search Engines

Web Search Basics: Web Index - Search Engines – Meta Search Engines - Types of Web Search Engines - Search the Internet - Conduct an Advanced Search – Tips and Techniques in Search – Search Functions - Searching Images, Videos and E-Books – How to download the content in search engine.

UNIT - III: E-Mail

E-Mail Basics - Creation of an Email Account - Use of E-mail – Privacy of E-mail – Getting Started: Composing/Sending / Replying / Forwarding an E-Mail Message – Address Book – Signature – File Attachment Facility – Schedule Send - Setting Priority– Ethics: Netiquettes – E-Mail advantages and disadvantages.

UNIT - IV: Networking and Communications

Networking: Types of networks – Topology – Protocols - TCP/IP, HTTP, SMTP, POP, IP – Network Devices - Hub, Repeater, Switch, Bridge, Router.

Communications: Tools of Web Communications (Google Meet, Zoom) – File Transfer – Voice Over IP – Screen Sharing.

UNIT - V: Social Media

Social Networking and Web 2.0 concepts – Types of Social Media Tools and Applications – comparisons of Social Media and Applications – Setup and use of Social Media (WhatsApp, Facebook, Twitter, Instagram, YouTube, LinkedIn).

3. Teaching Resources

Textbook

1. Internet Fundamentals, Lecture Material Prepared by the Faculty members of Department of Computer Science, Sacred Heart College, Tirupattur - 635601

References

1. How the Internet works – Techmedia – Preston Gralla Millennium Edition, Fourth Edition
2. The Internet – Christian Crumlish – No experience required. First Edition. BPB Publications, 1999.

Web References

1. [Internet Fundamentals - Wikiversity](#)
2. [le-17.p65 \(nios.ac.in\)](#)
3. <http://www.gcflernfree.org/internet>

4. Course Outcomes

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

| S. No. | Course Outcomes | Blooms Taxonomy |
|--------|---|-----------------|
| 1 | Enumerate Fundamentals of Internet and Web Server | Knowledge |
| 2 | Compare and Construct Search Engines | Understanding |
| 3 | Attain E-Mailing Abilities | Applying |
| 4 | Differentiate Types of Networks and Examine Web Communication Tools | Analyzing |
| 5 | Appraise Social Media Tools | Evaluating |
| 6 | Handle Various Internet Services Effectively | Creating |

NON-MAJOR ELECTIVE - II: WEB DESIGN

1. Course Objectives

| S.No. | Course Objectives | Blooms Taxonomy |
|-------|---|-----------------|
| 1 | To Recognize Tags, Elements and Attributes | Knowledge |
| 2 | To Abridge Formatting tags | Understanding |
| 3 | To Assign image, Link and List to a HTML Document | Applying |
| 4 | To Describe HTML Table and Inspect Frameset | Analysing |
| 5 | To Elucidatethe HTML Forms | Evaluating |
| 6 | To Generate an effective Web Page using HTML | Creating |

2. Course Outcomes

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

| S.No. | Course Outcomes | Blooms Taxonomy |
|-------|---|-----------------|
| 1 | Identify Tags, Elements and Attributes | Knowledge |
| 2 | Summarize Formatting tags | Understanding |
| 3 | Apply image, Link and List to a HTML Document | Applying |
| 4 | Characterize HTML Table and Examine Frameset | Analysing |
| 5 | Explainthe HTML Forms | Evaluating |
| 6 | Creating an effective Web Page using HTML | Creating |

3. Course Outline

Unit - I: HTML Basics

HTML Introduction – Web page: Static & Dynamic Page - Web Browsers - HTML Versions - HTML Tags – HTML Elements – HTML Attributes - HTML Editors - HTML Page Structure - HTML Basic tags: Head – Title – Body - Background - Heading tags – Paragraph tag – HR tag - Line break.

Unit - II: Formatting Tags

Presentational Element: Bold – Italic – Underline – Subscripted – Superscripted – Strike through - Emphasized – Strong – Inserted – Deleted – Phrase Elements: Abbreviation – Acronyms - Text Direction - Block quoted - Short quotation – citation – definition - Computer output tags: computer code – keyboard – variable – preformatted

Unit - III: Image, Links & List

HTML Images - Src Attribute - Dynsrc Attribute - Alt Attribute - Setting Height and Width of an Image - Map - Area - HTML Links - Hyperlinks - Hyperlinks Syntax - The target attribute - creating image as a link - HTML List: Ordered List - Unordered List - Definition List.

Unit - IV: Table and Frames

HTML Tables: Table attributes (Cell spacing, Cell Padding, Border, Width, Height) - Table Headers - Table Row - Define Table - Caption - Rows span - Cols span - Frames : The Frameset, No Frame Element - Creating Link between Frames -Nested Frameset.

Unit - V: Forms

HTML Form: Text Fields - Password Field - Radio Buttons - Checkboxes - Submit Button - Reset Button - Button - Select - option - text area.

4. Teaching Resources

Textbook

1. Jon Ducktt. "Web Programming with HTML, CSS & Java script". Wiley Publishing, 2005. (C Xavier)

Unit - I : Ch. 1.1, 1.3, 1.4

Unit - II : Ch. 1.5-1.7

Unit - III : Ch. 1.8, 2.1-2.3

Unit - IV : Ch. 6.1-6.3

Unit - V : Ch. 5.1-5.3

References

1. Joel Sklar, "Principles of Web Design", Singapore: Thomson Asia Pvt Ltd, 2000.
2. Powell, Thomas A., "Web Design - The Complete Reference", Tata McGraw Hill Edition, 2000.
3. C Xavier, "Web Technology and Design" New Age International Pvt Ltd, 2005

Web References

(i) Online Tutorial

http://www.w3schools.com/html/html_basic.asp

(ii) Online Quiz

<http://www.pskills.org/html.jsp>

(iii) Online Compiler

www.onlinehtmleditor.net

REGULATIONS FOR NME COURSES

1. Each theory course will have a maximum of 100 marks.
2. There is no External examination
3. For a theory course, Continuous Assessment (CA) is 100 marks
4. There is no passing minimum for CA
5. Evaluation Scheme for Continuous Assessment

| S.NO. | CA Component | Marks |
|--------------|-------------------------------------|------------|
| 1. | First CA | 25 |
| 2. | Second CA | 25 |
| 3. | Semester | 25 |
| 4. | Attendance | 5 |
| 5. | Assignments | 10 |
| 6. | Moodle Test/Seminars/Open Book Test | 10 |
| TOTAL | | 100 |

COURSES OFFERED TO BBA PROGRAMME

| Sem | Part | Course Title | Hrs. | Credits |
|------------|-------------|--|-------------|----------------|
| V | III | Computer Applications in Business | 4 | 3 |
| V | III | Practical I: Computer Applications in Business | 2 | 2 |
| VI | III | E-commerce and its Applications | 4 | 3 |
| VI | III | Practical II: E-commerce and its Applications | 2 | 2 |
| | | | 12 | 10 |

COMPUTER APPLICATIONS IN BUSINESS

1. Course Objectives

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

| S. No | CO-statement | Cognitive Level (K Level) |
|-------|--|---|
| CO-1 | Understand and Acquire knowledge on Office Package | K2 (Understanding and Applying) |
| CO-2 | Acquire the knowledge of Creating and Manipulating the data in sheets. | K3 and K4(Applying and Analysing) |
| CO-3 | Apply the knowledge to Create a Database Design and Generating a report using | K3 and K4(Applying and Analysing) |
| CO-4 | Recognize, compare powerful google tools for organizing, and Visualizing | K2, K5 and K6(Knowledge, Evaluating and creating) |
| CO-5 | Design a creative Presentation. | K6(Evaluating) |
| CO-6 | Analyse to use cloud-based program for creating and editing Professional Documentation | K6, k5 (Creating and Evaluating) |

2. Blue Print of the Question Paper

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

3. Course Outline

Unit – I: Introducing Office Software & Word Processor

Getting to know office: Starting – Introducing – Quick Access – Ribbon – Customize – Exit – Adding Data – Selecting Data – Editing Text – Deleting – Cut, Copy, Paste – Dragging – Undo – Redo – Sharing – Adding Pictures – Manipulating – Enhancing – Browsing Help – Searching – Making the Help window Easier to read – Typing Text in Word – Formatting Text – Designing your pages- Mail Merge.

Unit – II: Spread Sheet

Understanding Spreadsheets – Sorting – Formatting – Navigating – Searching – Editing – Clearing Data – Printing – Creating a formula – Using functions – Editing – Conditional Formatting – Data Validation – Goal Seeking – Creating Multiple scenarios – Auditing your formulas – Checking errors – Understanding parts of chart – Creating – Editing – Chart Tools – Spark lines – Organizing Lists in Pivot Tables.

Unit – III: Presentation

Defining purpose – Creation – Working with Text – Applying a Theme – Changing Background – Adding Graphics – Adding Movies – Adding sound – Spell Checking – Organizing slides – Adding Visual Transitions – Adding Hyperlinks – Viewing a Presentation – Creating a Handouts.

Unit – IV: Storing Stuff in Access

Using a Database – Designing – Editing and Modifying – Typing Data – Closing and Saving – Searching– Sorting – Querying – Using the Report Wizard – Manipulating the Data in a Report – Editing – Making Reports – Deleting a Report.

Unit–V:Google Docs, Sheets and Slides

Advantages of Google Docs- Working and Collaborating in Google Docs- Editing a Document in Docs– Sharing and Collaborating - Getting Started with Google Sheets – Entering, Editing, and Other Spreadsheet Basics- Using Charts, Graphs, and Diagrams- Working with multiple sheets- Creating Simple Formulas- Working with Functions - Getting Started with Your Presentation- Slide Basics – Adding Themes, Text, Shapes, and Images to Slides- Organizing Slides-Presenting the Slide Show.

4. Teaching Resources

Textbook

1. Gurty Leete, Ellen Finkelstein Mary Leete, “Openoffice.org for Dummies”, WileyPublishing, Inc.
Unit – II : Ch. 1-7
Unit – II : Ch. 8-10
Unit – III : Ch. 11-13
Unit - IV : Ch. 16-18
2. Ryan Teeter and Karl Barksdale, “Google Apps for Dummies” Willey India Pvt Ltd, New Delhi.
Unit – V : Ch. 10-13

References

1. Wallace Wang, “Microsoft Office 2010 for Dummies”, Willey India Pvt Ltd, New Delhi.
2. Gurty Leete, Ellen Finkelstein Mary Leete, “openoffice.org for Dummies”, Wiley Publishing, Inc.

Web References

(i) Online Tutorial

1. <https://www.openoffice.org/>
2. <https://en.wikipedia.org/wiki/OpenOffice.org>
3. <https://edu.gcfglobal.org/en/topics/googleapps/>

4. www.tutorialsforopenoffice.org/

(ii) **Online Quiz**

1. www.eduzip.com/computer-science/ms-word-quiz.html
2. www.openoffice.blogs.com/openoffice/2008/05/template-for-je.html
3. www.openoffice.blogs.com/openoffice/2006/08/times_tables_qu.html

5. Course Outcomes

On successful completion of this course, students will be able to

| Sno | Course Objectives | Blooms Taxonomy |
|-----|---|-----------------|
| 1 | Recognize the features of Office Package | K1(Remembering) |
| 2 | Develop the knowledge to prepare Professional documentation. | K6(Creating) |
| 3 | Design and Develop Animated videos and Images. | K6(Applying) |
| 4 | Analyze and express Mathematical functions, and to perform calculation using sheets. | K6Analyzing |
| 5 | Design and develop skills in sharing the sheets. | K6(Creating) |

PRACTICAL I: COMPUTER APPLICATIONS IN BUSINESS

1. Creating Business Letters, and an application for the job with Bio-data.
2. Creating circular letter with Mail Merge options.
3. Creating a spread sheet with formatting features and Charts.
4. Working with Formulas.
5. Creating Animation Slides.
6. Creation of Slides with Multimedia Presentation.
7. Creating Tables and Queries.
8. Generating Report in Access.
9. Creating Google Professional documents.
10. Creating interactive Presentation Slides.

1. Course Objectives

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

| S. No | CO-statement | Cognitive Level (K Level) |
|-------|--|---------------------------|
| CO-1 | Understand the complexity of E-commerce and its many facets. | K2 (Understanding) |
| CO-2 | Acquire the knowledge to explore about E-business and E-commerce to fit together. | K3 (Applying) |
| CO-3 | Identify the impact of E-commerce and to recognize the benefits and limitations of E-commerce. | K4 (Analyse) |
| CO-4 | Understand the classification frameworks for analysing E-commerce. | K2 (Understanding) |
| CO-5 | Recognize Tags, Elements and Attributes | K6 (Evaluating) |
| CO-6 | Generate an effective Web Page using HTML | K6 (Creating) |

2. Blue Print of the Question Paper

| | I-Unit | II-Unit | III-Unit | IV-Unit | V-Unit |
|------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|
| | 1-2 | 3-4 | 5-6 | 7-8 | 9-10 |
| Section-A | 11.Theory (OR) Program | 12.Theory (OR) Program | 13.Theory (OR) Program | 14.Theory (OR) Program | 15.Theory (OR) Program |
| Section-B | 16.Theory (OR) Program | 17.Theory (OR) Program | 18.Theory (OR) Program | 19.Theory (OR) Program | 20.Theory (OR) Program |

3. Course Outline

Unit - I: Understanding E-Commerce and Technology Infrastructure

Introduction to E-Commerce – The Difference between E-Commerce and E-Business- Eight Unique Features of E-Commerce Technology- Social Technology- User generated Content and Social Networks- Types of E-Commerce- E- Business Models- Growth of the Internet- Web and Mobile Platform. The Evolution of Internet- Key Technology Concepts- Packet Switching - TCP/IP - IP Address- Domain Names- URLs- Web Servers and Clients – Web Browsers.

Unit - II: E-Marketing and Advertising

Traditional Marketing – Identifying web presence goals – Achieving Web Presence Goals – The Uniqueness of the Web – Meeting the Needs of Website Visitors – E- Marketing Value Chain - The browsing behavior model – Online marketing – Online Payments by Buyers – Advantages of Online Marketing – E-Advertising Various Means of Advertising – E-branding.

Unit - III: E-Security

Information System Security – Security on the internet – Network and Website Security – E-Business Risk management issues – The Firewall Concept – Components – Benefits – Enterprise - wide Security Frameworks– Information Security Environment in India – Security Environment in India.

Unit - IV: E-Payment Systems

Digital Payment Requirements – Digital Token based E-Payment Systems - Benefits to Buyers and Sellers – Credit Card as Payment Systems – The Mobile Payments – Classification of New Payment System – Smart Card and Micropayment Systems – Properties of Electronic Cash – Cheque Payment System – Electronic Cheque – Risk and E-Payment Systems – Data Protection – Managing Information privacy and Credit Risks – Designing E-Payment Systems – Cryptography – Encryption Techniques – A matter Of Keys – Search – Private and Public Key – Digital Signature.

Unit - V: Introducing HTML

Creating Structured Documents – Links and Navigation – Images – Basic Table Elements and Attributes – Forms – Form Controls- - Simple Web Page Creation.

4. Teaching Resources

Textbook

1. Kenneth C.Laudon, Carol Guercio Traver —"E-Commerce", Pearson, 10th Edition, 2016
Unit – I : Ch. 1 & 2
2. P. T. Joseph, "E-Commerce – An Indian Perspective", Fourth Edition, PHI Learning Pvt Ltd, New Delhi, 2012.
Unit – II : Ch. 4
Unit – III : Ch. 5
Unit - IV : Ch. 6
3. Jon Ducktt, "Web Programming with HTML, CSS & Java script", Wiley Publishing, New Delhi 2013.
Unit - V : Ch. 1, 2, 3, 4, 5, 6

References

1. R. Kalakota and A. B. Whinston, "Readings in Electronic Commerce", Addison Wesley, 1997.
2. David Kosiur, "Understanding Electronic Commerce", Microsoft Press, 1997.
3. Joel Sklar, "Principles of Web Design", Singapore: Thomson Asia Pvt. Ltd, 2000
- Powell, Thomas A., "Web Design – The Complete Reference", Tata McGraw Hill Edition, 2000.

Web References

(i) Online Tutorial

1. https://www.tutorialspoint.com/e_commerce
2. <https://ecommerceguide.com/guides/>
3. <https://ecommerceguide.com/guides/>
4. http://www.w3schools.com/html/html_intro.asp

(ii) Online Quiz

1. www.proprofs.com
2. <https://www.classmarker.com/online-test/>
3. <http://www.pskills.org/html.jsp>

(iii) Online Compiler

1. https://www.tutorialspoint.com/try_html_online.php
2. <https://html-online.com/editor/>

5. Course Outcomes

On successful completion of this course, students will be able to

| Sno | Course Objectives | Blooms Taxonomy |
|-----|--|--|
| 1 | Recognize and analyse the impact of E-commerce on business models and strategy. | K1 (Remembering) |
| 2 | Identify the key security threats in the E-commerce environment. | K2 (Understanding) |
| 3 | Differentiate and acquire the knowledge of traditional and E Commerce | K6 (Applying) |
| 4 | Understand the basic principles of creating an effective Web Pages | K1, K6 (Understanding Analyzing) |
| 5 | Able to design, develop and Edit E commerce Websites Templates | K6 (Creating) |

PRACTICAL: E-COMMERCE AND ITS APPLICATIONS

1. Structure of HTML
2. Heading Tags.
3. Images
4. List Tags
5. Hyperlinks
6. Tables
7. Forms
8. Creating Web pages.
9. Working with Web Layouts
10. Editing E-Commerce Website Templates.

REGULATIONS FOR THEORY COURSES OFFERED TO BBA PROGRAMME

1. Each theory course will have a maximum of 100 marks.
2. For a theory course, Continuous Assessment (CA) is 50 marks and Semester Examination is 50 marks.
3. There is no passing minimum for CA
4. Evaluation Scheme for Continuous Assessment

| S.NO. | CA Component | Marks |
|--------------|---|-----------|
| 1. | First CA | 15 |
| 2. | Second CA | 15 |
| 3. | Attendance | 5 |
| 4. | MCQ Test Using MOODLE LMS | 5 |
| 5. | Assignment/Open Book Test / Problem Solving | 5 |
| 6. | Other Components (Seminars, Library reference works, Group Discussions, Field Visits and Quiz) | 5 |
| TOTAL | | 50 |

Question Paper Pattern for Continuous Assessment Tests

Time:2 Hrs.

The Question Paper shall consist of three sections

| S.No | CA Question Paper Pattern | Mark |
|-------|---|------|
| 1 | Part- A (6 x 2 =12) Answer all Questions. | 12 |
| 2 | Part - B (3 x 6 =18) 3 Questions with internal choice (either or type) | 18 |
| 3 | Part - C (2 x10 =20) Answer any two questions out of 3questions. | 20 |
| Total | | 50 |

Question Paper Pattern for Semester

Time:3 Hrs.

| S.No | Semester Question Paper Pattern | Marks |
|-------|---|-------|
| 1 | Part - A (10 x 2 = 20) Answer all Questions. Two questions from each unit. | 20 |
| 2 | Part - B (5 x 7 = 35) 5 Questions with internal choice (either or type).One question from each | 35 |
| 3 | Part - C (3 x15 = 45) Answer any three questions out of 5 questions. One question from each unit. | 45 |
| Total | | 100 |

The Question Paper shall consist of three sections

REGULATIONS FOR PRACTICAL COURSES OFFERED TO BBA PROGRAMME

1. Each practical course will have a maximum of 100 marks.
2. For a practical course, CA is 50 marks and Semester Examination is 50 marks.
3. There is no passing minimum for CA
4. The duration of semester practical examination is three hours. The student should submit a bonafide record of the experiments done at the time of the semester examination. The student shall not be allowed to appear for the semester examination without the bonafide record. The bonafide record should contain a certificate, program list and source code listing of all the programs with outputs
5. The features of every programming language are listed in the syllabus; however, the students are expected to carry out several exercises in each feature of the programming language.
6. Evaluation Scheme for Continuous Assessment

| S.NO. | CA Component | Marks |
|-------|---|-------|
| 1. | CA For each practical paper, only one CA test will be conducted. | 20 |
| 2. | Performance in the practical session Every practical session will carry a maximum of 10 marks and it is divided as follows: <div style="margin-left: 40px;"> Initial Preparation & Observation : 5marks. Debugging & Execution of Program : 5marks. </div> The students must prepare for the practical exercises by writing programs in the observation notebook. The observation notebook should be submitted for evaluation. Marks will be deducted for late as well as incomplete or incorrect submission. Ten marks will be awarded for each exercise subject to the successful completion of the entire exercise as directed by the staff concerned | 20 |
| 3. | Attendance | 5 |
| 4. | Module Development / MCQ Test Using MOODLE LMS | 5 |
| TOTAL | | 50 |

7. Question pattern for practical examination

Time:3Hrs

Max. Marks: 40+10(for Record) = 50

The question paper pattern for continuous assessment test is same as that the semester practical examination.

Each student will get a single question to be answered. The question may have subdivisions.

No more than three candidates should get the same question in a batch of 30 students.

Hence a question paper in practical should have 10 questions.

8. Blue Print of Practical Courses for the continuous Assessment tests and Semester Practical examination

| Section | Description Type and Choice | Marks | Total Questions in each Section |
|---------------------------|-----------------------------|-----------------------------------|---------------------------------|
| A | Programming Questions | Each Question Carries 20 Marks | 1 Pair |
| B | Programming Questions | Each Question Carries 20 Marks | 1 Pair |
| Total Number of Questions | | | 2 Pair |
| Total Marks | | | 40 |

In each section, one question will be asked from the list of exercise completed in the practical. Another question will be a general question covering the features of the programming language.

**B.SC. COMPUTER SCIENCE PROGRAMME
OBE FRAMEWORK**

Programme Outcomes

- PO1: Discuss their new knowledge and understanding; apply new ideas in order to acquire employability/self-employment
- PO2: Pursue higher learning programmes and become entrepreneurs
- PO3: Recognize moral and ethical values and be socially responsible citizens in the society
- PO4: Apply analytical, technical, problem solving, critical thinking skills, and decision-making skills in solving real life problems in one's life and in the society.
- PO5: Direct their own self-learning through MOOC courses, co-curricular activities, industrial exposures and field trainings
- PO6: Develop their own broad conceptual background in Biological sciences, Computing sciences, Languages and culture, Management studies, Physical sciences, etc.
- PO7: Demonstrate communication skills both oral and written in personal and academic pursuits

Programme Specific Outcomes

After completing this program the student will be able to

- PSO 1: Acquire knowledge of computing, mathematics, and basic sciences that may be relevant and appropriate to the domain
- PSO 2: Analyse a problem, identify and define the computing requirements, design, implement, and evaluate computer-based system, process, component, or program
- PSO 3: Apply Software Development Life Cycle principles to build Software Products and to become a IT professional.
- PSO 4: Become an Entrepreneur and Communicate effectively to accomplish a common goal
- PSO 5: Analyse the local and global impact of computing on individuals, organizations, and society
- PSO 6: Pursue higher studies in the Computer Science domain and to engage in continuous professional development.

Level of Cognitive Learning

| S. No. | Levels of Cognitive Learning | | Description |
|--------|------------------------------|---------------|---|
| 1. | K1 | Remembering | Retrieve, recall, or recognize relevant knowledge from long-term memory |
| 2. | K2 | Understanding | Demonstrate comprehension through one or more forms of explanation |
| 3. | K3 | Applying | Use information or a skill in a new situation |
| 4. | K4 | Analyzing | Break material into its constituent parts and determine how the parts relate to one another and/or to an overall structure or purpose |
| 5. | K5 | Evaluating | Make judgments based on criteria and standards |
| 6. | K6 | Creating | Put elements together to form a new coherent or functional whole; reorganize elements into a new pattern or structure |

Course Outcome**After successful completion of the course the students will be able to**

| | | |
|----|--|-----------------------------------|
| C1 | Explain the history of the internet and related internet concepts that are vital in understanding web development | Knowledge, Understanding (K1, K2) |
| C2 | Demonstrate the important HTML tags for designing static pages | Applying (K3) |
| C3 | Resolves written HTML codes. Runs the page he/she has designed using HTML codes | Analysing (K4) |
| C4 | Design a Web page that incorporates cascading style sheets | Creating (K6) |
| C5 | Select web elements to create User Interactive Form | Evaluating(K6)/Creating (K6) |

PROBLEM SOLVING TECHNIQUES

- Upon Completing the Course, Students will be able to:

| S.No. | Course Outcomes | Knowledge Level |
|-------|--|-----------------|
| CO 1 | Describe and Reproduce the Algorithm development techniques | K1 & K2 |
| CO 2 | Elaborate the solution in an algorithm for the given problem | K2 |
| CO 3 | Provide a solution which can be implemented in a program | K3 & K4 |
| CO 4 | Maximize the quality of an Algorithm development | K4 |
| CO 5 | Resolve the computing problems through algorithm | K5 & K6 |
| CO 6 | Develop techniques to handle array structure, searching and sorting | K6 |

Programming Using C

Course Outcome

After successful completion of the course, the student will be able to

| S.No | CO – Statement | Cognitive Level(K Level) |
|------|--|---|
| C1 | Describe the basic concepts of C programming | Knowledge and understanding (k1 and K2) |
| C2 | Able to choose right data representation formats based on the requirement of problems | Analysing (k4) |
| C3 | Acquire decision making and looping concepts | Applying(k3) |
| C4 | Compare and contrast various programming constructs and looping | Evaluating(K5) |
| C5 | Design and develop modular programming | Creating(K6) |
| C6 | Explore usage of arrays , strings , structure and files | Analysing(K4) |
| C7 | Effective utilisation of pointers | Applying(K3) |
| C8 | Write a program on computer, edit, compile, debug , correct and recompile and run it | Creating (K6) |

DIGITAL COMPUTER FUNDAMENTALS**Course Outcomes**

- Upon Completing the Course, Students will be able to:

| S.No. | Course Outcomes | Knowledge Level |
|-------|--|-----------------|
| CO 1 | Differentiate various numbers systems and Perform conversions among them. | K1 & K3 |
| CO 2 | Distinguish and interpret various logic gates and its functionalities | K2 & K4 |
| CO 3 | Solve Boolean functions using K-MAP | K3 |
| CO 4 | Draw the Logic circuits and truth table for Boolean functions | K4 |
| CO 5 | Compare and Examine the various Flip-flops | K3 & K5 |
| CO 6 | Design the combinational circuits such as Adder, Subtractor, Multiplexer, Encoder and Decoder etc. | K1 & K6 |

24th
-35th

BOARD OF STUDIES IN COMPUTER SCIENCE

SACRED HEART COLLEGE (AUTONOMOUS), TIRUPATTUR, VELLORE DT

Date: 9th April, 2022

Time: 10 am

Venue: DMT Hall

I. Constitution of the Board

1. Dr. L. Ravi
2. Dr. S. Sagayaraj
3. Mr. J. John Arokiaraj
4. Dr. M. Maria Dominic
5. Mrs. A. Josephine Sahaya Mala
6. Mrs. R. Sandrilla
7. Mrs. M. Poovizhi
8. Mr. P. Karthick
9. Mr. S. John Bosco
10. Miss D. Gajalakshmi
11. Dr. R. Denis.
12. Mr. M. Sarlinraj
13. Mr. S. Mohanraj
14. Mr. C. Sathishkumar
15. Dr. M. Santhoshkumar
16. Dr. E. George Dharma Prakash Raj

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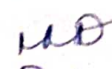
Tamilnadu, India


Email: di_george@ymail.com


Chairperson – UG & M.Phil. 


Chairperson – PG 


Member 


Member 


Member 

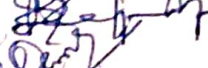
Member 

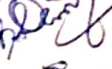
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34#
24th 33rd meeting.

33rd BOARD OF STUDIES IN COMPUTER SCIENCE

SACRED HEART COLLEGE (AUTONOMOUS), TIRUPATTUR, VELLORE DT

Date: 22nd November 2021

Time: 5 pm

Venue: Google Meet

I. Constitution of the Board

1. Dr. L. Ravi
2. Dr. S. Sagayaraj
3. Mr. J. John Arokiaraj
4. Dr. M. Maria Dominic
5. Mrs. A. Josephine Sahaya Mala
6. Mrs. R. Sandrilla
7. Mrs. M. Poovizhi
8. Mr. P. Karthick
9. Mr. S. John Bosco
10. Miss D. Gajalakshmi
11. Mr. M. Sarlinraj
12. Mr. S. Mohanraj
13. Dr. R. Denis.
14. Mr. C. Sathishkumar
15. Dr. M. Santhoshkumar
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Chairperson – UG & M.Phil. AG

Chairperson – PG

Member

Member

Member AG

Member

Member M.P.

Member

Member

Member

Member

Member

Member

Member

Member M.

University Nominee

Subject Expert

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Industry Representative

AB

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X. Mattam

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Student Member

S. Kalaiyaran

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Student Member B. Faizudeen

Agenda (UG)

1. Prayer of Invocation – Mr. C. Sathishkumar
2. Welcome Address – Dr. S. Sagayaraj
3. MOM
 - Minutes of the ^{32nd} meeting of the Board of Studies of Dept. of Computer Science (UG) – Mrs. R.Sandrilla
4. Business to be transacted (UG)
 - Feedback template and methods.
 - Faculty feedback
5. Concluding Remarks - External Members.
6. Vote of thanks – Mr. M. Sarlinraj

Proceeding

1. The meeting started with a prayer song. Dr. S. Sagayaraj welcomed the members of the Board.
2. Mr. Srinivasan Narasimhan (Industry Representative), Dr. L. Ravi (Chairperson – UG & M.Phil.), Mrs. A. Josephine Sahaya Mala (Member) was not present for the meeting. They Communicated to Chairperson (PG) about their inability to attend.
3. Mrs. R. Sandrilla read the minutes of ^{32nd} Board of Studies meeting and it was approved.
4. Dr. S. Sagayaraj presented the feedbacks of faculty.
5. B.Sc. (CS) Curriculum introduced from the academic year 2021-2022(Semester I) was reviewed by the course teacher and the suggestions were recorded. Feedback was collected for each course from the faculty and the students. These suggestions will be considered for next revision.
6. The meeting concluded at 5:45 with vote of thanks by Mr. M. Sarlinraj.