**BHARATHIAR UNIVERSITY::COIMBATORE 641 046**

**B. Sc. Computer Science and Applications (CBCS PATTERN)**

(*For the students admitted from the academic year* ***2021-2022*** *and onwards*)

**Scheme of Examination**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Part** | **Title of the Course** | **Hours/ Week** | **Examination** | | | | **Credits** |
| **Duration**  **in Hours** | **Maximum Marks** | | |
| **CIA** | **CEE** | **Total** |
|  | **Semester I** | | | | | | |
| I | Language - I | 6 | 3 | 50 | 50 | 100 | 4 |
| II | English - I | 6 | 3 | 50 | 50 | 100 | 4 |
| III | Core 1: Computing Fundamentals and C  Programming | 4 | 3 | 50 | 50 | 100 | 4 |
| III | Core 2: Digital Fundamentalsand Computer  Architecture | 4 | 3 | 50 | 50 | 100 | 4 |
| III | Core Lab 1: Programming Lab - C | 3 | 3 | 50 | 50 | 100 | 4 |
| III | Allied 1: Mathematical Structures for Computer  Science | 5 | 3 | 50 | 50 | 100 | 4 |
| IV | Environmental Studies\* | 2 | 3 | - | 50 | 50 | 2 |
|  | **Total** | **30** |  | **300** | **350** | **650** | **26** |
|  | **Semester II** | | | | | | |
| I | Language – II | 6 | 3 | 50 | 50 | 100 | 4 |
| II | English – II | 6 | 3 | 50 | 50 | 100 | 4 |
| III | Core 3: C++ Programming | 5 | 3 | 50 | 50 | 100 | 4 |
| III | Core Lab 2: Programming Lab - C++ | 4 | 3 | 50 | 50 | 100 | 4 |
| III | Core Lab 3: Internet Basics | 2 | 3 | 25 | 25 | 50 | 2 |
| III | Allied 2: Discrete Mathematics | 5 | 3 | 50 | 50 | 100 | 4 |
| IV | Value Education – Human Rights\* | 2 | 3 | - | 50 | 50 | 2 |
|  | **Total** | **30** |  | **275** | **325** | **600** | **24** |
|  | **Semester III** | | | | | | |
| III | Core 4: Data Structures | 6 | 3 | 50 | 50 | 100 | 4 |
| III | Core 5: Java Programming | 6 | 3 | 50 | 50 | 100 | 4 |
| III | Core Lab 4: Programming Lab – JAVA | 5 | 3 | 50 | 50 | 100 | 4 |
| III | Allied 3: Management Information Systems | 6 | 3 | 50 | 50 | 100 | 4 |
| III | Skill based Subject 1: Internet Programming | 5 | 3 | 30 | 45 | 75 | 3 |
| IV | Tamil\*\* / Advanced Tamil\* (OR) Non-  major elective - I (Yoga for Human Excellence)\* / Women’s Rights\* | 2 | 3 | - | 50 | 50 | 2 |
|  | **Total** | **30** |  | **230** | **295** | **525** | **21** |
|  | **Semester IV** | | | | | | |
| III | Core 6: System Software andOperating System | 6 | 3 | 50 | 50 | 100 | 4 |
| III | Core 7: Linux and Shell Programming | 6 | 3 | 50 | 50 | 100 | 4 |
| III | Core Lab 5: Linux and Shell Programming Lab | 3 | 3 | 25 | 25 | 50 | 2 |
| III | Allied 4: Organizational Behavior | 6 | 3 | 50 | 50 | 100 | 4 |
| III | Skill based Subject 2 Lab: PHP Programming -  Lab | 4 | 3 | 30 | 45 | 75 | 3 |
| IV | Tamil\*\*/Advanced Tamil\* (OR) Non- major elective -II (General Awareness\*) | 2 | 3 | - | 50 | 50 | 2 |
|  | NaanMuthalvan – Skill Course  Office Fundamentals - Lab  http://kb.naanmudhalvan.in/Bharathiar\_University\_(BU) | 3 | 3 | 25 | 25 | 50 | 2 |
|  | **Total** | **30** |  | **230** | **295** | **525** | **21** |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Semester V** | | | | | | |
| III | Core 8: RDBMS & Oracle | 6 | 3 | 50 | 50 | 100 | 4 |
| III | Core 9: Visual Basic | 6 | 3 | 50 | 50 | 100 | 4 |
| III | Core Lab 6: Programming Lab  – VB & Oracle | 6 | 3 | 50 | 50 | 100 | 4 |
| III | Elective – I: Client Server Computing / E- Commerce / Software Engineering | 6 | 3 | 50 | 50 | 100 | 4 |
| III | Skill based Subject 3: Web designing with  ASP and ASP .NET | 6 | 3 | 30 | 45 | 75 | 3 |
|  | Naan Mudhalvan Skill Course – cloud and IT Essential for Employability | 2 | 3 | 25 | 75 | 100 | 2 |
|  | **Total** | **32** |  | **255** | **320** | **575** | **21** |
|  | **Semester VI** | | | | | | |
| III | Core 10: Graphics &Multimedia | 6 | 3 | 50 | 50 | 100 | 4 |
| III | Core 11: Project Work Lab %% | 6 | - | 60 | 90 | 150 | 6 |
| III | Core Lab 7: Programming Lab  – Graphics & Multimedia | 3 | 3 | 50 | 50 | 100 | 4 |
| III | Elective – II: Network Security &  Cryptography / Distributed Computing / Computer Networks | 5 | 3 | 50 | 50 | 100 | 4 |
| III | Elective – III: Mobile Computing / Web  Technology / Software Testing | 5 | 3 | 50 | 50 | 100 | 4 |
| III | Skill Based Subject 4(Lab): ASP Lab | 3 | 3 | 30 | 45 | 75 | 3 |
| V | Extension Activities\*\* | - | - | 50 | - | 50 | 2 |
|  | Naan Muthalvan - Skill Course  Cyber Security **@**  <http://kb.naanmudhalvan.in/images/7/71/Cybersecurity.pdf>  (or) Machine Learning **#**  <http://kb.naanmudhalvan.in/images/1/19/PBL_Google.pdf>  (or) Android APP Development **$** <http://kb.naanmudhalvan.in/images/0/08/Android_App_Dev.pdf> | 2 | 2 | 25 | 25 | 50 | 2 |
|  | **Total** | **30** |  | **365** | **360** | **725** | **29** |
|  | **Grand Total** |  |  | **1655** | **1945** | **3600** | **142** |

* \*No Continuous Internal Assessment (CIA). Only University Examinations.
* \*\* No University Examinations. Only Continuous Internal Assessment (CIA).
* **#** Govt – Non-Autonomous Colleges, **$** Aided – Non-Autonomous Colleges, **@** Self - Financing **(**Non – Autonomous).
* **&** The English II- University semester examination will be conducted for 50 marks

(As per existing pattern of Examination) and it will be converted for 25 marks.

* NaanMudhalvan – skill courses- external 25 marks will be assessed by Industry

and internal will be offered by respective course teacher.