VIVEKANANDA COLLEGE

College with Potential for Excellence
(Residential & Autonomous – A Gurukula Institute of Life-Training)
(Affiliated to Madurai Kamaraj University)
(Re-accredited with ‘A’ Grade [CGPA 3.59 out of 4.00] by NAAC)

TIRUVEDAKAM WEST
MADURAI DISTRICT – 625 234

DEPARTMENT OF COMMERCE
(COMPUTER APPLICATIONS)
Course: B.Com (CA)

SYLLABUS

Choice Based Credit System
(For those who joined in June 2015 and after)
(2017-2020 Batch)
ABOUT THE COLLEGE

Vivekananda College was started by Founder-President Swamiji Chidbhavanandhaji Maharaj of Sri Ramakrishna Tapovanam, Tirupparaithurai, Trichy in 1971 on the banks of the river Vaigai which is blissfully free from the noise and hurry, the crowds and distraction of the city. Vivekananda College is a residential college functioning under Gurukula pattern. It is Man-making education, that is imparted in this institution, Culture, character and curriculum are the three facets of ideal education that make man a better man. This is possible only when the teacher and taught live together, The Gurukula system of Training is therefore a humble and systematic attempt in reviving the age old GURUGRIHAVASA for wholesome education, Attention to physical culture, devotion to duty, obedience to teachers, hospitality to guests, zest for life, love for the nation, and above all, humility and faith in the presence of God etc. are the values sought to be inculcated. All steps are taken to ensure the required atmosphere for the ideal life training.

Vivekananda College, Tiruvedakam West, Madurai District-625 234 is an aided college established in 1971 and offers UG and PG courses. This College is affiliated to the Madurai Kamaraj University, Madurai. The College was reaccredited with ‘A’ grade (CGPA 3.59 out of 4.00) by NAAC in September 2015. The College was awarded College with Potential for Excellence by UGC in April 2016.

VISION AND MISSION

Our Vision : To raise an army of neo-graduates steeped in the hoary culture of the motherland and dedicated to serving her as potential leaders in the manifold spheres of national effort.

Our Mission : A harmonious enrichment of physical, emotional and intellectual facets of a student’s personality to bring out his inherent PERFECTION.

OBJECTIVES OF THE COLLEGE

1. To inculcate spiritual, ethical, moral and social values in all disciplines of study.
2. Simultaneous education of the Hand, Heart and Head. Only a sound body can hold a sound mind.
3. Provide opportunities for all round development of the students and excellence in higher education, research and extension in different disciplines.
4. Disseminate the findings of research to the community to facilitate its development.
5. To provide society citizens of sterling character.
6. To cater to the needs of the educationally backward people – the most backward, scheduled caste and tribe.
I. Eligibility for Admission

Admission to B.A. – Economics Programme is open to candidates with +2 pass with Maths, Physics, Chemistry, Biology, Botany, Zoology and Commerce, Accountancy, History and Economics as major subjects.

For B.Com. – Commerce (Computer Applications) offered in the college, a pass in the Higher Secondary Examination conducted by the Government of Tamil Nadu or an examination accepted as equivalent there to by the Syndicate of the MKU, subject to such conditions as may be prescribed therefore.

II. Duration

The course is for a period of three years. Each academic year shall comprise of two semesters viz. Odd and Even semesters. Odd semesters shall be from June to November and Even Semesters shall be from December to April. There shall be not less than 90 working days which shall comprise 450 teaching clock hours for each semester (Exclusive of the days for the conduct of university end-semester examinations) for each semester.

III. CBCS System

All Programmes offered in the college are run on Choice Based Credit System (CBCS). It is an instructional package developed to suit the needs of students to keep pace with developments in higher education and the quality assurance expected of it in the light of liberalization and globalization in higher education.

IV. Semesters

An academic year is divided into two semesters. In each semester, courses are offered in 15 teaching weeks. Each week has 30 working hours spread over 6 days a week.

V. Credits

The term 'Credit' refers to the weightage given to a course, usually in relation to the instructional hours assigned to it. The total minimum credits, required for completing the B.A programme is 140. The details of credits for individual components and individual courses are given in the above table.

VI. Course

Each Course is to be designed variously under lectures / laboratory / seminar / practical training / assignments to meet effective teaching and learning needs.

VII. Examinations

i) There shall be examinations at the end of each semester, for odd semesters in the month of October / November; for even semesters in April/May. A candidate who does not pass the examination in any course(s) shall be permitted to appear in such failed course(s) in the subsequent examinations to be held in October / November or April/May.

ii) A candidate should get registered for the first semester examination. If registration is not possible owing to shortage of attendance beyond condonation limit / regulations prescribed or belated joining or on medical grounds, the candidates are permitted to move to the next semester. Such candidates shall re-do the missed semester after the completion of the programme.

VIII. Condonation
Students must have 75% of attendance in each paper for appearing the examination. Students who have 65% to 74% of attendance shall apply for condonation in the prescribed form with the prescribed fee. Students who have 50% to 64% of attendance shall apply for condonation in prescribed form with the prescribed fee along with the Medical Certificate. Students who have below 50% of attendance are not eligible to appear for the examination. They shall compensate the shortage after the completion of the programme.

**IX. Question Paper Pattern**

Time: 3 Hours
Maximum Marks: 75

**SECTION-A (10 X 1 =10 Marks)**

**Answer All Questions**

(1-5) Multiple Choice
(6-10) Fill in the blanks
Two questions from each unit

**SECTION-B (5 X 7 = 35 Marks)**

**Answer All Questions**

(11-15) Questions shall be in the format of either (a) or (b)
One question from each unit

**SECTION-C (3 X 10 = 30 Marks)**

**Answer any THREE Questions**

(16-20) One question from each unit.

**X. Evaluation:**

Performance of the students are evaluated objectively. Evaluation is done both internally and externally. They will be assessed continuously through Internal Assessment System and finally through summative (end) semester examination. To assess internally, there will be three examinations conducted centrally with a duration of two hours for each paper. In addition to continuous evaluation, the summative semester examination, which will be a written examination of three hours duration, would also form an integral component of the evaluation. The ratio of marks to be allotted to continuous internal assessment and to end semester examination is 25: 75.

The pattern of internal valuation shall be:

- Test: 20 Marks (the average of best two tests out of three tests)
- Assignment: 5 marks
- Total: 25 marks.

In respect of practical papers, the ratio of marks to be allotted to internal assessment and to summative (end) semester examination is 40: 60. The internal marks will be calculated on the basis of marks secured at the model examination and marks awarded for the preparation of practical note book. The external marks will be calculated on the basis of the marks awarded by the internal examiner and the external examiner at the summative semester examination.

**XI. Passing Minimum:**

There is no passing minimum for Internal Assessment. The passing minimum for external Examinations shall be 27 out of 75 marks and passing minimum for a paper is 40%.
**XII. Classification of Students:**

Candidates who have secured not less than 40% of marks in each paper shall be declared to have passed in that paper. Candidates who obtain 40% and above but below 50% shall be declared to have passed in Third Class. Candidates who obtain 50% and above but below 60% of the aggregate marks in Part-III shall be declared to have passed in Second Class and those who obtain 60% of marks and above shall be placed in the First Class. Candidates who obtain 75% and above shall be declared to have passed in Distinction provided he has not re-appeared for any paper during the course of the study.

**XIII. Failed Candidates:**

A candidate who has arrears in any paper in a semester examination will be permitted to proceed to the next semester classes. A candidate who has arrears may appear again in these failed papers at the November/April examinations. The internal assessment marks already obtained by him shall be carried over for the subsequent appearance also.

**XIV. Improvement of Internal Marks:**

The student desirous of improving the internal assessment marks may request the Head of the Department. After obtaining permission from the Staff Council Meeting by the Head, the student may write improvement examinations in consultation with the course teacher. The marks obtained (when it is more than the previous marks) will be submitted to the Controller of Examinations for further adoption.

**XV. Study Tour**

Students are expected to participate in the field visit and the study tours organized by the department. Though study tour/field trip carries no credit, it is compulsory for the students to attend whereby the students can get an opportunity to gain practical knowledge. As such, observational visit to selected social welfare organizations, industries, trade centres, exhibitions, places of historical importance and the like will be considered as extra-curricular activities.

**Profile of the Department**

The Department of Commerce (Computer Applications) was started in 2007-08 with 30 students and 2 staff members. The department offers one UG course – B.Com. (Computer Applications) and nine Certificate courses namely, Accounting Practice, Computation of Income Tax, E-Commerce, Web Designing and E-Filing & XBRL, Internet applications, Photoshop, PHP and my SQL, Computer awareness for competitive Exams. The department conducts Personality Development Programme for the students every week to develop soft skills among the students. The department is also publishing ‘ARISE’- a Quarterly E-Magazine for circulation among the staff and students through email. Dr. K. Karthikeyan, Associate Professor of Commerce, is the Coordinator. The department has a well equipped library and computer lab with internet facility.
department is also organising seminars and guest lectures on current developments in the subjects periodically. Factory visits and educational tours are arranged by the departments regularly to provide exposure and experience. Group Discussion, Newspaper Reading Forum, ICT in Commerce Education, Commerce Quality Circle, etc. are salient features of the department. Real time Software Projects are done by the final year students.

**Vision:**

To promote a global centre of excellence focusing on commerce education with computer applications

**Mission:**

To prepare students with academic excellence and professional and computer skills in commerce to face global challenges.

**Objectives:**

1. To impart holistic commerce education with professional excellence and experience
2. To educate students with computerized accounting knowledge, skills and training
3. To provide students with computer knowledge, skills and applications for better employment career.
4. To enhance the value system in the environment of life training and character building education.
### FIRST SEMESTER

<table>
<thead>
<tr>
<th>Part</th>
<th>Study Component</th>
<th>Subject Code</th>
<th>Title of The Paper</th>
<th>Hours</th>
<th>Credit</th>
<th>Sessional Marks</th>
<th>Summative Marks</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Hindi</td>
<td>P1LH11</td>
<td>Hindi</td>
<td>2</td>
<td>*</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>II</td>
<td>English</td>
<td>P2CE11</td>
<td>Communicative English</td>
<td>4</td>
<td>2</td>
<td>25</td>
<td>75</td>
<td>100</td>
</tr>
<tr>
<td>III</td>
<td>Core</td>
<td>11CT11</td>
<td>Financial Accounting I</td>
<td>6</td>
<td>5</td>
<td>25</td>
<td>75</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td></td>
<td>11CT12</td>
<td>Business Correspondence and Office Methods</td>
<td>5</td>
<td>4</td>
<td>25</td>
<td>75</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td></td>
<td>11CP13</td>
<td>LAB-1: MS Office</td>
<td>6</td>
<td>4</td>
<td>40</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Allied</td>
<td>11AT11</td>
<td>Allied Paper-I Programming in C</td>
<td>5</td>
<td>5</td>
<td>25</td>
<td>75</td>
<td>100</td>
</tr>
<tr>
<td>IV</td>
<td>Non Major</td>
<td>LTNE1A</td>
<td>Tamil</td>
<td>2</td>
<td>2</td>
<td>25</td>
<td>75</td>
<td>100</td>
</tr>
<tr>
<td>IV</td>
<td>NME</td>
<td>11NE11</td>
<td>PC Software</td>
<td>2</td>
<td>2</td>
<td>25</td>
<td>75</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td></td>
<td></td>
<td>30</td>
<td>22</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### SECOND SEMESTER

<table>
<thead>
<tr>
<th>Part</th>
<th>Study Component</th>
<th>Subject Code</th>
<th>Title of The Paper</th>
<th>Hours</th>
<th>Credit</th>
<th>Sessional Marks</th>
<th>Summative Marks</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Hindi</td>
<td>P1LH21</td>
<td>Hindi</td>
<td>2</td>
<td>**</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>II</td>
<td>English</td>
<td>P2CE21</td>
<td>Functional English</td>
<td>4</td>
<td>1</td>
<td>25</td>
<td>75</td>
<td>100</td>
</tr>
<tr>
<td>III</td>
<td>Core</td>
<td>11CT21</td>
<td>Financial Accounting II</td>
<td>7</td>
<td>5</td>
<td>25</td>
<td>75</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td></td>
<td>11CT22</td>
<td>Banking Theory, Law and Practice</td>
<td>4</td>
<td>4</td>
<td>25</td>
<td>75</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Core</td>
<td>11CP23</td>
<td>LAB-2: Object Oriented Programming With C++</td>
<td>6</td>
<td>4</td>
<td>40</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Allied</td>
<td>11AT21</td>
<td>Object Oriented Programming With C++</td>
<td>5</td>
<td>5</td>
<td>25</td>
<td>75</td>
<td>100</td>
</tr>
<tr>
<td>IV</td>
<td>Non Major</td>
<td>LTNE2A</td>
<td>Tamil Mozhi Thiran Arithalam Tamil Ilakkia Varalarum</td>
<td>2</td>
<td>2</td>
<td>25</td>
<td>75</td>
<td>100</td>
</tr>
<tr>
<td>IV</td>
<td>NME</td>
<td>11NE21</td>
<td>Salesmanship</td>
<td>2</td>
<td>2</td>
<td>25</td>
<td>75</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td></td>
<td></td>
<td>30</td>
<td>22</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### THIRD SEMESTER

<table>
<thead>
<tr>
<th>Part</th>
<th>Study Component</th>
<th>Subject Code</th>
<th>Title of The Paper</th>
<th>Hours</th>
<th>Credit</th>
<th>Sessional Marks</th>
<th>Summative Marks</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Hindi</td>
<td>P1LH31</td>
<td>Business Hindi-I</td>
<td>4</td>
<td>3</td>
<td>25</td>
<td>75</td>
<td>100</td>
</tr>
<tr>
<td>II</td>
<td>English</td>
<td>P2CE22</td>
<td>Spoken English – I</td>
<td>1</td>
<td>100</td>
<td>--</td>
<td>--</td>
<td>100</td>
</tr>
<tr>
<td>III</td>
<td>Core</td>
<td>11CT31</td>
<td>Advanced Accounting</td>
<td>7</td>
<td>5</td>
<td>25</td>
<td>75</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Core</td>
<td>11CT32</td>
<td>Income Tax Law and Practice I</td>
<td>5</td>
<td>4</td>
<td>25</td>
<td>75</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Core</td>
<td>11CP33</td>
<td>LAB-3: Oracle</td>
<td>6</td>
<td>4</td>
<td>40</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Allied</td>
<td>11AT31</td>
<td>Relational Data Base Management System</td>
<td>5</td>
<td>5</td>
<td>25</td>
<td>75</td>
<td>100</td>
</tr>
<tr>
<td>IV</td>
<td>Skill Based</td>
<td>11SB31</td>
<td>Business Mathematics</td>
<td>2</td>
<td>2</td>
<td>25</td>
<td>75</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td></td>
<td></td>
<td>30</td>
<td>23</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### FOURTH SEMESTER

<table>
<thead>
<tr>
<th>Part</th>
<th>Study Component</th>
<th>Subject Code</th>
<th>Title of The Paper</th>
<th>Hours</th>
<th>Credit</th>
<th>Sessional Marks</th>
<th>Summative Marks</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Hindi</td>
<td>P1LH41</td>
<td>Business Hindi-II</td>
<td>4</td>
<td>3</td>
<td>25</td>
<td>75</td>
<td>100</td>
</tr>
<tr>
<td>II</td>
<td>English</td>
<td>P2CE42</td>
<td>Spoken English-II</td>
<td>1</td>
<td>100</td>
<td>--</td>
<td>--</td>
<td>100</td>
</tr>
<tr>
<td>III</td>
<td>Core</td>
<td>11CT41</td>
<td>Corporate Accounting</td>
<td>7</td>
<td>5</td>
<td>25</td>
<td>75</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Core</td>
<td>11CT42</td>
<td>Income Tax Law and Practice II</td>
<td>5</td>
<td>4</td>
<td>25</td>
<td>75</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Core</td>
<td>11CP43</td>
<td>LAB-4: Tally</td>
<td>6</td>
<td>5</td>
<td>40</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Allied</td>
<td>11AT41</td>
<td>Business Statistics</td>
<td>5</td>
<td>5</td>
<td>25</td>
<td>75</td>
<td>100</td>
</tr>
<tr>
<td>IV</td>
<td>Skill Based</td>
<td>11SB41</td>
<td>Coral DRAW</td>
<td>2</td>
<td>2</td>
<td>25</td>
<td>75</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td></td>
<td></td>
<td>30</td>
<td>25</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### FIFTH SEMESTER

<table>
<thead>
<tr>
<th>Part</th>
<th>Study Component</th>
<th>Subject Code</th>
<th>Subject Code</th>
<th>Title of The Paper</th>
<th>Hours</th>
<th>Credit</th>
<th>Sessional Marks</th>
<th>Summative Marks</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>II</td>
<td>English</td>
<td>P2CE51</td>
<td></td>
<td>English for Career Development</td>
<td>1</td>
<td>****</td>
<td>100</td>
<td>--</td>
<td>100</td>
</tr>
<tr>
<td>III</td>
<td>Core</td>
<td>11CT51</td>
<td></td>
<td>Cost and Management Accounting</td>
<td>6</td>
<td>5</td>
<td>25</td>
<td>75</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Core</td>
<td>11CT52</td>
<td></td>
<td><strong>Goods and Services Tax Law</strong></td>
<td>6</td>
<td>5</td>
<td>25</td>
<td>75</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Core</td>
<td>11CP53</td>
<td></td>
<td>LAB-5: Visual Basic</td>
<td>6</td>
<td>4</td>
<td>40</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Elective</td>
<td>11EP1A</td>
<td></td>
<td>Java Programming</td>
<td>7</td>
<td>5</td>
<td>25</td>
<td>75</td>
<td>100</td>
</tr>
<tr>
<td>IV</td>
<td>ES</td>
<td>ESUG51</td>
<td></td>
<td>Environmental Studies</td>
<td>2</td>
<td>2</td>
<td>25</td>
<td>75</td>
<td>100</td>
</tr>
<tr>
<td>IV</td>
<td>Skill Based</td>
<td>11SB51</td>
<td></td>
<td>Commerce for Competitive Examinations</td>
<td>2</td>
<td>2</td>
<td>100</td>
<td>--</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td></td>
<td></td>
<td></td>
<td>30</td>
<td>23</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### SIXTH SEMESTER

<table>
<thead>
<tr>
<th>Part</th>
<th>Study Component</th>
<th>Subject Code</th>
<th>Title of The Paper</th>
<th>Hours</th>
<th>Credit</th>
<th>Sessional Marks</th>
<th>Summative Marks</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>II</td>
<td>English</td>
<td>P2CE61</td>
<td>English for Professional Excellence</td>
<td>1</td>
<td>1</td>
<td>100</td>
<td>--</td>
<td>100</td>
</tr>
<tr>
<td>III</td>
<td>Core</td>
<td>11CT61</td>
<td>Auditing</td>
<td>7</td>
<td>5</td>
<td>25</td>
<td>75</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Elective</td>
<td>11EP6A</td>
<td>Web Designing</td>
<td>6</td>
<td>5</td>
<td>25</td>
<td>75</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Elective</td>
<td>11PV61</td>
<td>Project &amp; Viva-voce</td>
<td>8</td>
<td>5</td>
<td>100</td>
<td>100</td>
<td>200</td>
</tr>
<tr>
<td>IV</td>
<td>VE</td>
<td>VEUG61</td>
<td>Value Education</td>
<td>2</td>
<td>2</td>
<td>25</td>
<td>75</td>
<td>100</td>
</tr>
<tr>
<td>IV</td>
<td>Skill Based</td>
<td>11SB61</td>
<td>Advanced Excel Operations</td>
<td>2</td>
<td>2</td>
<td>25</td>
<td>75</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Skill Based</td>
<td>11SB62</td>
<td>Hardware &amp; Networking</td>
<td>2</td>
<td>2</td>
<td>25</td>
<td>75</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Skill Based</td>
<td>11SB63</td>
<td>PHP and MYSQL</td>
<td>2</td>
<td>2</td>
<td>25</td>
<td>75</td>
<td>100</td>
</tr>
<tr>
<td>V</td>
<td>EA</td>
<td>EAUG61</td>
<td>Extension Activities</td>
<td>-</td>
<td>1</td>
<td>--</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td></td>
<td></td>
<td>30</td>
<td>25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TOTAL NUMBER OF HOURS</td>
<td></td>
<td></td>
<td>180</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TOTAL NUMBER OF CREDITS</td>
<td></td>
<td></td>
<td>140</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# CBCS - DISTRIBUTION OF CREDITS

**Course: B.Com. (Computer Applications)**
(For those who joined in June 2015 and After)

<table>
<thead>
<tr>
<th>Study Component</th>
<th>SEMESTER</th>
<th>Total Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>I</td>
<td>II</td>
</tr>
<tr>
<td>Business Hindi</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>English</td>
<td>2</td>
<td>1+1</td>
</tr>
<tr>
<td>Core Subject</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>Allied Subject</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Non Major Elective</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Skill Based Subject</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Elective Subject</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Environmental Study</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Value Education</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Extension Activity</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>22</td>
<td>22</td>
</tr>
</tbody>
</table>
QUESTION PAPER PATTERN
VIVEKANANDA COLLEGE, TIRUVEDAKAM WEST
(Residential & Autonomous - A Gurukula Institute of Life Training)
(Affiliated to Madurai Kamaraj University)

B.Com. [Computer Applications] Degree (Semester) Examination

Subject Title:

Time: 3 Hours
Maximum Marks: 75

Section-A
Answer all questions. (10 x 1 = 10 Marks)

(Two Questions from Each Unit)

I. Multiple Choice Questions
1.
2.
3.
4.
5.

II. Short Answer Questions
6.
7.
8.
9.
10.

Section-B
Answer all questions. (5 x 7 = 35 Marks)

11. a
(Or)
11. b
12. a
(Or)
12. b
13. a
(Or)
13. b
14. a
(Or)
14. b
15. a
(Or)
15. b

Section-C
Answer all questions. (3 x 10 = 30 Marks)
Department of Commerce (Computer Applications)

COURSES OFFERED

I. UG Course
   B.Com (Computer Applications)

II. Certificate Courses
   i. Accounting Practice
   ii. Income Tax
   iii. E-Commerce
   iv. Web Designing
   v. E-Filing and XBRL
   vi. Internet Applications
   vii. Photoshop
   viii. PHP and MYSQL
   ix. Computer Awareness for Competitive Exams

Faculty Members:

Dr. K. Karthikeyan., M.Com.,M.Phil., B.Ed., PGDCA., Ph.D., M.B.A.,
Coordinator & Associate Professor of Commerce

Dr. B. Raja., M.Com., M.Phil., PGDCA., Ph.D.,
Assistant Professor of Commerce (CA)

Sri. B. Marimuthu., M.Com., M.Phil.,
Assistant Professor of Commerce (CA)

Sri. C. Sundharam., M.Com (CA). M.Phil,
Assistant Professor of Commerce (CA)

Sri. R. Karthikeyan., MCA.,
Assistant Professor of Commerce (CA)
Sri. M. Mohan., M.Com., M.Phil.,
Assistant Professor of Commerce (CA)

Course: B.Com. (Computer Applications) - CBCS Syllabus – SEMESTER – I
(For those who joined in June 2015 and After)

<table>
<thead>
<tr>
<th>PART – I : Language</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject Title : Hindi – I</td>
</tr>
<tr>
<td>Subject Code: P1LH11</td>
</tr>
</tbody>
</table>

उद्देश्य:-

1. हमारी राष्ट्रभाषा हिंदी को जान सकते हैं।
2. हमारे ज्ञान को वृद्धि कर सकते हैं।
3. उत्तर भारत में नौकरी पाने के लिए बहुत उपयोगी भाषा है।

UNIT-I वर्णमालाँ(Alphabets)क्षण(Vowels)
व्यंजन(Consonants)

UNIT-II आधाराक्षर(Half letters)बारहखिच्छूं(Matharas)
बिंदु अक्षर(Bindu letters)

UNIT-III बारों के नाम(Name of Days)
महीनों के नाम(Name of Months)

UNIT-IV सुबोध हिंदी बोधिनी-I
(Suhodh Hindi Bodhini -1
(Lesson No.1-10)

UNIT-V व्याकरण(Grammer)
1.विधि (Imperative)
2.सामान्य वर्तमानकाल(Simple Present Tense)
3.ताकासिकवर्त मानकाल(Present Continuous Tense)
4.सामान्य भविष्यत काल(Simple Future Tense)
5.सामान्य मूलकाल(Simple Past Tense)

Text Book

सुबोध हिंदी पाठमाला-1 दक्षिणभारत हिंदी प्रचारसभा टीनगर चेन्नई– 600017.
Course: B.Com. (Computer Applications) - CBCS Syllabus – SEMESTER – I

Department of English (Part II) - SEMESTER I
(For those who joined in June 2017 and after)

<table>
<thead>
<tr>
<th>PART II – Paper I</th>
<th>Subject Title: Communicative English</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject Code: P2CE11</td>
<td>Hours per week: 4</td>
</tr>
<tr>
<td>Sessional Marks: 25</td>
<td>Summative Marks: 75</td>
</tr>
</tbody>
</table>

Objectives: Total number of hours per semester: 75 Hrs

- To develop listening and speaking skills
- To increase the vocabulary of students
- To improve reading skills
- To develop competency in grammar
- To develop continuous writing

Unit – I - Listening, Speaking and Reading Components 15 Hrs
1. Rabindranath Tagore – Cabuliwallah
2. Khushwant Singh – Karma
3. R.K. Narayan – Sweets for Angels
4. K.A. Abbas – Sparrows

Unit – II 15 Hrs
- Sentences, Clauses, and Phrases
- Parts of Speech
- Pronouns
- Determiners
- Adjectives
- Verbs
- Adverbs
- Some Common Adjectives and Adverbs

Unit – III Composition 15 Hrs
- Letter writing – Formal Letters & Informal Letters
- Descriptive Writing – General topics (Paragraph)

Unit – IV - Extensive Reading: Short Stories 15 Hrs
- Young Naren - by Brahamachari Amal.
  [From “A Simple life of Swami Vivekananda” Advaita Ashrama, Kolkata]
- A Story of Initiation - by Sri Aurobindo Society.
  From “Stories and Anecdotes from the Mother” Pondicherry.
- Glory At Twilight - Bhabani Bhattacharya
- The Martyr’s Corner - R.K. Narayan

Unit – V - Translation 15 Hrs
Translation of Sentences and Stories from Tamil to English / English to Tamil (Passages will be supplied)

Reference Book:
PART – III : Core Subject Theory

Subject Title: FINANCIAL ACCOUNTING I

<table>
<thead>
<tr>
<th>Subject Code: 11CT11</th>
<th>Hours per week: 6</th>
<th>Credit: 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sessional Marks: 25</td>
<td>Summative Marks: 75</td>
<td>Total Marks: 100</td>
</tr>
</tbody>
</table>

Objectives:

➢ To enable the students to acquire knowledge of the financial accounting principles and practices.
➢ To familiarize the basic concepts in BRS and preparation of final accounts.
➢ To understand the procedures involved in the computation of depreciation and Accounts of Non – Trading Concerns

UNIT-I [21 Hours]

Book Keeping – Accounting-Objectives-Methods of Accounting-
Accounting Concepts and Conventions – Processing of Accounting - Journal –

UNIT-II [21 Hours]

Bank Reconciliation Statement - Errors and their Rectification - Bills of Exchange (Problems) - Accommodation Bills (Theory only).

UNIT-III [21 Hours]

Final Accounts of Sole Trading Concerns.

UNIT-IV [21 Hours]

Depreciation - Straight Line Method-Written Down Value Method Problems – Remaining Methods (Theory only). Average Due Date (Simple Problems only) - Capital and Revenue items-Distinction between Capital and Revenue Receipts - and Losses (Theory only)

UNIT-V [21 Hours]


TEXT BOOK:


REFERENCE BOOKS:


Course: B.Com. (Computer Applications) - CBCS Syllabus – SEMESTER – I
(For those who joined in June 2015 and After)

<table>
<thead>
<tr>
<th>Subject Title: BUSINESS CORRESPONDENCE AND OFFICE METHODS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject Code: 11CT12</td>
</tr>
<tr>
<td>Sessional Marks: 25</td>
</tr>
</tbody>
</table>

OBJECTIVES:
- To know the principles, objectives and importance of communication in commerce and trade.
- To provide an overview of Business Correspondence in the day-to-day business world.
- To familiarize the students with the concept of mailing and maintenance of records.

UNIT-I

UNIT-II

UNIT-III
Banking Correspondence: Correspondence Between Banker and Customer – Relating to Opening and Closure of Accounts Letter Requesting Overdraft and Loan Facilities – Letter Ordering Stop Payment of a Cheque.
Insurance Correspondence: Correspondence Between Insured and Insurer with Regard to Claims and Settlements – Letter of Complaints with Regard to Damage to Goods for Transit.

UNIT-IV
UNIT-V


*Filing*: Essentials of a Good Filing System - Classification and Arrangement - Filing Methods - Centralised and Decentralized Filing

**TEXT BOOK:**


**REFERENCE BOOKS:**

Course: B.Com. (Computer Applications) - CBCS Syllabus – SEMESTER – I
(For those who joined in June 2014 and After)

PART – III : Core Subject Lab

<table>
<thead>
<tr>
<th>Subject Title: LAB-1: MS-OFFICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject Code: 11CP13</td>
</tr>
<tr>
<td>Sessional Marks: 40</td>
</tr>
</tbody>
</table>

Objectives:

- To expose the students on the practical applications of computer in business.
- To enable the students to learn the concepts of Ms-Office.
- To understand the basic framework and how to work in Ms-Word, Ms-Excel and Ms-Power Point.

PRACTICAL LAB LIST FOR MS-OFFICE

MS-WORD
1. Using MS-WORD perform the following.
   a) Change the font size to 20
   b) Change the font type to Garamond
   c) Align the text to left, right, justify and center
   d) Underline the text
   e) Table manipulation
2. Illustrate the mail merge concept to apply for a suitable job for at least 5 companies.
3. Design an invitation card for cultural function of your college and the card should contain a logo of your own design. Pictures from standard libraries for describing various events and front cover with 2 pictures on the diagonal corners.

MS-EXCEL
4. Build a worksheet to perform correlation and regression coefficients using formulae and check the answer with built-in.
6. Maintain a worksheet of a mark list of your class for each semester.
7. Draw graphs to illustrate class performance.

MS-POWPOINT
8. Prepare an organization chart for a college environment in Power point.
9. Perform frame movement by inserting clip arts to illustrate running of a car automatically.
10. Design Slides for the Headlines NEWS of a popular TV Channel the presentation should contain the following transaction.
   (1) Top-down (2) Bottom-up (3) Zoom in (4) Zoom out.
   The presentation should work in Auto mode.

11. Design Presentation Slides for a product of your choice. Include the picture of the product and include pictures that demonstrate the input and output of the product and its working. The presentation will work in manual mode

Course: B.Com. (Computer Applications) - CBCS Syllabus – SEMESTER – I
(For those who Joined in June 2014 and After)

<table>
<thead>
<tr>
<th>PART – III : Allied Subject Theory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject Code: 11AT11</td>
</tr>
<tr>
<td>Seasonal Marks: 25</td>
</tr>
</tbody>
</table>

Objectives:
- To allow the trainee to write their own programs using standard language infrastructure regardless of the hardware or software platform
- To familiarize the trainee with basic concepts of computer programming and developer tools.
- To present the syntax and semantics of the “C” language as well as data types offered by the language

UNIT: I
(13 Hours)

Introduction to computers: Basic components and functioning of the computers – Evolution of computers – Types of computers – Hardware of a personal computer – Storage devices and media – Concept of files and Directories in MSDOS and Windows Operating System.

UNIT: II
(10 Hours)

C language – Elementary Programming Declarations - Assignments and Variable – integers Arithmetic Expressions – more data types – Printf and scanf- escape sequences and control characters – conversions specification -relational and logical operations – break and continue – if and if- else statements while and do-while, For loop and statements.

UNIT: III
(17 Hours)


UNIT: IV
(22 Hours)
Structure: Defining a structure-Declaring structure variable-Accessing Structure members-Structure Initialization-Copying and computing structure variables-arrays of structure-structure in function.

UNIT: V (13 Hours)


Text Book:


Reference Books:

Course: B.Com. (Computer Applications) - CBCS Syllabus – SEMESTER – I

PART – IV: Non Major Elective - Tamil

Subject Title: Language Tamil Subject

<table>
<thead>
<tr>
<th>Subject Code: LTNEIA</th>
<th>Hours per week: 2</th>
<th>Credit: 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seasonal Marks: 25</td>
<td>Summative marks: 75</td>
<td>Total Marks: 100</td>
</tr>
</tbody>
</table>

PART – IV: Language Tamil Subject

<table>
<thead>
<tr>
<th>Subject Title: jkpo; nkhopapd; mbg;gilf;$WfSk; jkpo; ,yf;fpa tuyhWk;</th>
<th>Subject Code: LTNEIB</th>
<th>Hours per week: 2</th>
<th>Credit: 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seasonal Marks: 25</td>
<td>Summative marks: 75</td>
<td>Total Marks: 100</td>
<td></td>
</tr>
</tbody>
</table>
Course: B.Com. (Computer Applications) - CBCS Syllabus – SEMESTER – I
(For those who joined in June 2014 and After)

<table>
<thead>
<tr>
<th>PART – IV: Non-Major Elective</th>
<th>Subject Title : PC Software</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject Code: 11NE11</td>
<td>Hours per week: 2</td>
</tr>
<tr>
<td>Sessional Marks: 25</td>
<td>Summative Marks: 75</td>
</tr>
</tbody>
</table>

Objectives:
- To learn the parts on the Computer
- To enable the students to learn the concepts of Ms-Office.
- To understood the basic framework and how to work in Ms-Word, Ms-Excel and Ms-Power Point.

UNIT: I

UNIT: II

UNIT: III

UNIT: IV
Creating Charts – Using Data and Time – Naming Ranges and using Build-in Functions.

UNIT: V
Overview of PowerPoint – Creating a presentation – PowerPoint Views – Running a Slide show – Inserting Media files in the presentation – Custom Animation

Text Book:
Study material prepared by department

Reference Books:

Course: B.Com. (Computer Applications) - CBCS Syllabus – SEMESTER – II
(For those who joined in June 2015 and After)

<table>
<thead>
<tr>
<th>PART – I: Language</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject Code: P1LH21</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>उद्देश्यः:-</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 हमारी राष्ट्रभाषा हिंदी को जान सकते हैं।</td>
</tr>
<tr>
<td>2 हमारे ज्ञान को दृष्टिगत कर सकते हैं।</td>
</tr>
<tr>
<td>3 उत्तर भारत में नौकरी पाने के लिए बहुत उपयोगी भाषा है।</td>
</tr>
</tbody>
</table>

UNIT-I सुबोध हिंदी पाठमाला-1
(SUBODH HINDI PATMALA-1) (Lesson:11-20)

UNIT-II गिन्तियाँ(Numericals)लिंग(Gender)वचन(Number)
(1-50 with Fractions)

UNIT-III व्याकरण(Grammer)
1 अपूर्ण भूतकाल(Past Continuous Tense)
2 आसन्न भूतकाल(Present Perfect Tense)
3 पूर्ण भूतकाल(Past Perfect Tense)
4 The Use of “ने”
5 The Use of “सक”
6 The Use of “बुक”

UNIT-IV जानवरों के नाम(Name of Animals)
पक्षियों के नाम(Name of Birds)

UNIT-V तरकारियों के नाम(Name of Vegetables)
फलों के नाम(Name of Birds)

Text Book:

सुबोध हिंदी पाठमाला-1 दक्षिणभारत हिंदी प्रचारसभा टीनगर चेन्नई– 600017.
Course: B.Com. (Computer Applications) - CBCS Syllabus – SEMESTER – II
(For those who joined in June 2015 and after)

PART II – Paper I

<table>
<thead>
<tr>
<th>Subject Code</th>
<th>Hours per week</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>P2CE21</td>
<td>4</td>
<td>1</td>
</tr>
</tbody>
</table>

Sessional Marks: 25 Summative Marks: 75 Total Marks: 100

**Objectives:**

- To develop listening, speaking and reading skills
- To develop Information and Communication Technology (ICT) skills
- To develop presentation skills
- To develop competency in grammar

**Unit – I Listening, Speaking and Reading Components**

15 Hrs

- Prose
  1. My Visions for India - A.P.J. Abdul Kalam
  2. Mahatma Gandhi - V.S. Srinivasa Sastri
  3. The Secret of Work - Swami Vivekananda
  4. The Golden Age of Cricket - Neville Cardus
  5. Tree Speaks - C. Rajagopalachari

**Unit – II Language Study**

15 Hrs

- Tenses and Their Uses
- Concord or Agreement
- Conditional Sentences
- Active and Passive Voice
- Preposition

Book: *A Textbook of English Grammar and Usage by K.V. Joseph*

**Unit – III Composition**

15 Hrs

- Letter writing – Informal Letters
- Hints Development
- Descriptive Writing

**Unit – IV Extensive Reading: Short Stories**

15 Hrs

- Extensive Reading
  1. Upper Division Love - Manohar Malgonkar
  2. The Tiger in the Tunnel - Ruskin Bond
3. A Devoted Son           - Anitha Desai
4. The Lost Child          - Mulk Raj Anand
5. The Cask of Amantilado - Edgar Allan Poe

Unit – V Translation        15 Hrs
- Translation of Sentences and Stories from Tamil to English/English to Tamil
  (Passages will be supplied)

Course: B.Com. (Computer Applications) - CBCS Syllabus – SEMESTER – II
(For those who joined in June 2014 and After)

<table>
<thead>
<tr>
<th>PART – III : Core Subject Theory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject Code: <strong>11CT21</strong></td>
</tr>
<tr>
<td>Hours per week: <strong>7</strong></td>
</tr>
<tr>
<td>Credit: <strong>5</strong></td>
</tr>
<tr>
<td>Sessional Marks: <strong>25</strong></td>
</tr>
<tr>
<td>Summative Marks: <strong>75</strong></td>
</tr>
<tr>
<td>Total Marks: <strong>100</strong></td>
</tr>
</tbody>
</table>

Objectives:
- To enable the students to acquire knowledge of the consignment and joint venture.
- To make familiarize with branch and department accounts.
- To understand the procedure involved in the computation of insurance claims.

UNIT: I                                (21 hours)

UNIT: II                               (21 hours)
Joint venture-Meaning- Feature partnership vs Joint venture- When a separate set of books is kept- When a separate set of books is not kept.

UNIT: III                             (21 hours)
Single entry-net worth method- Conversion Method

UNIT: IV                               (21 hours)
Branch accounts-dependent branches-debtors system-Cost price and invoice price -Departmental accounts-allocation of expenditure-trading and profit and loss account.

UNIT: V                               (21 hours)
Self-balancing ledgers: Fire insurance claims –loss of stock-Average clause – loss of profit (Theory only)

Text Book:

Reference Books:

Course: B.Com. (Computer Applications) - CBCS Syllabus – SEMESTER – II
(For those who joined in June 2014 and After)

<table>
<thead>
<tr>
<th>PART – III : Core Subject Theory</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Subject Title</strong>: BANKING THEORY, LAW &amp; PRACTICE</td>
</tr>
<tr>
<td><strong>Subject Code</strong>: 11CT22</td>
</tr>
<tr>
<td><strong>Sessional Marks</strong>: 25</td>
</tr>
</tbody>
</table>

**Objectives:**

- To familiarize students with the functions of commercial banks and RBI.
- To impart knowledge about the various forms of banking services.
- To enable the students to learn various provisions of the banking regulations act 1949, RBI Act, Negotiable Instrument Act 1881.

**UNIT: I**

Definition of banking – kinds of banks – Unit banking Vs Branch banking – Deposit banking vs investment banking – Mixed banking – Commercial banks – Role of commercial banks for the economic development of a nation – Functions of commercial banks – innovative services (Credit card, Debit card, ATM) – Central banking – Functions of central bank – Credit control.

**UNIT: II**

Banker and Customer – Definition – General and Special relationship.

**UNIT: III**

Types of deposit accounts with the banker – current accounts – Savings bank accounts – Fixed deposit accounts - precautions to be taken before opening an account in the name of a new customer.

**UNIT: IV**


**UNIT: V**

Paying and Collecting Bankers – Rights responsibilities and duties of paying and collecting bankers – precautions to be taken while paying and collecting cheques – Statutory protection.

**Text Book:**

Reference Books:

Course: B.Com. (Computer Applications) - CBCS Syllabus – SEMESTER – II
(For those who joined in June 2014 and After)

PART – III : Core Subject Lab

<table>
<thead>
<tr>
<th>Subject Title</th>
<th>LAB-2:OBJECT ORIENTED PROGRAMMING WITH C++</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject Code:</td>
<td>11CP23</td>
</tr>
<tr>
<td>Hours per week:</td>
<td>6</td>
</tr>
<tr>
<td>Credit:</td>
<td>4</td>
</tr>
<tr>
<td>Sessional Marks:</td>
<td>40</td>
</tr>
<tr>
<td>Summative Marks:</td>
<td>60</td>
</tr>
<tr>
<td>Total Marks:</td>
<td>100</td>
</tr>
</tbody>
</table>

Objectives:
- To gain the basic knowledge of object oriented programming concepts
- To understand the detail idea of C++ streams, templates and error handling concepts of C++ programming.

UNIT: I

Objected oriented paradigm – Elements of Object Oriented Programming (OOP) – Merits and demerits of OPP – Introduction to C++ Program - identifiers - basic data types -user defined data types -derived data types -symbolic constants - declaration of variables -dynamic initialization of variables.

UNIT: II

FUNCTIONS IN C++: Introduction -the main function -function prototyping call by reference - return by reference -inline functions -default arguments -const arguments -function overloading. CLASSES AND OBJECTS: Introduction - specifying a class -defining member functions -a C++ program with class -making an outside function inline -nesting of member functions -private member functions -arrays within a class.

UNIT: III


UNIT: IV

INHERITANCE EXTENDING CLASSES - Introduction -defining derived classes -single inheritance -making a private member inheritable -multilevel inheritance -multiple inheritances -hierarchical inheritance.
UNIT: V (10 Hours)

POINTER, VIRTUAL FUNCTIONS AND POLYMORPHISM: Introduction - pointers of objects - this pointer - pointers to derived classes - virtual functions - pure virtual functions. MANAGING CONSOLE I/O OPERATIONS Introduction - C++ stream classes - unformatted I/O operations - formatted console I/O operations.

Practical Lab List

1. Program to print prime numbers between 1 to 10
2. Program to accept a number and find factorial of given number
3. Program to accept number and check the given number Armstrong or not
4. Program to print odd numbers from 1 to 10
5. Program to print naturals numbers from 1 to 10
6. Program to natural numbers from 1 to 10 by using while loop
7. Program to print 1 to 10 mathematical tables
8. Program to print Fibonacci series
9. Program to accept two number and print sum of numbers by using function
10. Program to print prime numbers between 1 to 50
11. Program to check whether a given number is prime number
12. Program to read two numbers and print sum of two numbers
Course: B.Com. (Computer Applications) - CBCS Syllabus – SEMESTER – II
(For those who joined in June 2014 and After)

<table>
<thead>
<tr>
<th>PART – III : Allied Subject</th>
<th>Theory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject Title</td>
<td>OBJECT ORIENTED PROGRAMMING WITH C++</td>
</tr>
<tr>
<td>Subject Code</td>
<td>11AT21</td>
</tr>
<tr>
<td>Hours per week</td>
<td>5</td>
</tr>
<tr>
<td>Credit</td>
<td>5</td>
</tr>
<tr>
<td>Sessional Marks</td>
<td>25</td>
</tr>
<tr>
<td>Summative Marks</td>
<td>75</td>
</tr>
<tr>
<td>Total Marks</td>
<td>100</td>
</tr>
</tbody>
</table>

Objectives:

- To gain knowledge about the object oriented programming concepts
- To C++ streams, templates and error handling concepts of C++ programming by implementing sample programs.

UNIT: I
(15 Hours)

Objected Oriented paradigm – Elements of Object Oriented Programming (OOP) – Merits and demerits of OPP – Introduction to C++ Program - identifiers - basic data types -user defined data types -derived data types -symbolic constants - declaration of variables -dynamic initialization of variables -reference variables - operators in C++ -scope resolution operators - manipulators type cast operator - implicit conversions - operator precedence -control structures

UNIT: II
(20 Hours)

FUNCTIONS IN C++: Introduction -the main function -function prototyping call by reference - return by reference -inline functions -default arguments -const arguments -function overloading. CLASSES AND OBJECTS: Introduction - specifying a class -defining member functions -a C++ program with class -making an outside function inline -nesting of member functions -private member functions -arrays within a class -memory allocation for objects -static data members -static member functions -arrays of objects -objects as function arguments -friendly functions -returning objects -const member functions.

UNIT: III
(20 Hours)


UNIT: IV
(10 Hours)

INHERITANCE EXTENDING CLASSES - Introduction -defining derived classes -single inheritance -making a private member inheritable -multilevel
inheritance -multiple inheritance -hierarchical inheritance -hybrid inheritance -virtual base classes -abstract classes -constructors in derived classes.

UNIT: V
(10 Hours)

POINTERS, VIRTUAL FUNCTIONS AND POLYMORPHISM:
Introduction -pointers of objects -this pointer -pointers to derived classes -virtual functions -pure virtual functions. MANAGING CONSOLE I/O OPERATIONS
Introduction - C++ stream classes -unformatted I/O operations -formatted console I/O operations.

Text Book:


Reference Books:

PART-IV: Language Tamil Subject

| Subject Title: தமிழ் எழுத்துச் சார்பு ஆண்டுத் திறன் முறுக்குதலும் | Subject Code: LTNE2A | Hours per week: 2 | Credit: 2 |
| Seasonal Marks: 25 | Summative marks: 75 | Total Marks: 100 |

1. கைப்பொருள் நடை காட்டும்வரை? (அதிசயங்கூறு, மக்கள் விளக்கம்)
2. கைத்தொடர் கல்வியின்றி பயிற்சி (மூலம் முதல், வரையறையை பின்புறம், முதலை)
3. கையேடு தொகுப்பு அரங்கம் (மீண்டும் வரையறையை)
4. கையேடு கல்வி மேலாண்மை (மூலம், முதலை பின்புறம், நூற்றாண்)

******************************************************************************************

PART-IV: Language Tamil Subject

| Subject Title: தமிழ் எழுத்துச் சார்பு ஆண்டுத் திறன் முறுக்குதலும் | Subject Code: LTNE2B | Hours per week: 2 | Credit: 2 |
| Seasonal Marks: 25 | Summative marks: 75 | Total Marks: 100 |

1. கைத்தொடர் - கைத்தொடர் பயிற்சி மேலாண்மை - கையேடு கல்வி - நூற்றாண் கல்விகள்
2. கையேடுகளால், சிற்றகண்ட கைப்பொருள் பயிற்சிகள்
3. கையேடுகளால், சிற்றகண்ட கைப்பொருள் பயிற்சிகள்
4. கைத்தொடர் கல்வி
5. மாணவர் கால கைத்தொடர் - கைத்தொடர் கல்விகள்
PART – IV : Non-Major Elective

Subject Title : SALESMANSHIP

<table>
<thead>
<tr>
<th>Subject Code</th>
<th>Hours per week</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>11NE21</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

Sessional Marks: 25  
Summative Marks: 75  
Total Marks: 100

Objectives:

- To provide an understanding of salesmanship and its significance.
- To expose the students to the practical aspects of making sales and managing customers.
- To help the students to inculcate personal selling skills.

UNIT: I

Origin, Evolution and Meaning of Salesmanship – Nature of Salesmanship

UNIT: II

Marketing Channels – Role of Salesman in distribution.

UNIT: III

Salesmanship – Classification of salesmanship.

UNIT: IV

Qualities of a good salesman – Knowledge of goods – Buying Motive – Customer

UNIT: V

Personal selling – Selling Process

Text Book:


Reference Books:

PART–I – BUSINESS HINDI - I

<table>
<thead>
<tr>
<th>SUB. CODE: P1LH31</th>
<th>Hours per week: 4</th>
<th>Credit: 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sessional Marks: 25</td>
<td>Summative Marks: 75</td>
<td>Total Marks: 100</td>
</tr>
</tbody>
</table>

उद्देश्य—
1. हमारी राष्ट्रभाषा हिंदी को जान सकते हैं।
2. हमारे ज्ञान को वृद्धि कर सकते हैं।
3. उत्तर भारत में नौकरी पाने के लिए बहुत उपयोगी भाषा है।

UNIT: 1 वर्णमालाएँ—स्वर—व्यंजन—शब्द—वाक्य—लिंग—वचन—गिनती—वारों के नाम—
महीनों के नाम

नोट : 1–50 के साथ ¼, ½, ¾

मूलभूत व्याकरण : सुबोध हिंदी रचना–1 (भाग 1 से 10 तक)

UNIT: 2 गद्य : सुबोध हिंदी पाठमाला–1 (भाग 1–5 तक)

UNIT: 3 पद्य: सुबोध हिंदी पाठमाला–1 (भाग 1–4 तक)

UNIT: 4 छुटे हुए वाणिज्य पत्राचार के शब्द : (१–९० मिलाना)

पत्र : 1. छुट्टी पत्र 2. पुस्तकों के लिए आदेश 3. आवेदन पत्र 4. बिकायली पत्र

UNIT: 5 अनुवाद अभ्यास

सुबोध हिंदी रचना–1 (भाग 1–5) (हिंदी से तमिल या अंग्रेजी)

सुबोध हिंदी रचना–1 (भाग 1–5) (तमिल या अंग्रेजी से हिंदी)

समाजवादी (पद्यांश)

सुबोध हिंदी पाठमाला–1 (कहानियाँ से) (भाग 1–4)

पाद्य पुस्तकें : दक्षिण (प्रणोदत्त सहित प्राथमिक पाद्य सामग्री) प्रकाशित वर्ष : 2010

1. सुबोध हिंदी पाठमाला–1 (दक्षिण भारत हिंदी प्रचार समा, चेन्नई–17)

2. सुबोध हिंदी रचना–1 (दक्षिण भारत हिंदी प्रचार समा, चेन्नई–17)

निर्देशी पुस्तकें:

1. हिंदी व्याकरण—भाग 1, प्रकाशित वर्ष : 2012

लेखक : के.आर. नोपालन, जी.एम.बी. प्रकाशन, सेलम–636 001.
2. सुबोध हिन्दी रचना–2 (भारत–3) प्रकाशित वर्ष : 2010
   प्रकाशक : दक्षिण भारत हिन्दी प्रचार समitis, चेन्नई–17.
3. व्याकरण प्रवेषिक, प्रकाशित वर्ष : 2011
   प्रकाशक : दक्षिण भारत हिन्दी प्रचार समitas, चेन्नई–17
4. हिन्दी व्याकरण–भाग 2, प्रकाशित वर्ष : 2011
   लेखक : सी.एस. कामराज, जी.एम.वी. प्रकाशन, सेलम–636 001.

DEPARTMENT OF ENGLISH
Course: B.Com. (Computer Applications) - CBCS Syllabus – Semester – III
(For those who joined in June 2015 and After)

<table>
<thead>
<tr>
<th>PART – II– SPOKEN ENGLISH – I</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUB. CODE: P2LE22/P2CE22</td>
</tr>
<tr>
<td>Sessional Marks: <strong>100</strong></td>
</tr>
</tbody>
</table>

Objectives:

- To develop the reading habit of the students.
- To develop the commutation skills of the students.
- To enrich the vocabulary of the students.

Text Books Prescribed

First Semester – Oliver Twist by Charles Dickens  [15 Hours]
Second Semester – A Handful of Nuts by Ruskin Bond  [15 Hours]
Course: B.Com. (Computer Applications) - CBCS Syllabus – SEMESTER – III
(For those who joined in June 2014 and After)

<table>
<thead>
<tr>
<th>PART – III : Core Subject Theory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject Title : ADVANCED ACCOUNTING</td>
</tr>
<tr>
<td>Subject Code: 11CT31</td>
</tr>
<tr>
<td>Sessional Marks: 25</td>
</tr>
</tbody>
</table>

Objectives:
- To gain comprehensive understanding of all aspects relating to partnership accounting.
- To gain knowledge of accounting in royal accounts.
- To make the students to gain the knowledge of hire purchase and instalment accounts.

UNIT: I (5 Hours)
Partnership Accounts – Past adjustment and Guarantee – Admission of a new partner – Retirement and Death of a partner.

UNIT: II (5 Hours)
Joint Life Policy – Dissolution of firms – Piecemeal distribution of assets.

UNIT: III (5 Hours)
Royalty Accounts – Accounting records in the books of Lessor and Lessee – Sub-Lease.

UNIT: IV (5 Hours)
Hire Purchase and Instalment Accounts (Excluding Hire Trading Account and Stock and Debtors system)

UNIT: V (5 Hours)
Insolvency of individuals – Statement of Affairs and Deficiency Account.

Text Book:

Reference Books:

Course: B.Com. (Computer Applications) - CBCS Syllabus – SEMESTER – III
(For those who joined in June 2017 and after)

PART – III : Core Subject Theory

<table>
<thead>
<tr>
<th>Subject Title</th>
<th>INCOME TAX LAW &amp; PRACTICE – I</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject Code</td>
<td>11CT32</td>
</tr>
<tr>
<td>Hours per week</td>
<td>5</td>
</tr>
<tr>
<td>Credit</td>
<td>4</td>
</tr>
<tr>
<td>Sessional Marks</td>
<td>25</td>
</tr>
<tr>
<td>Summative Marks</td>
<td>75</td>
</tr>
<tr>
<td>Total Marks</td>
<td>100</td>
</tr>
</tbody>
</table>

Objectives:
- To equip the students with provisions of Income Tax Act, 1961 amended up-to-date.
- To enable the students to identify exempted income.
- To impart knowledge of residential status and Tax Liabilities.
- To familiarize students to compute income from salary, house property and other sources.

UNIT-I [15 Hours]
Introduction - Definitions: Assessee – Previous Year – Assessment Year – Income - Concept of Income – Assessee - Person – Agricultural Income – Gross Total Income – Total Income

UNIT-II [15 Hours]
Determination of Residential Status and Tax Liabilities – Incidence of Tax.

UNIT-III [15 Hours]
Incomes which do not form part of Total Income. (Exempted Incomes – u/s 10)

UNIT-IV [15 Hours]
Income from Salary.

UNIT-V [15 Hours]
Income from House Property – Income from Other Sources.

Text Book: (Current Edition Relevant to the Assessment Year)

Reference Books: (Current Edition Relevant to the Assessment Year)

Note:
- Questions shall be set as between theory and problems in the ratio of 40% and 60% respectively.
- Amendments made upto 6 months prior to the date of examination is to be followed.

Course: B.Com. (Computer Applications) - CBCS Syllabus – SEMESTER – III
(For those who joined in June 2014 and After)

<table>
<thead>
<tr>
<th>PART – III : Core Subject Lab</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject Title : LAB-3: Oracle</td>
</tr>
<tr>
<td>Subject Code: <strong>11CP33</strong></td>
</tr>
<tr>
<td>Sessional Marks: <strong>40</strong></td>
</tr>
</tbody>
</table>

Objectives:
- To acquire skills in SQL statements with various constructs
- To acquire skills in PL/SQL Programming
- To practice with stored Objects

Exercises:
1. Creating, modifying and dropping Tables.
2. Inserting, modifying and deleting rows.
3. Working with Decode and case.
4. Creating tables with Adding, Dropping, disabling /enabling constraints.
5. Retrieving rows with Character functions.
6. Retrieving rows with Number and Date functions.
7. Retrieving rows with Group functions and HAVING.
8. Retrieving rows with Sub Queries.
9. PL/SQL programs with control structures.
10. PL/SQL programs with Cursors.
11. PL/SQL programs with Exception Handling.
12. Creating and Calling Procedures.
13. Creating and Calling Functions.
14. Creating and Calling Packages.
15. Overloading Packages.
16. Working with Sequences, synonyms, partition, index and clusters
Course: B.Com. (Computer Applications) - CBCS Syllabus – SEMESTER – III
(For those who joined in June 2016 and after)

PART – III : Allied Subject Theory

<table>
<thead>
<tr>
<th>Subject Title : RELATIONAL DATA BASE MANAGEMENT SYSTEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject Code: <strong>11AT31</strong></td>
</tr>
<tr>
<td>Sessional Marks: <strong>25</strong></td>
</tr>
</tbody>
</table>

Objectives:
- To understand the fundamentals of data models and conceptualize and depict a database system using ER diagram
- To make a study of SQL and relational database design.
- To know about data storage techniques and query processing.
- To impart knowledge in transaction processing, concurrency control techniques and recovery procedures.

UNIT – I (15 Hours)
Data, Information and Information Processing, Secondary Storage Devices.

UNIT – II (15 Hours)
Files file organization and file structure, introduction to Database Management System.

UNIT – III (15 Hours)
Software Development life Cycle (SDLC) and Database Development Cycle (DDLC), introduction to Relational database management system (RDBMS) Database architecture and data modeling.

UNIT – IV (15 Hours)
Entity – Relationship (E-R) modeling, Data Normalization, Relational Algebra and Relational Calculus.

UNIT – V (15 Hours)
Oracle data types- Numbers, Strings, dates-Defining tables and column constraints-creating and modifying tables- Create, Alter, Drop-Select from and where clause-Ordering, Group by having in-update, deletion - Aggregate function-Ave, min, max, sum& count.

Text Books:
PART – IV : Skill Based Subject

Subject Title: BUSINESS MATHEMATICS

<table>
<thead>
<tr>
<th>Subject Code: 11SB31</th>
<th>Hours per week: 2</th>
<th>Credit: 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sessional Marks: 25</td>
<td>Summative Marks: 75</td>
<td>Total Marks: 100</td>
</tr>
</tbody>
</table>

Objectives:

➢ To enable the students to acquire knowledge of mathematics.
➢ To familiarise the students with set theory, powers and mathematics of finance and their applications.
➢ To expose the students to apply mathematical knowledge to solve modern business problem.

UNIT: I

(4 Hours)

Set theory – Set Definition – Operations on sets - Venn diagram- Laws of sets – Verification of laws by Venn Diagrams and examples – Solving problems using set theory.

UNIT: II

(4 Hours)

Annuity- Definition – Types of Annuities – Present value of Annuity – Sinking fund - Amortization of principal.

UNIT: III

(4 Hours)

Simple Interest – Compound Interest - Nominal Rate and Effective rate of Interest – Discount on Bills – True Discount – Bankers Discount – Bankers Gain – Present Value.

UNIT: IV

(4 Hours)


UNIT: V

(4 Hours)


Text Book:
Reference Books:

Course: B.Com. (Computer Applications) - CBCS Syllabus – SEMESTER –IV
(For those who joined in June 2015 and after)

<table>
<thead>
<tr>
<th>PART – I – BUSINESS HINDI - II</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUB. CODE: P1LH41</td>
</tr>
<tr>
<td>Hours per week: 4</td>
</tr>
<tr>
<td>Credit: 3</td>
</tr>
<tr>
<td>Sessional Marks: 25</td>
</tr>
<tr>
<td>Summative Marks: 75</td>
</tr>
<tr>
<td>Total Marks: 100</td>
</tr>
</tbody>
</table>

UNIT -1
1. व्याकरण : सुबोध हिन्दी रचना–1 (पाठ 11 से 20 तक)
2. वाक्यों को जोड़ें
3. वाच्य बदलिए (सिर्फ कर्तव्याच्य से कर्मवाच्य)
4. मिनटी (51–100 के साथ ⅓, ⅔, ¾)

UNIT -2 गद्य:
1. सुबोध हिन्दी पाठमाला-1 (पाठ 6–9 तक)

UNIT -3 पद्य:
1. सुबोध हिन्दी पाठमाला–1 (पाठ 5–9 तक)

UNIT -4 पत्र
1. साधित विषय
2. मूल के रूप में लिखित पत्र
3. बीजक
4. साधित नमूना हुए आवेदन पत्र

UNIT -5 नोटों का विकसार करना (पाठ 1–10 मिलाना)
1. सुबोध हिन्दी पाठमाला-1 (पाठ 6–10) (हिन्दी से लेखन या अंग्रेजी)
2. सुबोध हिन्दी पाठमाला–1 (पाठ 6–10) (हिन्दी से अंग्रेजी)
3. समाचार (गद्य) : सुबोध हिन्दी पाठमाला–1 (कहाँ नियम लें) (पाठ 5–9)

पाद्य पुस्तकें
1. सुबोध हिन्दी पाठमाला–1 (दक्षिण भारत हिन्दी प्रचार सम्पादन, चेन्नई–17)
2. सुबोध हिन्दी पाठमाला–1 (दक्षिण भारत हिन्दी प्रचार सम्पादन, चेन्नई–17)

निर्देशी पुस्तकें
1. हिन्दी व्याकरण–भाग 1, प्रकाशित वर्ष : 2012
DEPARTMENT OF ENGLISH
Course: B.Com. (Computer Applications) - CBCS Syllabus – SEMESTER – IV
(For those who joined in June 2015 and After)

DEPARTMENT OF ENGLISH

PART – II– SPOKEN ENGLISH – II

<table>
<thead>
<tr>
<th>SUB. CODE: P2CE42</th>
<th>Hours per week: 1</th>
<th>Credit: 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sessional Marks: 100</td>
<td>Summative Marks:</td>
<td>Total Marks: 100</td>
</tr>
</tbody>
</table>

Objectives:

➢ To develop the reading habit of the students.
➢ To develop the commutation skills of the students.
➢ To enrich the vocabulary of the students.

Text Books Prescribed

Third Semester – The Sun also rises by Ernest Hemingway. [15 Hours]
Fourth Semester – The Strange Case of Dr. Jekyll and Mr. Hyde by R.L. Stevenson. [15 Hours]
Course: B.Com. (Computer Applications) - CBCS Syllabus – SEMESTER – IV
(For those who joined in June 2014 and After)

<table>
<thead>
<tr>
<th>PART – III : Core Subject Theory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject Title: <strong>CORPORATE ACCOUNTING</strong></td>
</tr>
<tr>
<td>Subject Code: <strong>11CT41</strong></td>
</tr>
<tr>
<td>Sessional Marks: 25</td>
</tr>
</tbody>
</table>

Objectives:
- To familiarize with the accounting treatment for issue of shares and debenture to run the company with long term source of funds.
- To enable students to prepare the financial statements of joint stock companies.
- To understand the procedure for valuing the good will and share of companies to acquire a business.

UNIT: I (21 Hours)
Company Accounts – issue, forfeiture and reissue of shares – Redemption of preference shares – Issue and Redemption of Debentures as per Companies Act 2013

UNIT: II (21 Hours)
Pre-Incorporation Profit– Final Accounts of companies as Revised Schedule VI (managerial remuneration excluded)

UNIT: III (21 Hours)
Valuation of Goodwill and shares

UNIT: IV (21 Hours)
Amalgamations as per AS 14 and Internal Reconstruction of companies

UNIT: V (21 Hours)
Liquidation of companies – Order of payment - Preferential Creditors – Statements of Affairs – Deficiency or Surplus Account – Liquidator’s final statement of Account.

Text Book:

Reference Books:

Course: B.Com. (Computer Applications) - CBCS Syllabus – SEMESTER – IV
(For those who joined in June 2014 and After)

<table>
<thead>
<tr>
<th>PART – III : Core Subject Theory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject Title : INCOME TAX LAW AND PRACTICE – II</td>
</tr>
<tr>
<td>Subject Code: <strong>11CT42</strong></td>
</tr>
<tr>
<td>Sessional Marks: <strong>25</strong></td>
</tr>
</tbody>
</table>

**Objectives:**
- To familiarize the students with computation of profits and gains from business/profession and capital gains.
- To impart knowledge of the clubbing of income and set-off and carry forward of losses.
- To equip students with the assessment of individual-assessment of firm.
- To gain knowledge of deductions, tax authorities and assessment procedure.

**UNIT: I**
Computation of profits and gains from business / profession – Capital Gains.

**UNIT: II**
Income of other persons including assessee’s total income Aggregation of incomes and set-off and carry forward of losses.

**UNIT: III**
Deductions from gross total income.

**UNIT: IV**
Assessment of Individual – Assessment of Firm.

**UNIT: V**
Income tax Authorities Different types of assessments.

**Text Book:**
Dr.Mehrotra & Dr.Goyal.,”**Income Tax Law and Accounts**”,Sathitya Bhavan Publication,Agra.

**Reference Books:**
3. B.B.Lal.,”**Direct Tax**”,Konark Publisher(P)Ltd,Newdelhi.

Note:
- Questions shall be set as between theory and problems in the ratio of 40% and 60% respectively
- Amendments made upto 6 months prior to the date of examination is to be followed

Course: B.Com. (Computer Applications) - CBCS Syllabus – SEMESTER IV
(For those who joined in June 2015 and after)

<table>
<thead>
<tr>
<th>PART – III : Core Subject Lab</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject Title:</td>
</tr>
<tr>
<td>Subject Code: 11CP43</td>
</tr>
<tr>
<td>Hours per week: 6</td>
</tr>
<tr>
<td>Credit: 5</td>
</tr>
<tr>
<td>Sessional Marks: 40</td>
</tr>
<tr>
<td>Summative Marks: 60</td>
</tr>
<tr>
<td>Total Marks: 100</td>
</tr>
</tbody>
</table>

Objectives:
- To bridge the academic knowledge and professional implementation.
- To provide first-hand knowledge on the procedure of analyzing, recording and reporting of financial transaction in Tally.ERP 9.
- To equip job seeker for professional accounting career.
- To help future entrepreneur in managing their financial accounting along with business operation.

Lab: 1 Preparation of Trail Balance, Profit & Loss Account and Balance Sheet by creating necessary (Accounting Information) Primary Groups, Sub Groups, and Ledger accounts with opening Balance.

Lab: 2 Preparation of Day Book by entering the Accounting transactions in accounting Vouchers.

Lab: 3 Preparation of Stock Summary by Creating necessary (Inventory Information) Simple and Compound Unit of Measure, Stock Group, Stock Category, Stock Items and Stock Category.

Lab: 4 Preparation of Profit and Loss account and Balance sheet by creating both accounting and Inventory information with opening and closing stock.

Lab: 5 Preparation of Profit and Loss account and Balance sheet by creating both accounting & Inventory information with opening and closing stock with Adjustment entries.

Lab: 6 Preparation of Stock Movement Register by entering Pure Inventory vouchers.
Lab: 7 Preparation of Statement of Accounts of Outstanding Receivables and Payables (Age wise Analysis) by activating maintain Bill wise details Option in F11 Accounting Features

Lab: 8 Preparation of Statement of Accounts of Interest Receivables and Payables by activating Interest Calculation Option in F11 Accounting Features.

Lab: 9 Preparation of Statement of Accounts of Cost Centres and Cost Category by activating Cost Centres and Cost Category Option in F11 Accounting Features.

Lab: 10 Preparation of Statement of Inventory of Expiry Batches by activating Batch wise details option in F11 Inventory Features.

Text Book:

Reference Books:
1. Learning Tally ERP 9 from Accounting to ERP, Sahaj Enterprises, Bangalore, 2013.
**Course:** B.Com. (Computer Applications) - CBCS Syllabus – SEMESTER – IV  
(For those who joined in June 2014 and After)

**PART – III : Allied Subject Theory**

<table>
<thead>
<tr>
<th>Subject Code: 11AT41</th>
<th>Hours per week: 5</th>
<th>Credit: 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sessional Marks: 25</td>
<td>Summative Marks: 75</td>
<td>Total Marks: 100</td>
</tr>
</tbody>
</table>

**Objectives:**
- To enable the students to learn the statistical methods and their applications in commerce.
- To understand the various statistical methods in application to business.
- To acquire the knowledge on basic concepts of statistics.
- To enable the students to apply statistical techniques to solve business problems.

**UNIT: I**  
(18 Hours)
Meaning and Definition of Statistics, Characteristics and Limitations - Methods of Collection of data – Presentation of Data, Primary and Secondary data – Classification and Tabulation of statistical data – Diagrams and Graph - Types and Uses of diagram.

**UNIT: II**  
(18 Hours)

**UNIT: III**  
(18 Hours)

**UNIT: IV**  
(18 Hours)

**UNIT: V**  
(18 Hours)
Index Numbers – Meaning – Utility – Methods – Construction of Wholesale Index Number – Unweighted Index Number – Simple Aggregative Method – Average of Price Relatives Method – Weighted Index Number – Weighted Average of Price
Relatives – Weighted Aggregative Index Number – Mathematical Test of Consistency for Index Numbers – Time Reversal Test – Factor Reversal Test.

Text Book:

Reference Books:

Course: B.Com. (Computer Applications) - CBCS Syllabus – SEMESTER – IV
(For those who joined in June 2016 and After)

<table>
<thead>
<tr>
<th>PART – IV : Skill Based Subject</th>
<th>Subject Title : Coral DRAW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject Code: 11SB41</td>
<td>Hours per week: 2</td>
</tr>
<tr>
<td>Sessional Marks: 25</td>
<td>Summative Marks: 75</td>
</tr>
</tbody>
</table>

Objectives:
- To Use tools and palettes effectively and understand the terminology used
- To Create and edit images and text
- To Apply a range of special effects to images

UNIT- I (6 hours)
CorelDraw: Introduction-Getting started with Corel Draw-Exploring the workspace of CorelDraw-Drawing basic geometric figures-Saving and opening an existing document-Previewing the drawing-working with page layout-Closing the drawing and quitting CorelDraw.

UNIT-II (6 hours)
Working with lines: Drawing a curve-Drawing calligraphic outline tool-Defining lines and outlines setting-Creating a calligraphic outline-Adding an Arrowhead.

UNIT –III (6 hours)
Working with Objects: Selecting and Deselecting Objects, Deleting, Sizing, Rotating, Combining Objects-Groping in Corel Draw, Grouping object, Ungrouping object-Applying convert to curve command on objects-Selecting colour for an object-Filling objects.

UNIT-IV (6 hours)
Working with Text: Types of text- Converting text from one type to another changing the appearances of text-Applying effects to the text-wrapping paragraph text around objects-Filling Text to an object path- Converting Text to an object using curve Command.

UNIT-V (6 hours)

Text Book:

Reference Books:

***************************************
Course: B.Com. (Computer Applications) - CBCS Syllabus – SEMESTER – V
(For those who join in June 2015 onwards)

<table>
<thead>
<tr>
<th>PART II – Paper I</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Subject Title :</strong> English for Career Development</td>
</tr>
<tr>
<td>Subject Code: P2LE51 / P2CE51</td>
</tr>
<tr>
<td><strong>Sessional Marks:</strong> 100</td>
</tr>
</tbody>
</table>

Objectives:
- To make students face Competitive Examinations with confidence
- To train students in writing book reviews
- To make them write reports, resolutions, minutes
- To make them prepare agenda for meeting.

Unit I
- Comprehension

Unit II
- Spotting the Errors
- Sentence Improvement
- Voice
- Preposition
- Cloze Test or Numbered Gaps


Unit III
- Preparation of Short Speeches

Unit IV
- Report-writing
- Preparation of Agenda, Resolutions, Minutes

Unit V
Course: B.Com. (Computer Applications) - CBCS Syllabus – SEMESTER – V
(For those who joined in June 2016 and After)

PART – III : Core Subject Theory

<table>
<thead>
<tr>
<th>Subject Title : COST AND MANAGEMENT ACCOUNTING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject Code: <strong>11CT51</strong></td>
</tr>
<tr>
<td>Sessional Marks: <strong>25</strong></td>
</tr>
</tbody>
</table>

Objectives:
- To gain knowledge with the various concepts and elements of cost
- To familiarize the students on the importance of cost ascertainment, reduction and control
- To acquire the students, the management accounting techniques that facilitates managerial decision making.

UNIT I (6 Hours)


UNIT II (6 Hours)


UNIT III (6 Hours)

UNIT IV (6 Hours)

Fund Flow Analysis- Schedule of changes in working capital – Funds from operations – Analysis of Sources and Applications of Funds - Preparation of Funds flow statement.


UNIT V (6 Hours)


Text Books:


Reference Books:

Objectives:

- To equip the students with the provisions of GST Law & Practice.
- To impart knowledge of Levy, Input Tax Credit, Registration and Tax Invoice.
- To familiarize students to Returns, Payment of Tax and Accounts and Records.

UNIT-I


UNIT-II

Levy of and Exemption from Tax: Tax Rate Structure - Levy and Collection of Central/State Goods and Services Tax - Composition Levy - Taxable person - Power to grant exemption from tax.

Time, Value and Place of Supply: Time of supply of goods - Time of supply of services - Change in rate of tax in respect of supply of goods or services - Value of taxable supply.
UNIT-III

**Input Tax Credit:** Eligibility and conditions for taking input tax credit - Apportionment of credit and blocked credits - Availability of credit in special circumstances - Recovery of Input Tax Credit and Interest thereon - Taking input tax credit in respect of inputs sent for job work - Manner of distribution of credit by Input Service Distributor - Manner of recovery of credit distributed in excess.

**Registration:** Registration - Registration Forms and Process - Special provisions relating to casual taxable person and non-resident taxable person - Amendment of registration - Cancellation of registration - Revocation of cancellation of registration.

UNIT-IV

**Tax Invoice, Credit and Debit Notes:** Tax invoice - Tax not to be collected by unregistered taxable person - Amount of tax to be indicated in tax invoice and other documents - Credit and debit notes.

**Returns:** Furnishing details of outward supplies - Furnishing details of inward supplies - Returns - First Return - Claim of input tax credit and provisional acceptance thereof - Matching, reversal and reclaim of input tax credit - Matching, reversal and reclaim of reduction in output tax liability - Annual return - Final return - Notice to return defaulters - Levy of late fee - Tax Return Preparers.

UNIT-V

**Payment of Tax:** Payment of tax, interest, penalty and other amounts - Interest on delayed payment of tax - Tax deduction at source - Transfer of input tax credit.

**Refunds:** Refund of Tax - Refund in certain cases - Interest on delayed refunds - Consumer Welfare Fund - Utilization of the Fund.

**Accounts and Records:** Accounts and other records - Period of retention of accounts.

**Text Book:** (Current Edition)


**Reference Books:** (Current Edition)

Course: B.Com. (Computer Applications) - CBCS Syllabus – SEMESTER – IV
(For those who joined in June 2015 and After)

<table>
<thead>
<tr>
<th>PART – III : Core Subject Lab</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject Title : LAB-5: VISUAL BASIC</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Subject Code: 11CP53</th>
<th>Hours per week: 6</th>
<th>Credit: 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sessional Marks: 40</td>
<td>Summative Marks: 60</td>
<td>Total Marks: 100</td>
</tr>
</tbody>
</table>

Objectives:
- To familiarize the students with computation of profits and gains from business/profession and capital gains.
- To impart knowledge of the clubbing of income and set-off and carry forward of losses.
- To equip students with the assessment of individual-assessment of firm.
- To gain knowledge of deductions, tax authorities and assessment procedure.

UNIT: I

Starting a new project -The properties of window -common form properties -Scale properties -Color properties -Making a form responsive -Printing a visual representation of a form -Types -Creating stand-alone windows programs -The tool box - Creating Controls - The name (Control Name) Property -Properties of command buttons -Simple event procedures for command buttons -Access Keys - Image Controls -Text Boxes -labels -Navigating between controls -Message boxes - The Grid -The ASCII representation of forms.

UNIT: II


UNIT: III
Function procedures -sub procedures -Advanced uses or producers and functions using the Object Browser to Navigate among your subprograms -List: One-dimensional arrays- Arrays with more than one dimension -Using Lists and Arrays with functions and procedures - The new array-based string - Records (User-Defined Types).

UNIT: IV


UNIT: V


Text Book:

Reference Books:
Course: B.Com. (Computer Applications) - CBGS Syllabus – SEMESTER – V
(For those who joined in June 2015 and After)

<table>
<thead>
<tr>
<th>PART – III : Elective Subject</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject Title : <strong>JAVA PROGRAMMING</strong></td>
</tr>
<tr>
<td>Subject Code: <strong>11EP1A</strong></td>
</tr>
<tr>
<td>Hours per week: <strong>7</strong></td>
</tr>
<tr>
<td>Credit: <strong>5</strong></td>
</tr>
<tr>
<td>Sessional Marks: <strong>25</strong></td>
</tr>
<tr>
<td>Summative Marks: <strong>75</strong></td>
</tr>
<tr>
<td>Total Marks: <strong>100</strong></td>
</tr>
</tbody>
</table>

**Objectives:**
- To provide the basics of Object Oriented paradigms
- To practice the principles of programming languages.
- To practice threading and exception handling with Java
- To understand the basic programming constructs of Java Language.
- To develop programs for window application or Web application.

**UNIT: I**
(15 Hours)

**UNIT: II**
(15 Hours)
Introducing classes: Class fundamentals-declaring objects-assigning objects reference variables-introducing methods-constructors-the this key word-garbage collection-the finalize () method. A closer look at method and classes: Overloading methods-using objects as parameters-a closer look at argument passing-returning objects-recursion-introducing access control-understanding static-introducing final-arrays revisited-introducing nested and inner classes-exploring the string class-using command-line argument.
UNIT: III  
(15 Hours)

UNIT: IV  
(15 Hours)
Multithreaded programming: The java thread model-the main thread-creating a thread-creating multiple threads-using is alive () and join ()-thread priorities-synchronization-inter thread communication-suspending, resuming and stopping thread- using multithreading. I/O applets and other topics:

UNIT: V  
(15 Hours)
String handling: The string constructors-string lengths-special string operators-character extraction-string comparison-searching strings-modifying a string-data conversion using value of ()-changing the case of characters within a string-string buffer

Text Book:

Reference books:
Course: B.Com. (Computer Applications) - CBCS Syllabus – SEMESTER – V
(For those who joined in June 2015 and After)

<table>
<thead>
<tr>
<th>Part – IV : Common Subject Theory</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Subject Title:</strong> Environmental studies</td>
</tr>
<tr>
<td><strong>Subject Code:</strong> ESUG51</td>
</tr>
<tr>
<td><strong>Hours per week:</strong> 2</td>
</tr>
<tr>
<td><strong>Credit:</strong> 2</td>
</tr>
<tr>
<td><strong>Sessional Marks:</strong> 25</td>
</tr>
<tr>
<td><strong>Summative Marks:</strong> 75</td>
</tr>
<tr>
<td><strong>Total Marks:</strong> 100</td>
</tr>
</tbody>
</table>

Objectives
- Disseminate information of Environment of national and international issues
- Environmental consciousness creation among the students
- Facilitation of environmental leadership among students

Unit-I 5 hrs
Introduction – Nature, scope and importance of Environmental studies – Natural Resources and conservation – forest, water and energy.

Unit-II 5 hrs
Ecosystem – concept – structure and function, energy flow, food chain, food web and ecological pyramids

Unit-III 5hrs
Biodiversity – definition, types – values – India, a mega diversity zone – Hotspots – Endangered and endemic species – threat to biodiversity and conservation

Unit-IV 5 hrs

Unit-V 4hrs
Course: B.Com. (Computer Applications) - CBCS Syllabus – SEMESTER – V
(For those who joined in June 2014 and After)

PART – IV : Skill Based Subject

Subject Title : COMMERCE FOR COMPETITIVE EXAMINATIONS

<table>
<thead>
<tr>
<th>Subject Code: 11SB51</th>
<th>Hours per week: 2</th>
<th>Credit: 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sessional Marks: 100</td>
<td>Summative Marks: --</td>
<td>Total Marks: 100</td>
</tr>
</tbody>
</table>

Objectives:

➢ To create awareness among the students, about the various competitive examinations.
➢ To train the students for successful participation in competitive examination.
➢ To prepare the students for all competitive examinations held at state and national levels.

UNIT: I

(6 Hours)

Verbal Reasoning: Alphabet test- Mathematical operations test- Series test - Odd Man out – Classification - Blood relations - Number, ranking and time sequence - Direction sense test - Sitting arrangement - Decision making

UNIT: II:

(6 Hours)

Non-Verbal Reasoning: Series test – Analogy - Odd figures - Miscellaneous tests

UNIT: III

(6 Hours)

Quantitative Aptitude: Number system, HCF & LCM - Number series - Decimal fractions - Square root and cube root – Simplifications – Partnerships – Percentage - Ratio and proportions, Average & Ages Ratio & Proportion - Profit and loss - Simple interest and compound interest

UNIT: IV

(6 Hours)

General Awareness: Indian Economy - International Economy - Books & Their Authors - Banking Terms – RBI - Fiscal Monetary Policies etc. - Social
Function of Banks - UNO, Marketing - Awards & Honors Sports - Finance - Agriculture etc

UNIT: V  
(6 Hours)

Computer: Basic computer terminology - Software & Hardware questions - Computer abbreviation - Microsoft-office - Basic knowledge of Internet use etc

Text book:

Materials Prepared by the Department of Commerce (CA).

Reference books:
1. IBPS Common written examination, unique publishers, New Delhi, 2015.
2. IBPS CWE-V, Kiran Institute of Career Excellence Pvt.Ltd., New Delhi, 2015

Course: B.Com. (Computer Applications) - CBCS Syllabus – SEMESTER – VI (For those who join in June 2015 onwards)

<table>
<thead>
<tr>
<th>PART II – Paper I</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject Title: English for Professional Excellence</td>
</tr>
<tr>
<td>Subject Code: P2LE61, P2CE61</td>
</tr>
<tr>
<td>Sessional Marks: 100</td>
</tr>
</tbody>
</table>

Total number of hours: 15 hours

Objectives:
➢ To make students face Competitive Examinations with confidence
➢ To prepare students to face interviews
➢ To make students familiar with books and authors in English literature
➢ To make students prepare resume
➢ To motivate students to participate in Group Discussion

Unit I
➢ Sentence Completion
➢ Sentence Fillers
➢ Synonym
➢ Antonym
➢ Idioms and Phrases
➢ Substitution

Unit II
➢ Sentence Re-Arrangement
➢ Jumbled sentences
➢ Paragraph Reconstruction
➢ Analogy


Unit III
Course: B.Com. (Computer Applications) - CBCS Syllabus – SEMESTER – VI
(For those who joined in June 2014 and After)

PART – III : Core Subject Theory

<table>
<thead>
<tr>
<th>Subject Title : AUDITING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject Code: <strong>11CT61</strong></td>
</tr>
<tr>
<td>Sessional Marks: <strong>25</strong></td>
</tr>
</tbody>
</table>

Objectives:

- To create interest in the minds of students towards auditing profession.
- To familiarize with the provisions of the companies act relating to the appointment, conduct and liabilities of an author.
- To impart knowledge about auditing principles, procedures and techniques in accordance with current legal requirements and profession standards.

UNIT: I


Conduct of Audit : Audit programme – Meaning – Merits and Demerits – Audit Notes – Working papers (Preparation of Audit Programmes not required)

UNIT: II

Internal control: Internal check – Meaning Definition – objects – Procedure of Internal check – Advantages – Duties an auditor – Internal Check in respect of Cash Book – Credit Purchases – Credit Sales Payment of wages – Closing stock.

UNIT: III

Vouching: Meaning – Objectives – importance – voucher – Requisites of a valid voucher – Vouching of different receipts and payments – receipts from debtors, bad debts recovered, cash and credit sales-payments in respect of wages, salaries, and rent, cash and credit purchases

UNIT: IV

(21 Hours)

UNIT: V (21 Hours)
Liabilities of Auditor: Basis for liabilities – Civil – Criminal & Contractual Liabilities – Liabilities under I.P.C- Liabilities to Third Parties – Legal cases and their applicability – Preparation of Audit report.

Text Book:

Reference Books:

Course: B.Com. (Computer Applications) - CBCS Syllabus – SEMESTER – VI
(For those who joined in June 2015 and After)

<table>
<thead>
<tr>
<th>PART – III : Elective Subject</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject Title : WEB DESIGNING</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Subject Code: 11EP6A</th>
<th>Hours per week: 6</th>
<th>Credit: 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sessional Marks: 25</td>
<td>Summative Marks: 75</td>
<td>Total Marks: 100</td>
</tr>
</tbody>
</table>

Objective:

➢ To impart knowledge about the technologies and their applications
➢ To understand the basics of web designing and to use open source tools.
   To highlights the basic concepts of HTML and helps the students
➢ To equip with the programming skills in implementing and developing web based Applications.

UNIT: I (15 Hours)


UNIT: II (15 Hours)


UNIT: III (13 Hours)
Ordered and Unordered Lists: Unordered lists – Heading in a list – Ordered lists – Type attribute – Nested lists. Table Handling: Tables – Table Creation in HTML – Width of the table and Cells – Cells spanning multiple rows and columns – Coloring cells – Column Specification.

UNIT: IV (20 Hours)

Frames: Frameset Definition – pixel unit – percentage unit – fraction unit – Frame definition – Src, name, margin, scrolling and noresize attributes – Nested Framesets.


UNIT: V (20 Hours)


Text Book:


Reference Books:

Course: B.Com. (Computer Applications) - CBCS Syllabus – SEMESTER – VI
(For those who joined in June 2014 and After)

<table>
<thead>
<tr>
<th>PART – III : Elective Subject</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject Title : <strong>Project &amp; Viva - Voce</strong></td>
</tr>
<tr>
<td>Subject Code: <strong>11PV61</strong></td>
</tr>
<tr>
<td>Sessional Marks: <strong>100</strong></td>
</tr>
</tbody>
</table>

Objectives:

- To provide skills to identify a problem to be automated with social relevance.
- To develop skills in analyzing real world problems and prepare problem statements.
- To design with various design representation including architectural design, database design and GUI design.
- To apply the coding skills and develop the system.
- To prepare test cases and test the system through unit testing, integration testing and acceptance testing.
- Apply proper validation to the system developed.
- To prepare user manual and maintenance guidelines.
- To provide documentation and presentation skills.

Mode of Evaluation: Internal
Course: B.Com. (Computer Applications) - CBCS Syllabus – SEMESTER – VI
(For those who joined in June 2014 and After)

<table>
<thead>
<tr>
<th>Components</th>
<th>Review 1</th>
<th>Review 2</th>
<th>Final Review</th>
</tr>
</thead>
<tbody>
<tr>
<td>Documentation</td>
<td>10</td>
<td>10</td>
<td>20</td>
</tr>
<tr>
<td>Seminar /presentation</td>
<td>20</td>
<td>10</td>
<td>20</td>
</tr>
<tr>
<td>Viva-voce</td>
<td>20</td>
<td>10</td>
<td>20</td>
</tr>
<tr>
<td>Demo</td>
<td>20</td>
<td></td>
<td>40</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>50</td>
<td>100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Subject Title: Value Education</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Subject Code: VEUG61</th>
<th>Hours per week:</th>
<th>Credit:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sessional Marks: 25</th>
<th>Summative Marks: 75</th>
<th>Total Marks: 100</th>
</tr>
</thead>
</table>

UNIT I: The heart of Education: [6 hours]


UNIT II: The Value of Body and Life Energy [6 hours]

Introduction – what are the causes for paid, Disease and death? Three Basic needs for all living Beings – Personal Hygeine Five Factors of Balance in Life – The need and benefits of physical Exercise – The value and Base of Life energy – The value and Base of Bio-magnetism - You are your own best caretaker.

The Marvelous nature of mind


UNIT III: Analysis of Thought [6 hours]


Effects of good vibrations – Make Blessing a Daily Habit

UNIT IV: Moralisation of Derive [6 hours]

Introduction – moralization of desire - Analyse your desires – Summary of practice.
Neutralisation of Anger:

63
Introduction – meaning – characteristics of Anger – Anger is a Destructive emotion – Anger spoils our relationship with others – Some common misconception about anger – will power and method success through awareness – method of neutralisation of anger.

UNIT V: Eradication of Worries [6 hours]

Worry is a mental disease – Nature’s Law of cause and effect – factors beyond our control – How to deal with problems – analyse your problem and eradicate worry

Harmonious Relationships

Introduction – Three angles of life – The value of harmony in personal relations – Love and Compassion – pleasant face and loving words – appreciation and gratitude to parents and teachers – Bringing needed reforms in educational institutions

Why should we serve others? Brotherhood – A scientific Basis for Universal Brotherhood protection of the environment – non-violence and the five fold moral culture.

Text Book: Value Education for Health, Happiness and Harmony

Based on the Philosophy and Teachings of Swami Vethanthiri Maharishi) Published By: Brain Trust, Aliyar A Wing of World Community Service Centre

Course: B.Com. (Computer Applications) - CBCS Syllabus – SEMESTER – VI
(For those who joined in June 2016 and After)

<table>
<thead>
<tr>
<th>PART – IV : Skill Based Subject</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Subject Title : ADVANCED EXCEL OPERATIONS</strong></td>
</tr>
<tr>
<td><strong>Subject Code: 11SB61</strong></td>
</tr>
<tr>
<td><strong>Sessional Marks: 25</strong></td>
</tr>
</tbody>
</table>

Objectives:

- Performing complex calculations more efficiently, using various Excel functions.
- Organizing and analyzing large volumes of data.
- Creating MIS reports and Designing and using templates.
- Consolidating and managing data from multiple workbooks.

UNIT- I (6 hours)

AboutExcel- The ExcelEnvironment -The TitleBar-The Ribbon-ScrollBars-The Microsoft OfficeButton - The Quick AccessToolbar - The FormulaBar-The WorkbookWindow - The StatusBar-The Workbook ViewButtons - The ZoomSlider

UNIT-II (6 hours)

CreatingFormulas-Ranged FormulaSyntax - Simple FormulaSyntax - WritingFormulas- UsingAutoSum- InsertingFunctions - Editing aRange- FormulaAutoCorrect-Auto Calculate-COLUMNS &ROWS: Selecting Columns andRows- Adjusting Column Width and RowHeight - Hiding and Unhiding Columns andRows

UNIT -III (6 hours)
Formatting Worksheets: Formatting Cells - The Format Cells Dialog Box - Clearing all formatting from Cells - Copying All Formatting from Cells to Another Area.

Worksheet Tools: Selecting Multiple Worksheets - Inserting and Deleting Worksheets – Renaming Worksheets - Coloring Worksheet Tabs - Copying or Moving Worksheets

UNIT-IV

Worksheet Tools: Moving between Worksheets - Selecting Multiple Worksheets - Inserting and Deleting Worksheets - Renaming Worksheets - Coloring Worksheet Tabs - Copying or Moving Worksheets.

Printing Worksheets: Using PrintPreview - Printing Worksheets - 3D Formulas - Creating 3D Formulas - 3D Formula Syntax

UNIT-V

Conditional Formatting And Cell Styles: Conditional Formatting - Finding Cells with Conditional Formatting – Creating Charts - Selecting Charts - Moving and Resizing Charts - Changing the Chart Type - Changing the Data Range - Deleting Charts - Creating Pivot Tables and Pivot Charts – Excel Macros

Text Book:

Timothy J.O. Leary and Lindai O Leary, “MS Office”, IRWIN/MS GRAW Hill, New Delhi, 2015

Reference Books:

Course: B.Com. (Computer Applications) - CBCS Syllabus – SEMESTER – VI
(For those who joined in June 2016 and After)

PART – IV : Skill Based Subject

<table>
<thead>
<tr>
<th>Subject Title</th>
<th>Subject Code</th>
<th>Hours per week</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>HARDWARE &amp; NETWORKING</td>
<td>11SB62</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

Sessional Marks: 25
Summative Marks: 75
Total Marks: 100

Objectives:

➢ To understand the fundamentals of networking.
➢ To basic networking concepts.
➢ To understand the fundamentals of Hardware.
➢ To understand the operations of basic PC hardware.

UNIT I

Computer Hardware - Components of mother boards - Types- Ports – Slots – Connectors - add on cards - Power supply units - Cabinet types - Storage devices - Primary & secondary storage medium.

UNIT II


UNIT III

(6 hours)
Input devices: Keyboard - Mouse - Types of Mouse - Joy stick – web cam-barcode reader
Output devices: Monitors- Different types of Monitors, - Printers - Types – Projectors.

UNIT IV
(6 hours)

UNIT V
(6 hours)

Text Books:

Reference Books:
Course: B.Com. (Computer Applications) - CBCS Syllabus – SEMESTER – VI
(For those who joined in June 2016 and After)

<table>
<thead>
<tr>
<th>Part IV : Skill Based Subject</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject Title: PHP and MYSQL</td>
<td></td>
</tr>
<tr>
<td>Subject Code: 11SB63</td>
<td>Hours per week: 2</td>
</tr>
<tr>
<td></td>
<td>Credit: 2</td>
</tr>
<tr>
<td>Seasonal Marks: 25</td>
<td>Summative Marks: 75</td>
</tr>
<tr>
<td></td>
<td>Total Marks: 100</td>
</tr>
</tbody>
</table>

Objectives:

- *Behind this course is to give basic Knowledge of PHP.*
- *Learn about PHP Syntax and MySQL connectivity.*
- *Get a job in software industry as web developer.*
- *To impart knowledge about the technologies and their applications*
- *To understand the basics of web designing and to use open source tools.*

UNIT- I  

**Introduction:** History of PHP -Basic PHP Syntax- PHP Data Types-Basic Program in PHP-Operators and Variable -String Handling Functions- Condition Statements and Loops- Embedding PHP and HTML -Executing PHP and viewing in Browser

UNIT-II  

**Functions**-Meaning-creating a function-User Defined Function-**Arrays**-Meaning -arrays-One Dimensional Arrays-Two Dimensional Arrays-Accessing Array-Getting the Size of an Array

UNIT -III  

(6 hours)
**File handling** - Creating and deleting a file - Reading and Writing Text Files - Working with Directories in PHP - File Upload 

**Forms** - Meaning - Importing User Input - Accessing User Input - Combine HTML and PHP Code

**UNIT-IV**

(6 hours)

**Cookies** - Meaning - Setting Time in Cookie With PHP - Deleting A Cookie - Creating Session Cookie - Working with the Query String. **Session** - Meaning - Starting Session - Registering Session Variables - Working with Session Variables - Destroying Session

**UNIT-V**

(6 hours)

**MY SQL** - Meaning - Connecting to the MYSQL - Selecting a Database - Adding Data to a Table - Types of Tables in MYSQL - Query in MYSQL - Select, Insert, Update, Delete, Truncate, Alias, Order By - Database and Connectivity of PHP with MYSQL

**Text book:**

“PHP and MYSQL in Easy Steps”, Mike McGrath, Easy Steps Limited, 2015

**Reference Books:**


PART – V : Common Subject Theory
Subject Title : EXTENSION ACTIVITIES

| Subject Code: EAUG61 | Hours per week: | Credit: | 1 |
|----------------------|----------------|---------|
| Sessional Marks:     | Summative Marks: | 100 | Total Marks: | 100 |

UNIT – I:

UNIT – II:

UNIT – III:

UNIT – IV:

UNIT – V:
Adventure Programme – National Days and Celebrations.(Applicable to NSS Students)

(OR)

Civil Defence – Aid to civil authorities – Disaster management – Leadership
– Man management – Adventure activities – Social service

Reference:
National Service Scheme Manual (Revised), Ministry of Human Resources Development, government of India.