

Shiksha Mandal, Wardha's

# **G. S. COLLEGE OF COMMERCE & ECONOMICS**

Amravati Road, Civil Lines, Nagpur-440 001

A Hindi Linguistic Minority College

ACCREDITED WITH 'A'-GRADE BY NAAC

## **An Autonomous College**

(Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)

1. Conferment of Fresh Autonomous Status vide UGC letter No. F. 22-1/2017 dt. 28-12-2017
2. Notified as Fresh Autonomous College by RTM Nagpur University vide letter No. RTMNU / CDS/2018/325 dt. 3-4-2018



## **ACADEMIC REGULATIONS**

**GOVERNING THE EXAMINATION LEADING TO DEGREE OF**

**B. COM. (C.A.)**

**[BACHELOR OF COMMERCE (COMPUTER APPLICATION)]**

**(AUTONOMOUS)**

**(REVISED W.E.F. 2020-21)**

**PROGRAMME CODE: GSN-UG-02-BCCA**

**Issued by:**

**Principal, G. S. College of Commerce & Economics, Nagpur**

Shiksha Mandal, Wardha's  
**G. S. COLLEGE OF COMMERCE & ECONOMICS, NAGPUR**  
**(Autonomous)**  
(Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)

**GOVERNING BODY**  
(As per UGC Guidelines for Autonomous Colleges, 2018)

Sr. No.	Name	Designation	Category
1.	Shri. Rahul Bajaj	President/Trustee	Management
2.	Shri. Shekhar Bajaj	Trustee	Management
3.	Shri. Sanjay Bhargava	Chairperson/Trustee	Management
4.	Shri. P. D. Khemuka	Member	Management
5.	Shri. Jaydeep Shah	Member	Management
6.	Dr. P. N. Mishra	Member	UGC Nominee
7.	Dr. Vinayak Deshpande	Member	University Nominee
8.	Joint Director, HE, Nagpur	Member	State Government Nominee
9.	Dr. Apoorva Palkar	Member	Educationist/Industrialist
10.	Mrs. S. S. Kathaley	Member	Teacher
11.	Dr. P. M. Paradkar	Member	Teacher
12.	Dr. N.Y.Khandait	Member (ex-officio)	Principal

**ACADEMIC COUNCIL**  
(As per UGC Guidelines for Autonomous Colleges, 2018)

Sr. No.	Name	Designation	Category
1.	Dr. N.Y.Khandait	Chairperson	Principal
2.	Dr. R.H. Nagarkar	Member	HOD (Commerce)
3.	Dr. A.B. Patle	Member	HOD (Accountancy & Statistics)
4.	Dr. Mrs. S.D Morey	Member	HOD (Economics)
4.	Dr Ms Ashwini Purohit	Member	HOD (Business Administration and Management)
5.	Prof. P.J. Yadao	Member	HOD (Information Technology)
6.	Prof. Mrs. S.S. Kathaley	Member	HOD (Languages)
7.	Prof. Ms. M.V. Purohit	Member	Faculty (Commerce)
8.	Prof. Sushma Gawande	Member	Faculty (Information Technology)
9.	Dr. Mrs. D.V. Chavan	Member	Faculty (Languages)
10.	Dr. Ms.Archana Dadhe	Member	Faculty (Management)
11.	Shri. Hemant Singhal	Member	Expert (Industry)
12.	Shri. Ranjit Dani	Member	Expert (Commerce)
13.	Shri. Ashutosh Dharmadhikari	Member	Expert (Law)
14.	Dr. A. G. Pawade	Member	Expert (Education)
15.	Dr. Anant Deshmukh	Member	University Nominee
16.	Dr. K. C. Deshmukh	Member	University Nominee
17.	Dr. Pramod Sharma	Member	University Nominee
18.	Dr. V.N. Thangan	Member/ Secretary	Faculty Member nominated by Principal

**BOARDS OF STUDIES**  
(As per UGC Guidelines for Autonomous Colleges, 2018)

<b>COMMERCE</b>			<b>ACCOUNTANCY &amp; STATISTICS</b>		
Sr. No.	Name	Designation	Sr. No.	Name	Designation
1	Dr. R. H. Nagarkar	Chairman	1	Dr. A. B. Patle	Chairman
2	Dr. Y. H. Kedar	Faculty	2	Dr. B. M. Chachane	Faculty
3	Dr. Mrs. R. T. Sahu	Faculty	3	Prof. Ms. M. V. Purohit	Faculty
4	Prof. Ms. N.Z. Hirani	Faculty	4	Dr. V. N. Thangan	Faculty
5	Prof. A. S. Jain	Faculty	5	Dr. M. R. Pande	Faculty
6	Prof. Ms. P.S. Shrivastava	Faculty	6	Dr. Dinesh Nichit Dean, Faculty of Commerce, SGAU, Amaravati	Subject Expert (Other University)
7	Dr. Vijay Kumar Bhangadiya Principal, SKLC, Amaravati	Subject Expert (Other University)	7	Dr. Jayant Kale SLRK Toshnival College, Akola	Subject Expert (Other University)
8	Dr. Prakash Tayade Shivaji Arts & Commerce College, Amaravati	Subject Expert (Other University)	8	Dr. Dilip Gotmare, Principal, PD College, Nagpur	Expert nominated by VC
9	Dr. S. R. Jichkar DNC, Nagpur	Expert nominated by VC	9	Shri. CA Julfesh Shah Chartered Accountant,	Expert (Industry)
10	Shri. Devesh Pendharkar Director, Vicco Labs, Nagpur	Expert (Industry)	10	Dr. CA Tejinder Singh Rawal Chartered Accountant	PG Alumnus
11	Shri. Raunak Shah	PG Alumnus			
<b>BUSINESS ADMINISTRATION &amp; MANAGEMENT</b>			<b>BUSINESS ECONOMICS</b>		
Sr. No.	Name	Designation	Sr. No.	Name	Designation
1.	Dr. Mrs. A. A. Purohit	Chairman	1.	Dr. S. D. Morey	Chairman
2.	Dr. Ms. A. Dadhe	Faculty	2.	Prof. Ms. R. J. Arora	Faculty
3.	Dr. Geeta Naidu	Faculty	3.	Dr. Ms. V.D. Nagdive	Faculty
4.	Dr. Anirudha Akarte	Faculty	4.	Dr. Afsar Sheikh	Faculty
5.	Prof. Kamlesh Thote	Faculty	5.	Dr. Mrs. S.S. Gaddekar	Faculty
6.	Dr. Santosh Sadar DBM, SGAU Amaravati	Subject Expert (Other University)	6.	Dr. Anil Raut Shivaji Arts & Commerce College, Akola	Subject Expert (Other University)
7.	Dr. Pravin Deshmukh RD Deshmukh College, Badnera	Subject Expert (Other University)	7.	Dr. Prafulla Gudadhe Amolakchand College, Yeotmal	Subject Expert (Other University)
8.	Dr. Anant Deshmukh DBM, RTM, Nagpur University	Expert nominated by VC	8.	Dr. Aparna Samudra PGTD (Economics) RTM Nagpur University	Expert nominated by VC
9.	Shri. Shrikant Rikhe Sunil HiTech Ltd. Nagpur	Expert (Industry)	9.	Shri. Manish Bansal Nagpur Carbon (P)Ltd.	Expert (Industry)
10.	Ms. Vijaya Motwani	PG Alumnus	10.	Ms. Mahima Bhatnagar	PG Alumnus
<b>LANGUAGES</b>			<b>INFORMATION TECHNOLOGY</b>		
Sr. No.	Name	Designation	Sr. No.	Name	Designation
1.	Prof. Mrs. S. S. Kathaley	Chairman	1.	Prof. Pravin. J. Yadao	Chairman
2.	Dr. Mrs D. V. Chavan	Faculty	2.	Prof. Rahul Tiwari	Faculty
3.	Dr. Ms. P.S. Murarkar	Faculty	3.	Prof. Mrs. Sushma Gawande	Faculty
4.	Dr. Mrs N. H. Kalyani	Faculty	4.	Prof. Ms. Priti Rangari	Faculty
			5.	Prof. Ms. Prajakta Deshpande	Faculty
			6.	Prof. Haresh Naringe	Faculty
5.	Dr. V. R. Vishwarupe Amolakchand College, Yeotmal	Subject Expert (Other University)	7.	Dr. S. B. Kishore HOD, IT, SP College, Chandrapur	Subject Expert (Other University)
6.	Dr. T. D. Rai SKLC, Amaravati	Subject Expert (Other University)	8.	Dr. K. D. Kalaskar HOD, IT, Dr Ambedkar College, Chandrapur	Subject Expert (Other University)
7.	Dr. Sandhya Nair Principal, RS Mundle Dharampeth College, Nagpur	Expert nominated by VC	9.	Dr. U.A. Lanjewar VMV College, Nagpur	Expert nominated by VC

Shiksha Mandal, Wardha's  
**G. S. COLLEGE OF COMMERCE & ECONOMICS, NAGPUR**  
**(Autonomous)**  
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**ACADEMIC REGULATIONS**  
GOVERNING THE EXAMINATION LEADING TO DEGREE OF  
**BACHELOR OF COMMERCE (COMPUTER APPLICATION)**  
**[B.COM. (C.A.)]**  
**[Revised from 2020-21]**

WHEREAS, Maharashtra University Act: 1994 came into force with effect from July 22, 1994, and the Maharashtra Public Universities Act: 2016 came into force from March 1, 2017;

AND

WHEREAS, the Sub-Section (1) of Section 89 of the aforesaid Maharashtra University Act: 1994 provided for and the Sub-Section (1) of Section 122 of the Maharashtra Public Universities Act: 2016 provides that a University Department or Institution, Affiliated College or Recognized Institution may apply to the University for grant of autonomous status. The Management Council on the recommendation of the Academic Council may confer the autonomous status;

AND

WHEREAS, the University Grants Commission (UGC), under its XII Plan has issued guidelines for conferring autonomous status to the colleges in the country subject to their fulfilling various eligibility conditions for improving quality of higher education and to initiate academic reforms;

AND

WHEREAS, the Rashtrasant Tukadoji Maharaj Nagpur University had earlier issued Direction No. 4 of 1999 regarding conferment of autonomous status for College/University Department/University Institution which stood repealed by Direction No. 3 of 2016 regarding **NORMS AND PROCEDURES FOR GRANT OF AUTONOMY TO UNIVERSITY DEPARTMENTS OR INSTITUTIONS, AFFILIATED COLLEGES AND RECOGNISED INSTITUTIONS;**

AND

WHEREAS, G .S. College of Commerce & Economics, Nagpur, permanently affiliated to the Rashtrasant Tukadoji Maharaj Nagpur University applied to the University for NOC and forwarding their application for Autonomy to the University Grants Commission (UGC);

AND

WHEREAS, the University Grants Commission constituted an Expert Committee to visit G. S. College of Commerce & Economics, Nagpur for conferment of fresh autonomous status;

AND

WHEREAS, the University Grants Commission, on the basis of the report of its Expert Committee and on the recommendation of its Standing Committee, has conferred upon G. S. College of Commerce & Economics, Nagpur a fresh autonomous status vide its letter. F. 22-1/2017 dt. 28-12-2017;

AND

WHEREAS, the Rashtrasant Tukadoji Maharaj Nagpur University has notified G. S. College of Commerce & Economics, Nagpur as a “FRESH AUTONOMOUS COLLEGE” vide its letter No. RTMNU / CDS/2018/325 dt. 3-4-2018 w.e.f. 2018-19;

AND

WHEREAS, G. S. College of Commerce & Economics, Nagpur duly constituted its Governing Body, Academic Council, Boards of Studies and other statutory committees as stipulated in the University Grants Commission (Conferment of Autonomous Status Upon Colleges and Measures for Maintenance of Standards in Autonomous Colleges) Regulations, 2018;

AND

WHEREAS, the Boards of Studies of G. S. College of Commerce & Economics, Nagpur redesigned its existing courses to be conducted under Autonomy as per the pattern prescribed by the University Grants Commission in its various Guidelines from time to time;

AND

WHEREAS, the Boards of Studies of G. S. College of Commerce & Economics, Nagpur adopted the CHOICE BASED CREDIT SYSTEM (CBCS), and while designing the syllabus of B.Com. (Computer Application), also drafted the academic regulations, instructional and evaluation arrangements, methods and procedures for the above course in its meeting dt. 23-5-2018;

AND

WHEREAS, the Academic Council of G. S. College of Commerce & Economics, Nagpur in its meeting dt. 23-5-2018 approved the academic regulations, instructional and evaluation arrangements, methods and procedures for the course of B.Com. (Computer Application) as proposed by the Boards of Studies of G. S. College of Commerce & Economics, Nagpur;

AND

WHEREAS, the Governing Body of G. S. College of Commerce & Economics, Nagpur in its meeting dt. 23-5-2018 approved the academic regulations, instructional and evaluation arrangements, methods and procedures for the course of B.Com. (Computer Application) as proposed by the Boards of Studies and as approved by the Academic Council of G. S. College of Commerce & Economics, Nagpur;

AND

WHEREAS, the complete syllabus of B.Com.(Computer Application) and all the academic regulations, instructional and evaluation arrangements, methods and procedures for the course of B.Com. (Computer Application) as proposed by the Boards of Studies and as approved by the Academic Council and the Governing Body of G. S. College of Commerce & Economics, Nagpur, have been accepted by the Rashtrasant Tukadoji Maharaj Nagpur University;

AND

WHEREAS, the programme of B.Com. (Computer Application) under Autonomy Scheme was offered to all First Semester students of B.Com. (Computer Application) from the session 2018-19 as per the said academic regulations;

AND

WHEREAS, the original Academic Regulations of the programme of B.Com. (Computer Application) of 2018 were required to be subsequently revised to incorporate Grievance Redressal Mechanism, Programme and Course Codes, changes and modification in syllabi, internal assessment mechanism, moderation and revaluation of answer books etc. as approved by the Boards of Studies, Academic Council and the Governing Body from time to time, and also were required to be appended by the Programme and Course Outcomes as prescribed by the UGC circular No. F.No. 1-4/2018 (LOCF/QIP) dt.28-8-2019 and as prepared and approved by the Boards of Studies and also approved by the Academic Council in its meeting dt.21-8-2020.

AND

WHEREAS, the revised Academic Regulations of the programme of B.Com. (Computer Application) were subsequently approved by the Governing Body in its meeting dt.28-8-2020.

NOW

THEREFORE, I, Principal of G. S. College of Commerce & Economics, Nagpur, on behalf of the Governing Body of G. S. College of Commerce & Economics, Nagpur, hereby release the following Academic Regulations. These Academic Regulations shall be called “ACADEMIC REGULATIONS GOVERNING THE EXAMINATION LEADING TO DEGREE OF BACHELOR OF COMMERCE [COMPUTER APPLICATION] (REVISED)” under the Faculty of Commerce and Management of Rashtrasant Tukadoji Maharaj Nagpur University.

These Academic Regulations shall come into force with immediate effect and shall apply to all students to be admitted to the First Semester of B.Com. (Computer Application) from the session 2020-21.

Dr. N. Y. Khandait  
Principal

Shiksha Mandal, Wardha's  
**G. S. COLLEGE OF COMMERCE & ECONOMICS, NAGPUR**  
(Autonomous)  
(Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)

**ACADEMIC REGULATIONS**  
GOVERNING THE EXAMINATION LEADING TO DEGREE OF  
**BACHELOR OF COMMERCE (COMPUTER APPLICATION)**  
**[B.COM. (C.A.)]**  
**[Revised from 2020-21]**

1. TITLE OF THE PROGRAMME: BACHELOR OF COMMERCE (COMPUTER APPLICATION)  
[B.COM. (C.A.)]
2. PROGRAMME CODE: GSN-UG-02-BCCA
3. DURATION OF THE PROGRAMME: A THREE YEAR/ SIX SEMESTER FULL TIME  
UNDER GRADUATE DEGREE
4. PATTERN OF THE PROGRAMME: CHOICE BASED CREDIT SYSTEM (CBCS)
5. MEDIUM: ENGLISH
6. TIME SCHEDULE
  - The programme of B.Com. (C.A.) shall be conducted in THREE Academic Years.
  - Each academic year is divided into TWO TERMS.
  - Term I shall have odd Semesters I, III & V, whereas Term II shall have even Semesters II, IV & VI.
  - In each semester, courses are offered in 16-18 teaching weeks (minimum of 90 teaching days).
  - 4-6 weeks are to be utilized for conduct of examinations and evaluation purposes.
  - Each week shall have 40 working hours spread over 6 days a week, consisting of lectures, tutorials, practicals, assignments, seminars, project work, library work, co-curricular activities, field visits, counseling/guiding sessions, value addition courses, extra-curricular activities including Sports, NSS, NCC, Adult & Continuing Education and Extension activities etc.
  - The detailed Academic Calendar will be published in the College Prospectus every year.
7. ELIGIBILITY TO THE PROGRAMME
  - Subject to compliance with the provisions of the Government/ UGC / RTM University directions and of other ordinances in force from time to time, an applicant for admission to this programme shall have passed the XII Standard Examination of the Maharashtra State Board of Secondary and Higher Secondary Education, with English at Higher or Lower level and any Modern Indian Language at higher or lower level with any combination of optional subjects;

OR

- XII Standard Examination of Maharashtra State Board of Secondary and Higher Secondary Education in Vocational Stream with one language only;
- OR
- HSC (Vocational)/Minimum Competency Vocational Courses (MCVC);
- OR
- Any other examination recognized as equivalent thereto in such subjects and with such standards of attainments as may be prescribed;
- OR
- Any other Equivalent Examination of any State in (10+2) pattern with English & any combination of subjects.
  - Any student pursuing the regular programme of study leading to the Bachelor's Degree in Commerce (Computer Application) shall not be permitted to join any other programme in RTM Nagpur University or any other University simultaneously.
  - No person shall be admitted to this programme, if he has already passed the same programme or a programme of any other statutory University which has been recognized as equivalent to this programme.
  - The other eligibility conditions shall be as prescribed by the college from time to time through the related Directions/Rules.

#### 8. ADMISSIONS

- All admissions to this course will be strictly on merit basis as per the policies and procedures laid down by the college/UGC/University from time to time.
- Being a Linguistic Minority Institution the college reserves 50% seats (for grant-in-aid programmes) and 51% seats (for no-grant programmes) for those students who belong to the Hindi speaking communities as listed in the Eighth Schedule for Languages in the Constitution of India subject to the condition that these students are domiciled in Maharashtra State. The students will also have to submit an affidavit to this effect on a Rs. 100/- stamp paper at the time of admission.
- B.Com. (Computer Application) programme is conducted on the no-grant basis and as such 51% seats are reserved for Hindi speaking communities domiciled in Maharashtra State.
- The rest of the seats will be filled from among the other candidates belonging to Open/SC/ST/VJNT/OBC-SBC/PWD etc. categories as per the reservation rules stipulated by the Government and as applicable to the Minority Institutions strictly on merit basis.
- Rules regarding admission procedure/policy etc. shall be notified by the college from time to time through Directions, if necessary.

#### 9. ATTENDANCE CRITERIA

- It is mandatory for all students to have minimum 75% attendance in order to be eligible to appear in a Semester End Examination. Students with below 75% attendance in any given semester shall not be allowed to fill the examination form or appear in the examination.
- Principal may condone the attendance up to maximum 10% to meet the minimum attendance criterion of 75% only in exceptional cases viz. medical emergencies, deputation of students by college in official programs/activities like NCC/NSS camps, University level Sports or Extra-curricular activities or any other University/College sponsored activities where he is convinced that meeting the minimum attendance mark was beyond the control of the student and subject to the condition that the student will make up for attendance in subsequent semester. However, such students will not be eligible for any marks for attendance.



- The facility of relaxation of attendance up to 65% as above shall be available to students on only THREE occasions i.e. for any three semesters during the entire course of the programme.
- Rules regarding attendance shall be notified by the college from time to time through Directions, if necessary.

#### 10. FEES FOR THE PROGRAMME

- The Tuition Fees and other fees for the programme of B.Com. (Computer Application) shall be as prescribed by the college and Rashtrasant Tukadoji Maharaj Nagpur University from time to time.
- The Examination Fees shall be as prescribed by the college/the Rashtrasant Tukadoji Maharaj Nagpur University from time to time.

#### • STRUCTURE OF THE PROGRAMME/COURSES

The syllabus of B.Com. (Computer Application) is designed by the college's Boards of Studies and approved by the college's Academic Council as per the UGC Guidelines on CBCS (Choice Based Credit System).

- CBCS provides to students a cafeteria approach where students can take courses of their own choice, learn at their own pace, undergo additional courses and acquire more than required credits, and adopt an interdisciplinary approach to learning. Students thus get to study the courses which are both mandatory and optional as following:
- Students thus get to study the courses which are both mandatory and optional as following:
  - A. Core Courses (Compulsory)
  - B. Skill/Foundation Courses (Compulsory/Elective)
  - C. Discipline Specific Electives
  - D. Generic Electives
  - E. Open Electives (Inter-disciplinary)
- The college will offer Electives only if minimum 20 students opt for the same.
- In addition to the above, students can also earn extra credits through Value-addition Courses and UGC's 'Swayam' /Massive Online Open Courses (MOOC).
- The details of the Programme Outcomes/Course Outcomes, Courses and Course/Subject-wise allocation of teaching hours are given in **Appendix-I, II, & III** respectively.

#### 11. PROJECT

Students will have to compulsorily submit a Project on an IT (Information Technology) related theme in the final semester, i.e. VI<sup>th</sup> semester.

- a. Project Work may be done individually or in groups (Maximum 2 students in a group).
- b. Project Work should be done using the tools covered in B.Com. (Computer Application) only.
- c. Project should be of such a nature that it could prove useful or be relevant from the commercial/management angle.
- d. Project will carry 100 marks.
- e. Project Work should be carried out in the college only as per the topics finalized by the Department/college.
- f. Students can also carry out projects outside the college in industry/research and development laboratories/IT companies etc. with prior permission of the Department/College and only after getting their synopses approved by the Department/College.
- g. The Project proposal should be prepared in consultation with the guide. The Project proposal should clearly state the objectives and environment of the proposed project to be undertaken. It should have full details as indicated in APPENDIX-V.

- h. Students are expected to carry out Project Work on the topics which have some direct relevance to their academic activities and the syllabus. The Application Areas of project are Inventory/ Finance/ Marketing/ Database Management System (DBMS) / Relational Database Management System (RDBMS)/ E-Commerce/ Internet/ Manufacturing / Web Designing /Scientific/ ERP etc.
- i. Final Project should be submitted to Department/College as per the format given in APPENDIX-VI.
- j. Viva-voce for Project Work shall be conducted by a panel of examiners consisting both Internal and External examiners.
- k. Viva-voce would be conducted as per the schedule announced by the College.

## 12. PATTERN OF ASSESSMENT / EXAMINATIONS

- Each Subject/Paper shall be that of 100 Marks.
- There will be an Internal Assessment of 20 Marks as detailed in Point No. 13 below.
- There will be an External Assessment of 80 marks through Semester End Examination.
- For consideration of passing marks for all subjects, the criterion would be minimum 40% marks (combined total of both Internal and Semester End marks) for each subject.
- In addition to academics, students shall also be assessed for their participation and performance in co- & extra-curricular activities as well as their performance in Value-addition courses and given separate credits and will be considered for overall CGPA and grading as illustrated in point 26 later.

## 13. INTERNAL ASSESSMENT

Internal Assessment for all subjects shall be done as per the following scheme:

Sr.No	Details	Marks	Marking Scheme	Remarks
1.	2 Unit Tests of 20 marks each	2*3= 6	16-20: 03 12-15: 02 08-11: 01 < 08:Nil	Students will be given opportunity to appear for tests in a special schedule only in case of medical exigencies or if they have been detained by the college for any of its official programmes like NSS, NCC, Sports, ECA participation etc. on production of stipulated documents
2.	2 Home assignments of 20 marks each	2*3=6	16-20: 03 12-15: 02 08-11: 01 < 08:NIL	Students will submit 2 Home assignments on the topics/themes as prescribed by the subject teacher as per the schedule given by the college/department.
3.	Performance in Prelims (Out of 80)	04	70-80:04 60-69:03 50-59:02 40-49:01 <40: NIL	All students will mandatorily appear in the Preliminary/Test Examination before the Semester End Examination.
4.	Attendance	04	>90%: 4; <90-85%: 3; < 85-80%: 2; < 80-75%: 1; <75%: Nil.	Principal to condone attendance up to maximum 10% to meet the minimum attendance criterion of 75% only in exceptional cases where he is convinced that meeting the minimum attendance mark was beyond the control of the student and subject to the condition that the student will make up for attendance in subsequent semester. However, such students will not be eligible for any marks for attendance. Students, with more than 75% attendance but losing some days because of participation in official programmes like NSS, NCC, Sports, ECA etc. will be given proportionate marks.
	Total	20		

N.B. For subjects with Practical Component IA of 10 marks will be done on the basis of 2 unit tests (06 marks) and Attendance (04 marks). Performance in Home Assignments and Prelims will not be considered for IA for subjects with practical component.

#### 14. EXTERNAL/SEMESTER END ASSESSMENT

- There will be a Semester End Examination at the end of each of all SIX semesters.
- The Semester End Examination will be conducted by the college.
- The examination shall be held at the college premises on such dates as will be notified by the college.

#### 15. PATTERN OF SEMESTER END EXAMINATION

- Each paper of Semester End Examination for all semesters will be that of 80 marks each.
- The questions would be divided into Long Answer Questions (LAQ's), Short Answer Questions (SAQ's) and Very Short Answer Questions (VSAQ's).
- All questions shall be compulsory with internal choices within the questions.
- The duration of Semester End examination shall be of 3 hours
- The duration of IT/Computer Papers having Practical will be of 2 hours.
- The Pattern of Question Paper shall be as provided in the APPENDIX-IV.

#### 16. PRACTICAL/PROJECT EXAMINATIONS

- Practical Examination shall be of 3 hours duration (Written, Execution & Viva-voce).
- The Practical Record of every student shall carry a certificate duly signed by the teacher-in-charge and the Head of the Department.
- If the student fails to submit his / her certified Practical Record he / she shall not be allowed to appear for the Practical Examination and no Marks shall be allotted to the student.

#### 17. CLASSIFICATION OF PROJECT MARKS

Project work will be evaluated as per the following classification of marks:

Particulars	Marks
Reports and Documentation	50
Viva- Voce by External Expert	30
Viva- Voce by Internal Expert	20
TOTAL	100

#### 18. SCHEME FOR EVALUATION

- The answer books of all Semester End examinations will be assessed by a panel of examiners constituted by the college. The panel will comprise both internal and external faculty.
- The moderation of answer books [all distinction grade (>75%), all first division answer-books missing distinction with 5% margin (< 75%-70%), all second division answer-books missing first division with 5% margin (< 60%-55%), and those failed with 5% margin (<40%-35%)] will be done by a panel of external examiners only.
- Only in the event of there being a variation of 5% or more marks between the marks given by the examiner and the moderator, the marks originally given by the examiner shall be changed and the marks given by the moderator, whether increased or decreased, shall be final.

#### 19. GRACE MARKS

- Students will be entitled to Grace Marks to the tune of maximum 10 marks for entire duration of the B.Com. (C.A.) programme in case he fails in any subject or maximum 3 subjects by a margin of up to 5 marks even after moderation/revaluation and he shall be promoted/declared pass with grace. This facility will be available to students only 3 times during the entire course of their studies for maximum 3 subjects during the entire duration of the course.

- If a student gets grace marks for 3 subjects in any semester he shall not be eligible for this facility in other semesters. However, if he gets grace marks for ONE subject in a semester, he can avail the facility for TWO subjects in other semester/s provided he does not exceed the limit of 10 marks.
- The examinee passing with grace marks as above shall not be eligible to be placed in the merit list and also shall not be eligible for any medals, prizes or any other awards pertaining to that examination.
- The examinee shall be eligible for maximum 3 grace marks if his score in a paper/subject falls short by not more than 3 marks for getting distinction in a paper/subject even after moderation or revaluation provided he has not availed the benefit of grace marks earlier for either passing any subject. Such grace marks can be awarded in maximum TWO papers/subjects during the entire course of studies.
- However, such grace marks shall not be considered for the purpose of ranking or awards. Ranking or awards shall be finalized only on the basis of actual marks (i.e. without grace marks).

## 20. CREDIT SYSTEM OF EVALUATION

- The B. Com. (Computer Application) programme will consist of 36 courses/papers.
- Each Compulsory/Core/Discipline-Specific/Generic Elective/Skill/Foundation Subject/Paper will have 4 credit points.
- Each Credit is equivalent to ONE teaching hour.
- In all thus there shall be 144 credits.
- There will be additional 4 credits for student's participation and performance in Value-addition courses (2 credits) as well as his participation and performance in co- & extra-curricular activities (2 credits). These additional credits shall be added in Mark Sheet of the Sixth Semester.
- Students can also earn additional 4 credits by successfully completing UGC's on-line 'Swayam'/MOOC Course.
- The final grade would be inclusive of these additional credits of Value-addition courses (VAC), co- & extra-curricular activities (ECA) and the 'Swayam'/MOOC Course.

## 21. CREDITS AND GRADES

- In the Credit and Grade Point System, assessment of individual subjects in the concerned examinations will be on the basis of marks only, but the marks shall later be converted into Grades by a mechanism wherein the overall performance of learners can be reflected after considering the Credit Points for any given course and the overall evaluation shall be designated in terms of a Grade.
- **CREDIT:** Each Course/subject/paper has been given separate credits. A credit is a unit by which the course work is measured. It determines the number of hours of instructions required per week. One credit is equivalent to one hour of teaching (lecture or tutorial) or two hours of practical /field work per week.

Each semester, thus, has a definite number of credits depending on the number of courses/subjects/papers and the credits given to them.

- **GRADE POINT:** Grade Point is a numerical weight allotted to each Letter Grade on a 10 point scale as adopted by the college as under:

Sr. No.	Marks	Description	Grade Letter	Grade Points
1	85 & above	Outstanding	O	10
2	75-84	Excellent	A+	09
3	60-74	Very Good	A	08
4	55-59	Good	B+	07
5	50-54	Above Average	B	06
6	45-49	Average	C	05
7	40-44	Pass	P	04
8	00-39	Fail	F	0
9		Absent	Ab	0

- **CREDIT POINT:** Credit Point is the product of Grade Point and number of Credits for a course.

## 22. CALCULATION OF SGPA

**SGPA (Semester Grade Point Average):** The performance of a student in each course/subject/paper in each semester is measured through SGPA which is a ratio of total credit points secured by a student in various courses in the semester and total course credits taken during the semester.

SGPA shall be calculated for each semester as per the formula of SGPA (Si):  $\frac{\sum (C_i \times G_i)}{\sum C_i}$   
 [C<sub>i</sub>= no. of credits for the i<sup>th</sup> course and G<sub>i</sub> is the grade point scored by student in the i<sup>th</sup> course.]

### Illustration of SGPA

Course/Subject	Credit	Marks	Grade Letter	Grade Point	Credit Point
1	4	87	O	10	4*10=40
2	4	78	A+	9	4*9=36
3	4	68	A	8	4*8=32
4	4	57	B+	7	4*7=28
5	4	54	B	6	4*6=24
6	4	47	C	5	4*5=20
	24				180
SGPA	180/24 = 7.5				

## 23. ADDITIONAL CREDITS

In addition to the regular courses and credits thereof, the college also offers to its students under CBCS pattern an opportunity to earn extra credits and an improved grade through Value-addition Courses (VAC) and Extra-curricular Activity (ECA). VAC and ECA have been given 2 credits (50 marks) each i.e. together they have 4 credits (100 marks).

**E.g.:** Suppose a student scores 25 marks in ECA and 40 marks in VAC, his total would be 65 marks. His Grade letter would be A with 8 grade points.

Thus, his Credit Points would be 32 [4 (credits) × 8 (grade points for grade letter A)].

Suppose a student only opts for ECA and scores 25 marks out of 50 then his marks would be converted to 50 (out of 100) and his Grade letter would be C with 5 grade points.

Thus his Credit Points would be 10 [2 (credits) × 5 (grade points for grade letter C)]

Similarly, if a student successfully completes a MOOC under the UGC's 'Swayam' scheme, and scores 60 marks, his Grade letter would be B+ with 7 grade points.

Thus, his Credit Points would be 28 [4(credits) × 7 (grade points for grade letter B+)].

These Credit Points shall be added to the Cumulative Grade Score of all SIX Semesters and considered while calculating the Grade as explained in the illustration later.

## 24. CREDIT SCHEME FOR VAC (VALUE-ADDITION COURSES)

TIE-UP/ACCREDITED COURSES (Conducted in College only) (MAX TWO COURSES IN UG & PG RESPECTIVELY)	SCORE (ONLY AFTER SUCCESSFUL COMPLETION)	COURSES DESIGNED AND CONDUCTED BY COLLEGE (MAX THREE COURSES)	SCORE (For A, B, C GRADES)
Bajaj Finserv's CPBFI	50	English Proficiency Course	20/15/10
ICAI's CAT	50	Certificate in Business Communication	20/15/10
CA-F/IPCC	25/50	Hindi Communication Skills	20/15/10

CA-F/Executive	25/50	Basic Computer Skills	20/15/10
Cambridge English's BEC (2 Levels)	25/50	GS-SUN INTERNSHIPS (ONLY AFTER SUCCESSFUL COMPLETION)	50
TCS' BPS	25	FOR UG & PG Competitive Examinations Training	20 (COMPLETED) 30 (QUALIFIED)
NSE's NCFM	25	FOR PG ONLY NET/SET Guidance Programme	20 (COMPLETED) 30 (QUALIFIED)
NISM COURSES (Each)	25		
Tally Education's TALLY	25		
Any other		Any other	
NB: Students can claim maximum 50 marks (2Credits) for any 2 Courses (from Tie-up pool) and 3 courses from (college pool) over a period of 3 (UG) or 2 (PG) years respectively. They can also opt for a combination of both pools for maximum 3 courses. Credits will be added in FINAL SEMESTER Grade Sheet.			

## 25. CREDIT SCHEME FOR ECA (Extra- & Co-curricular Activities)

ACTIVITY/ LEVEL (Only Official Events)	NCC	NSS	Swachha Bharat Internship	ACEE	SPORTS	CULTURAL	CO-CURRICULAR
	ANY ONE OF THE ABOVE (2 Credits)			ANY TWO OR ALL THREE OF THE ABOVE (2 Credits)			
College	10	10	15-day Summer Internship in city/adopted village = 50 Marks = (2 Credits)	10 + 10 (Project)	10	10	10
Inter-College				10	10	10	10
University	10	10		10	10	10	10
State/Zone	10	10		10	10	10	10
National	20	20		10	20	20	20
NB: 10 Marks for the 'BEST' Cadet/Volunteer/Student Category and 5 Marks for the 'BEST' Unit Category to be added to total marks earned by a student in the above activities during the course of his entire UG or PG studies subject to the total score not exceeding 50 marks)					(10 for Selection/Participation + 10/5/3 for First, Second & Third Positions)		
Inter - national	25 (10 for Selection/Participation + 15/10/5 for First, Second & Third Positions) to be added to the total marks earned by a student in any 3 of the above activities during the course of his entire UG or PG studies subject to the total score not exceeding 50 marks.						
Total	50	50	50	50	50	50	50
NB:	Students can claim maximum 50 marks (2 Credits) for any 3 activities over a period of 3 (UG) or 2 (PG) years. Credits will be added in FINAL SEMESTER GradeSheet.						

## 26. CALCULATION OF CGPA

**CGPA (Cumulative Grade Point Average):** It is a measure of overall cumulative performance of a student over all semesters. The CGPA is a ratio of total credit points secured by a student in all semesters and the sum of the total credits of all courses in all the semesters.

CGPA shall be calculated for the entire programme on the basis of SGPA of all semesters and the additional credits for ECA & VAC to be added in Sixth Semester with the following formula:

$CGPA = \frac{\sum (C_i \times S_i)}{\sum C_i}$  [S<sub>i</sub>= SGPA for the i<sup>th</sup> semester and C<sub>i</sub> is the total no. of credits in that semester.]

### Illustration of CGPA

	SEM I	SEM II	SEM III	SEM IV	SEM V	SEM VI	Total Credits	ECA/VAC	Swayam/ MOOC

Credits	24	24	24	24	24	24	144	4	4
SGPA	7.5	7.6	7.8	8.2	8.1	8.14		8 (GP)	7(GP)
CGPA	24*7.5	24*7.6	24*7.8	24*8.2	24*8.1	24*8.14		4*8	4*7
	180 +	182.4+	187.2 +	196.8 +	194.4 +	195.36 =	1136.16	32	28
	1136.16/144 = 7.89			1136.16 + 32= 1168.16/144			1136.16 + 32+ 28= 1206.16/144		
	CGPA (Without ECA/VAC/MOOC) = 7.89			CGPA (With ECA/VAC) = 8.11			CGPA (With ECA/VAC/MOOC) = 8.37		

## 27. FINAL AWARD OF DIVISION

After the award of final Grade on the basis of CGPA, the students will be declared as passed with the following Divisions:

CGPA	Grade	Division
9.0-10	O	Outstanding
8.0 - 8.9	A+	Distinction
7.0- 7.9	A	First
6.0 – 6.9	B+	Higher Second
5.0- 5.9	B	Second
4.0- 4.9	C	Pass
00 – 3.9	F	Fail

While calculating the Cumulative Grade score, the value of Grade Point shall be considered Zero (00) in case of students who failed in the concerned course/s i.e. obtained the marks below 40. After calculating the SGPA for an individual semester and the CGPA for entire programme, the value can be matched with the grade in the Grade Point table as per the Seven (07) Points Grading System and expressed as a single designated GRADE such as O, A+, A, B+, B, C, F (Fail).

## 28. DECLARATION OF RESULT

- The results of all semester end examinations will be declared within 45 days after the conclusion of examination and will be notified on the college notice boards and website.
- The result of successful candidates at the end of Sixth Semester shall be classified on the basis of aggregate marks obtained in all the SIX semesters.
- An unsuccessful examinee at a Semester End examination shall be eligible for re-examination on payment of a fresh Examination Fee prescribed by the college and will appear for re-examination in the next Examination Schedule of the said semester examination either in Summer or Winter.
- The result of the candidates who have passed the Semester-VI examination but not passed the lower semester examinations shall be declared as NCL (not completed lower semester examinations). Such candidates shall be eligible for the Degree only after successful completion of all the lower semester examinations.
- Only those candidates who pass all the semester examinations in the First Attempt will be eligible for ranks/awards etc. to be announced by the college.

## 29. ATKKT RULES

Unsuccessful Students shall be '**Allowed To Keep Term**' in accordance with the following rules:

Admission to Semester	Candidate should have filled the examination form	Candidate should have passed at least 50% of subjects of the following examinations
Semester II	Of Semester I	
Semester III	Of Semester II	50% of all Semester I & II subjects taken together ; i.e. 6 subjects
Semester IV	Of Semester III	
Semester V	Of Semester IV	All 12 Subjects of Semester I & II clear and 50% of Semester III

		& IV subjects taken together ( i.e. 6 subjects) = 18 subjects
Semester VI	Of Semester V	

**Note:**

- For consideration of passing marks for all subjects, the criterion would be minimum 40% marks (combined total of both internal and semester end marks) for each subject.
- Total marks (Internal + Semester End Examination) obtained by the student shall be converted into Grades as illustrated earlier.

**30. REVALUATION**

- Students can apply for revaluation of their answer-books after paying the prescribed fees and following due procedure.
- Revaluation of answer-books shall be done by a panel of external experts.
- If there is a variation of more than 5% to 10 % of marks between the original marks and the marks after reassessment the marks after reassessment (R1) shall be granted.
- In case there is a variation of more than 10% to 20% of marks between the original marks and the marks after the reassessment (R1) the paper shall be subjected to another reassessment (R2).
- In case there is a variation of more than 10% to 20% of marks between the marks after the first reassessment (R1) and marks after the second reassessment (R2) the paper shall be subjected to third reassessment (R3).
- Marks awarded after the third reassessment (R3), whether increased or decreased, shall be taken as final marks.

**31. MAXIMUM ATTEMPTS**

A candidate who fails in any of the semester examinations may be permitted to take the examination again at subsequent appearance as per the syllabus and scheme of examination in vogue at the time the candidate took the examination for the first time. This facility shall be limited to the following two years i.e. 4 more attempts.

**32. REJECTION OF RESULT**

- The candidate shall have an option of being NOT DECLARED SUCCESSFUL in any of the semester end examinations if he/she fails to secure minimum 60% marks in aggregate in that semester. This option can be opted only through prescribed format forming a part of Examination Application Form for semester end examination. It shall be applicable only to the external/semester end examination and not to the marks awarded in Internal Assessment which shall not be altered in any case. Once the candidate opts for Rejection of Result Scheme, his option shall be irrevocable.
- The candidate who fails in one or more subjects of a semester may be permitted to reject the result of the whole examination of that semester. Rejection of result subject-wise shall not be permitted. A candidate who rejects the result shall appear in the examination of that semester in the subsequent examination.
- Rejection shall be exercised only once in each semester and the rejection once exercised cannot be revoked.
- Application for rejection along with payment of prescribed fee shall be submitted to the college's Controller of Examination along with the original statement of marks within 30 days from the date of declaration of result.
- A candidate who rejects the result of a given semester will not be eligible for admission to the next semester.



- A candidate who has exercised the rejection option will be eligible for grade/division only and not considered for any ranking.

### 33. IMPROVEMENT OF RESULT

- A candidate who has passed in all the papers of a semester may be permitted to improve the result by reappearing for the whole examination of that semester.
- The reappearance shall be permitted only once in each semester.
- The reappearance for the examination of any semester shall be permitted during the subsequent examination of that semester.
- Application for reappearance along with payment of prescribed fees shall be submitted to the college along with the original statement of marks within 30 days from the declaration of result.
- If a candidate passes in all subjects in the reappearance, higher of the two aggregate marks secured by the candidate shall be awarded to the candidate for that semester. In case the candidate fails in reappearance, he shall retain his first appearance result.
- A candidate who appears for improvement of result shall be eligible for grade/division but not for ranking.
- Internal assessment marks shall remain the same and they are not included in the improvement of result scheme.

### 34. AWARD OF MARK SHEET/S

- All Mark Sheets for all semesters shall be awarded by the college at the end of each semester.
- Each Semester End Mark Sheet shall reflect both the actual marks and the Credits of each subject along with the Grade Letter designated for the marks obtained and SGPA.
- The Mark Sheet shall specifically mark all the pass/exempted/pass with grace and fail subjects.
- The Final Semester Mark Sheet shall include Credits / as well as additional Credits / Credit Points for ECA and VAC and Swayam/MOOC Courses.
- The Final Semester Mark Sheet shall include total marks, CGPA and final designated GRADE such as O, A+, A, B+, B, F (Fail).

### 35. AWARD OF DEGREE

- Students shall receive Degree from the RTM Nagpur University on payment of the prescribed fee.
- The Degree shall be issued at the end of successful completion of the programme i.e. after passing all semester end examinations. It shall be signed by the Hon'ble Vice-Chancellor and shall have the college's name on it.

### 36. GRIEVANCE REDRESSAL MECHANISM

- There shall be a Grievance Redressal Committee for all grievances related to examinations and assessment.
- The Committee shall be headed by the Controller of Examinations and shall have as members all HOD's/Programme Coordinators.
- In case of any dispute, the Chief Controller, Examinations/Principal shall decide the matter and his decision shall be final.

### 37. ABSORPTION SCHEME

- Only fresh candidates will be eligible for admission to this programme.

- Other students already enrolled in B.Com. (Computer Application) course of RTM Nagpur University or any other University can also join this course from Semester III stage subject to the conditions of medium and vacancies provided they have studied and passed in their previous semesters in RTM Nagpur University or any other university with the same subjects as prescribed in this course. Alternatively, such students will have to take examination in those subjects which they have not studied in earlier semesters in RTM Nagpur University or any other university earlier and their final result in this programme will be declared only after they clear these subject/s in maximum four attempts in four consecutive examinations.

### 38. REVISION OF COURSES

The college is offering a number of courses as per the following classification:

- A. The English Language Course (Compulsory)
- B. Core Courses (Compulsory)
- C. Skill/Foundation Courses (Compulsory)
- D. Elective Courses
  - a. Discipline Specific Electives
  - b. Generic Electives
  - c. Open Electives
- E. PROJECT WORK

The above courses as listed in **Appendix-II** have been designed by the college's Boards of Studies and approved by the college's Academic Council and Governing Body.

Further, existing courses will be modified or the new courses would be introduced as per the requirements of students and other stakeholders from time to time.

All the courses designed by the college are deemed to have the approval of RTM Nagpur University, State Government and the UGC.

### APPENDIX-I

#### PROGRAMME/COURSE OUTCOMES

#### B.COM. [COMPUTER APPLICATION]

#### [PROGRAMME CODE: GSN-UG-02-BCCA]

<b>BACHELOR OF COMMERCE (COMPUTER APPLICATION) [B.C.C.A.]</b>	
<b>A.</b>	<b>PROGRAMME OUTCOMES</b>
	After completing three years of B.Com. (Computer Application) programme, students are expected to
PO-1	Gain fundamental as well as advance knowledge of all the key and broad concepts in the field of Information Technology and Computer Application in general and the main domains of Commerce, Accountancy and Statistics, Business Management and Administration, Economics, and Business Communication in particular through various core, elective and skill-foundation courses including value-addition courses.
PO-2	Acquire and develop basic and advance skills in computer application and information technology for business such as accounting software like Tally.ERP 9.0, management information systems,

	database management systems, programming languages, web designing etc. in order to develop into professionals in different fields of Information Technology and apply these IT skills for the promotion of Industry and business.	
PO-3	Be able to use and apply their knowledge and skills to find effective solutions to real life situations and challenges and take effective decisions.	
PO-4	Be capable of gaining employment in public and private sectors by virtue of their knowledge and skills acquired during the course of graduation.	
PO-5	Be competent to serve in various industries and sectors especially in the field of information technology, banking and insurance sectors, finance companies, logistical services etc. in various positions viz. system administrator, network system and data analyst, database administrator, chief information officer etc.	
PO-6	Be capable of self-employment or venturing into a start-up by virtue of course in entrepreneurship development	
PO-7	Have a solid foundation to build a larger corpus of knowledge through higher studies including post-graduation and research not only in the field of Commerce and Information Technology but also in other areas owing to the inter-disciplinary approach and study of Open and Generic Electives.	
<b>B.</b>	<b>PROGRAMME-SPECIFIC OUTCOMES</b>	
	After completing three years of B.Com. (Computer Application) programme, students would	
PSO-1	Have proficiency in the basic and advanced knowledge of the core information technology subjects viz. Programming in C, C++ & C#, VB.NET, Core Java, Advanced Java and Android, Python, Dynamic Web Designing, Database Management Systems and Oracle, Operating Systems and Computer Hardware and Networking Commerce as well as the core Commerce subjects of Accountancy, Business Economics, Business Laws, Taxation, Indian Financial Systems etc.	
PSO-2	Have proficiency in various Discipline-specific and Generic Electives of their choices and interests.	
PSO-3	Have specialized knowledge of Programming Languages, Database Management Systems, Management Information Systems, Web designing and key areas of Financial Accountancy, Management Accountancy, Cost Accountancy, Economics, Business Laws, Corporate Law and Secretarial Practices and Taxation.	
PSO-4	Have specialized knowledge of E-commerce, Indian Banking and Insurance System, International Trade and Business Administration, Security Analysis and Portfolio Management,	
PSO-5	Have proficiency in both Direct and Indirect Taxes with special emphasis on Corporate Tax and GST.	
PSO-6	Have proficiency in HRM, Entrepreneurship Development, Industrial and Labour Laws, E-Commerce.	
PSO-7	Have exposure to Gandhian Economics, Econometrics, Intellectual Property Rights, E-Governance, Constitution of India, Public Administration etc. through Electives leading to holistic development through an interdisciplinary approach.	
PSO-8	Prepare for Competitive Examinations by doing an Elective Course on Quantitative Aptitude and Logical Reasoning.	
PSO-9	Be able to apply Computer Application and data analytical skills in business decisions making.	
PSO-10	Be acquainted with business ethics and corporate culture and corporate governance.	
<b>C.</b>	<b>COURSE OUTCOMES</b>	
	<b>Course</b>	<b>Outcomes</b>
<b>1.</b>	<b>English Language Skills</b>	Students will able to develop competence and proficiency in English Language by studying relevant and motivating prose

		texts, Business Communication and Correspondence skills, Grammar skills and Vocabulary.
2.	<b>Financial Accounting</b>	Students will be able to understand the fundamentals of Accounting and the process of preparation of accounts as per the need of business organization.
3.	<b>Economics</b>	Students will be able to relate the concepts and theories of Economics with the real world and its practical application in business.
4.	<b>Programing in C</b>	Students will be able to work on enterprise applications, games, graphics, and applications requiring calculations, etc by learning C language. Students would able to design and develop Operating Systems like Windows, Linux etc.
5.	<b>Information System and Information Technology</b>	Students will be able to get benefit of keeping appropriate data about each user's task in a format best suited to that user and can do any task effectively and efficiently in a suitable format.
6.	<b>Mathematics</b>	Students will be able to get detailed understanding of various aspects of data collection and tabulation, learn application of measures of central tendency and get acquainted with the practical application of index number and to understand practical applications of business mathematics.
7.	<b>Operating System and Computer Hardware and Networking</b>	Student would able to get the knowledge of Operating System and Computer Hardware & Network connected peripheral devices like printers, scanners and copiers or sharing of system and application software between multiple users.
8.	<b>Programing in C++</b>	Student can develop interest in areas where C++ is popularly used i.e. Operating Systems, Libraries, Graphics, Banking Applications, Databases, Embedded Systems, Compilers.
9.	<b>Business Ethics and Corporate Culture</b>	Students will be able to understand the concept of ethics in business and their importance and develop acceptable attitudes and viewpoints with respect to business ethics and social responsibility.
10.	<b>Cost Accounting</b>	Students will be able to understand the fundamentals of Cost Accounting and the process of preparation of cost accounts and statement to arrive at cost of product as well as to know the amount of profit.
11.	<b>Company Law and Secretarial Practice</b>	Students will be able to understand the process of formation and incorporation of company in India; the framework of Memorandum of Association and Article of Association and Prospectus. Also learn about the concept of Share Capital, Shareholders, Members, Role of a Managing Director and meetings of companies.
12.	<b>Web Designing and HTML</b>	Students will be able to create web pages which can be understood by any web browsers.
13.	<b>Programing in C#</b>	Students would able to develop native windows applications, mobile apps, websites, games and even native Android or iOS apps by learning of C# with some additional frameworks like Xamarin or Mono.
14.	<b>MIS and System Analysis</b>	Students would be able to know the current status of

		organization at a glance through Management Information System & System Analysis in order to improve the quality of decisions.
15.	<b>Computer Application in Business</b>	Students will be able to use of MS Word, MS Power point and MS Excel Software in business, computerized accounting with the Tally accounting software, E-filing procedures of Direct Taxes and E-compliances of Indirect Taxes.
16.	<b>Management Accounting</b>	Students will understand fundamentals of Management Accounting and practical knowledge about various tools of management accounting for taking managerial decisions.
17.	<b>Business Law</b>	Students will be able to demonstrate an understanding of Legal Environment of Business in Indian scenario, apply basic legal knowledge to business transactions and communicate effectively using standard business and legal terminology.
18.	<b>VB.NET</b>	Students can create wide range of applications like console-based applications, window-based applications, window services web application, web services etc.
19.	<b>Dynamic Web Designing (PHP and My SQL)</b>	Students can present dynamic web content on web browsers for the personal and professional users.
20.	<b>Database Management System and Oracles</b>	Students can manage the database by DBMS & Oracle used for running Online Transactions Processing (OLTP), Data Warehousing (DW) and mixed database workload. Students can store and retrieve related information.
21.	<b>Environmental Studies</b>	Students will be able to understand the concept of Ecosystems and Environment, the concept of biodiversity and its conservation and environmental pollution.
22.	<b>Auditing and Corporate Governance</b>	Students will be able to understand mechanisms of Corporate Governance, role of Board of Directors in Corporate Governance and corporate Governance in Indian context.
23.	<b>Indian Financial System</b>	Students will be able to understand the concept of money markets, capital markets and various instruments of money and capital markets, instruments of global capital markets, financial markets and the meaning and working of derivative market in India.
24.	<b>Core Java</b>	Students would able to design application software for both desktop and web applications.
25.	<b>Python</b>	Students can create and learn Console application, Desktop application, web development, Machine learning, Internet of Things (IOT) applications, system scripting. Students can connect to database system so that they can handle big data and perform complex mathematics.
26.	<b>Indian Banking and Insurance System</b>	Student will be able to understand, the principles of borrowing and lending, Internet banking and concepts of insurance.
27.	<b>International Trade and Business Administration</b>	Students will be able to Explain the concepts in international business with respect to foreign trade/international business and Administration.
28.	<b>Human Resource Management</b>	Students would be able to build understanding about the aspects of managing Human Resources in an organisation.

29.	<b>Entrepreneurship Development</b>	Students will be able to understand historical evolution of entrepreneurship, various entrepreneurship trends, procedures of opportunity scouting and idea generation, the concept, need, problems of Rural entrepreneurship and measures to develop the same.
30.	<b>Quantitative aptitude and Logical reasoning</b>	Student will be able to understand concept of ratio and proportion, concept of interest and logical reasoning.
31.	<b>Econometrics</b>	Students would be able to develop clarity on application of statistical techniques to analyses and solve economic issues. Students would build an attitude towards the applicability of statistical techniques to various economic issues to evolve with a concrete solution.
32	<b>E-Governance</b>	Student will be able to understand compliance norms of e-governance related to tax filings, GST filings and companies and LLP.
33.	<b>Introduction to Travel and Tourism</b>	Student will be able to understand tourism development and impact of tourism and rural tourism and other related aspects.
34.	<b>Corporate Tax Planning</b>	Student will be able to understand the provisions of direct taxes relating to corporate tax, application of tax provisions in respect of tax planning considerations relating to companies.
35.	<b>Adv.Java and Android</b>	Students can learn simplified mobile app development process. Students can also create custom mobile apps that solve customer problems and increase value for their business.
36.	<b>ASP.NET</b>	Students can get help to create web pages and web technologies like amazon.com, ebay.com and many other popular web sites by using ASP. NET as the framework.
37.	<b>Security Analysis and Portfolio Management</b>	Students will be able to understand risk & return analysis, share valuation and portfolio Management through application of Various Models.
38.	<b>Goods and Service Tax</b>	Student will be able to understand the concept of charge and levy of Goods and Service Tax and computation of tax liability of Goods and Service Tax.
39.	<b>Industrial and Labor Law</b>	Student will be able to understand functioning of factories and industries, compensation Laws and Union Laws.
40.	<b>E-Commerce</b>	Student will be able to understand the concepts of E-Commerce & E-Business, basic requirements of E-Commerce and use of digital payment systems.
41.	<b>Gandhian Economics</b>	Students would be acquainted with the understanding about the various aspects of socio-economic principles of Gandhian ideology related to Economics and the implications of Gandhian Economics with respect to Indian Economy.
42.	<b>Introduction to Public Administration</b>	Student will be able to understand functioning of Public Administrative Authorities, the Concept of Democratic Governance and functioning of Parliament.
43.	<b>Intellectual property Rights</b>	Student will be able to understand the concept of Intellectual Property Rights, functioning of Patents and concepts of Copyright and Trademarks
44.	<b>Constitution of India and</b>	Student will be able to understand the basics of the Constitution,

	<b>Human Rights</b>	Citizenship Rights and Human Rights
<b>45</b>	<b>Project</b>	Students would be able to gain practical knowledge through exposure to different problems and are expected to find solutions through project work on any given idea/topic. Students would be able to understand which programming language is handy for them to make their project easier. Live projects will allow students to gain valuable work experience during study.

**APPENDIX-II**  
**SCHEME OF TEACHING AND EXAMINATION FOR**  
**B.COM. (COMPUTER APPLICATION)**  
**(UNDER CHOICE BASED CREDIT SYSTEM)**

**PROGRAMME CODE: GSN-UG-02-BCCA**  
**Semester-I**

Sr. No.	Course Code	Subjects	Total Hours		Marks						Credits	
			Theory	Practical	Semester End Exam	Internal Assessment	Practical Examination	External Examiner	Internal Examiner	Total Marks		
1	BCCAL 1.E	English Language Skills	60		80	20					100	4
2	BCCAC 1.1	Financial Accounting-I	60		80	20					100	4
3	BCCAC 1.2	Business Economics	60		80	20					100	4
4	BCCAC 1.3	Programming in C	36	48 per batch	40	10	30	10	10		100	4
5	BCCAC 1.4	Information System & Information Technology	36	48 per batch	40	10	30	10	10		100	4
6	BCCASFC 1.0	Mathematics	60		80	20					100	4
Total			312	96	400	100	60	20	20		600	24

**Semester-II**

Sr. No.	Course Code	Subjects	Total Hours		Marks						Credits	
			Theory	Practical	Semester End Exam	Internal Assessment	Practical Examination	External Examiner	Internal Examiner	Total Marks		
1	BCCAL 2.E	English Language Skills	60		80	20					100	4
2	BCCAC 2.1	Financial Accounting-II	60		80	20					100	4
3	BCCAC 2.2	Monetary Economics	60		80	20					100	4
4	BCCAC 2.3	Operating System & Computer Hardware and Networking	36	48 per batch	40	10	30	10	10		100	4

5	BCCAC 2.4	Programming in C ++	36	48 per batch	40	10	30	10	10	100	4
6	BCCASFC 2.0	Business Ethics and Corporate Culture	60		80	20				100	4
Total			312	96	400	100	60	20	20	600	24

### Semester-III

Sr. No.	Course Code	Subjects	Total Hours		Marks						Credits
			Theory	Practical	Semester End Exam	Internal Assessment	Practical Examination	External Examiner	Internal Examiner	Total Marks	
1	BCCAC 3.1	Cost Accounting	60		80	20				100	4
2	BCCAC 3.2	Company Law & Secretarial Practice	60		80	20				100	4
3	BCCAC 3.3	Web Designing & HTML	36	48 per batch	40	10	30	10	10	100	4
4	BCCAC 3.4	Programming in C#	36	48 per batch	40	10	30	10	10	100	4
5	BCCAC 3.5	MIS and System Analysis	60		80	20				100	4
6	BCCASFC 3.0	Computer Applications in Business	36	48 per batch	40	10	30	10	10	100	4
Total			288	144	360	90	90	30	30	600	24

### Semester-IV

Sr. No.	Course Code	Subjects	Total Hours		Marks						Credits
			Theory	Practical	Semester End Exam	Internal Assessment	Practical Examination	External Examiner	Internal Examiner	Total Marks	
1	BCCAC 4.1	Management Accounting	60		80	20				100	4
2	BCCAC 4.2	Business Laws	60		80	20				100	4
3	BCCAC 4.3	VB.NET	36	48 per batch	40	10	30	10	10	100	4
4	BCCAC 4.4	Dynamic Web Designing (PHP & MySql)	36	48 per batch	40	10	30	10	10	100	4
5	BCCAC 4.5	Database Management Systems and Oracle	36	48 per batch	40	10	30	10	10	100	4
6	BCCASFC 4.0	Environmental Studies	60		80	20				100	4
Total			288	144	360	90	90	30	30	600	24



### Semester-V

Sr. No.	Course Code	Subjects	Total Hours		Marks						Credits
			Theory	Practical	Semester End Exam	Internal Assessment	Practical Examination	External Examiner	Internal Examiner	Total Marks	
1	BCCAC 5.1	Auditing & Corporate Governance	60		80	20				100	4
2	BCCAC 5.2	Indian Financial System	60		80	20				100	4
3	BCCAC 5.3	Core Java	36	48 per batch	40	10	30	10	10	100	4
4	BCCAC 5.4	Python	36	48 per batch	40	10	30	10	10	100	4
5	BCCADE 5.51	Indian Banking & Insurance System	60		80	20				100	4
	BCCADE 5.52	International Trade & Business Administration									
	BCCADE 5.53	Human Resource Management									
	BCCADE 5.54	Entrepreneurship Development									
6	BCCAGE 5.61	Quantitative Aptitude and Logical Reasoning	60		80	20				100	4
	BCCAGE 5.62	Econometrics									
	BCCAGE 5.63	E-Governance									
	BCCAGE 5.64	Introduction to Travel & Tourism									
Total			312	96	400	100	60	20	20	600	24

### Semester-VI

Sr. No.	Course Code	Subjects	Total Hours		Marks						Credits
			Theory	Practical	Semester End Exam	Internal Assessment	Practical Examination	External Examiner	Internal Examiner	Total Marks	
1	BCCAC 6.1	Corporate Tax Planning	60		80	20				100	4
2	BCCAC 6.2	Adv. Java and Android	36	48 per batch	40	10	30	10	10	100	4
3	BCCAC 6.3	ASP. NET	36	48 per batch	40	10	30	10	10	100	4
4	BCCADE 6.41	Security Analysis & Portfolio Management	60		80	20				100	4
	BCCADE 6.42	Goods and Service Tax									

	BCCADE 6.43	Industrial & Labour Laws									
	BCCADE 6.44	E-Commerce									
5	BCCAOE 6.51	Gandhian Economics	60		80	20				100	4
	BCCAOE 6.52	Introduction to Public Administration									
	BCCAOE 6.53	Intellectual Property Rights									
	BCCAOE 6.54	Constitution of India and Human Rights									
6	BCCAPR 6.6	Project (IT ) (Software/Web based)	36	48 per batch			50	30	20	100	4
	Total		312	96	400	100	60	20	20	600	24

### SUMMARY/CLASSIFICATION OF COURSES

	Sem I	Sem II	Sem III	Sem IV	Sem V	Sem VI	Total
Language Courses (Compulsory)	1	1					02
Core Courses (Compulsory)	4	4	5	5	4	3	25
Skill/Foundation Courses (Compulsory)	1	1	1	1	-	-	04
Discipline Specific Electives					4 (Any One)	4(Any One)	08
Generic Electives					4(Any One)		04
Open Electives						4(Any One)	04
Project (IT ) (Software/Web based)						1	01

### SUMMARY OF THE TOTAL MARKS

Sr.No		Instruction Hours	Total Marks	Credits
1	Semester – I	408	600	24
2	Semester – II	408	600	24
3	Semester – III	432	600	24
4	Semester – IV	432	600	24
5	Semester – V	408	600	24
6	Semester - VI	408	600	24 + 4 (ECA +VAC)
Total		2496	3600	144 + 4 (ECA +VAC)+ 4 (MOOC)

### B.COM. (Computer Application) Examination Semester-I

Sr. No.	Subject	Examination Scheme	Maximum Marks	Minimum Passing Marks
Core (Compulsory)				
1	Financial Accounting- I	Semester End Examination	80	40
		Internal Assessment	20	
		Total	100	
2	Business Economics	Semester End Examination	80	40

		Internal Assessment	20	
		Total	100	
3	Programming in C	Semester End Examination	40	40
		Internal Assessment	10	
		Practical Work	30	
		External Examiner	10	
		Internal Examiner	10	
		Total	100	
4	Information System & Information Technology	Semester End Examination	40	40
		Internal Assessment	10	
		Practical Work	30	
		External Examiner	10	
		Internal Examiner	10	
		Total	100	
Language				
5	English Language Skills	Semester End Examination	80	40
		Internal Assessment	20	
		Total	100	
Skill/Foundation (Compulsory)				
6.	Mathematics	Semester End Examination	80	40
		Internal Assessment	20	
		Total	100	
Total			600	240

### B.COM. (Computer Application) Examination Semester-II

Sr. No.	Subject	Examination Scheme	Maximum Marks	Minimum Passing Marks
Core (Compulsory)				
1	Financial Accounting- II	Semester End Examination	80	40
		Internal Assessment	20	
		Total	100	
2	Monetary Economics	Semester End Examination	80	40
		Internal Assessment	20	
		Total	100	
3	Operating System & Computer Hardware and Networking	Semester End Examination	40	40
		Internal Assessment	10	
		Practical Work	30	
		External Examiner	10	
		Internal Examiner	10	
		Total	100	
4	Programming in C ++	Semester End Examination	40	40
		Internal Assessment	10	
		Practical Work	30	
		External Examiner	10	
		Internal Examiner	10	
		Total	100	
Language				
5	English Language Skills	Semester End Examination	80	40
		Internal Assessment	20	
		Total	100	
Skill/Foundation (Compulsory)				
6.	Business Ethics and Corporate Culture	Semester End Examination	80	40
		Internal Assessment	20	
		Total	100	
Total			600	240

### B.COM.(Computer Application) Examination Semester-III

Sr. No.	Subject	Examination Scheme	Maximum Marks	Minimum Passing Marks
Core (Compulsory)				
1	Cost Accounting	Semester End Examination	80	40
		Internal Assessment	20	

		Total	100	
2	Company Law & Secretarial Practice	Semester End Examination	80	40
		Internal Assessment	20	
		Total	100	
3	Web Designing & HTML	Semester End Examination	40	40
		Internal Assessment	10	
		Practical Work	30	
		External Examiner	10	
		Internal Examiner	10	
		Total	100	
4	Programming in C#	Semester End Examination	40	40
		Internal Assessment	10	
		Practical Work	30	
		External Examiner	10	
		Internal Examiner	10	
		Total	100	
5	MIS and System Analysis	Semester End Examination	80	40
		Internal Assessment	20	
		Total	100	
Skill/Foundation (Compulsory)				
6.	Computer Applications in Business	Semester End Examination	40	40
		Internal Assessment	10	
		Practical Work	30	
		External Examiner	10	
		Internal Examiner	10	
		Total	100	
Total			600	240

### B.COM.(Computer Application) Examination Semester-IV

Sr. No.	Subject	Examination Scheme	Maximum Marks	Minimum Passing Marks
Core (Compulsory)				
1	Management Accounting	Semester End Examination	80	40
		Internal Assessment	20	
		Total	100	
2	Business Laws	Semester End Examination	80	40
		Internal Assessment	20	
		Total	100	
3	VB.NET	Semester End Examination	40	40
		Internal Assessment	10	
		Practical Work	30	
		External Examiner	10	
		Internal Examiner	10	
		Total	100	
4	Dynamic Web Designing (PHP & MySql)	Semester End Examination	40	40
		Internal Assessment	10	
		Practical Work	30	
		External Examiner	10	
		Internal Examiner	10	
		Total	100	
5	Database Management Systems and Oracle	Semester End Examination	40	40
		Internal Assessment	10	
		Practical Work	30	
		External Examiner	10	
		Internal Examiner	10	
		Total	100	
Skill/Foundation (Compulsory)				
6.	Environmental Studies	Semester End Examination	80	40
		Internal Assessment	20	
		Total	100	
Total			600	240

### B.COM.(Computer Application) Examination Semester–V

Sr. No.	Subject	Examination Scheme	Maximum Marks	Minimum Passing Marks
<b>Core (Compulsory)</b>				
1	Auditing & Corporate Governance	Semester End Examination	80	40
		Internal Assessment	20	
		Total	100	
2	Indian Financial System	Semester End Examination	80	40
		Internal Assessment	20	
		Total	100	
3	Core Java	Semester End Examination	40	40
		Internal Assessment	10	
		Practical Work	30	
		External Examiner	10	
		Internal Examiner	10	
		Total	100	
4	Python	Semester End Examination	40	40
		Internal Assessment	10	
		Practical Work	30	
		External Examiner	10	
		Internal Examiner	10	
		Total	100	
<b>DISCIPLINE-SPECIFIC ELECTIVES (Any One)</b>				
5	Indian Banking & Insurance System	Semester End Examination	80	40
	International Trade & Business Administration			
	Human Resource Management	Internal Assessment	20	
	Entrepreneurship Development	Total	100	
<b>GENERIC ELECTIVES(Any One)</b>				
6	Quantitative Aptitude and Logical Reasoning	Semester End Examination	80	40
	Econometrics			
	E-Governance	Internal Assessment	20	
	Introduction to Travel & Tourism	Total	100	
<b>Total</b>			600	240

### B.COM. (Computer Application) Examination Semester–VI

Sr. No.	Subject	Examination Scheme	Maximum Marks	Minimum Passing Marks
<b>Core (Compulsory)</b>				
1	Corporate Tax Planning	Semester End Examination	80	40
		Internal Assessment	20	
		Total	100	
2	Adv. Java and Android	Semester End Examination	40	40
		Internal Assessment	10	
		Practical Work	30	
		External Examiner	10	
		Internal Examiner	10	
		Total	100	
3	ASP. NET	Semester End Examination	40	40
		Internal Assessment	10	
		Practical Work	30	
		External Examiner	10	
		Internal Examiner	10	
		Total	100	
<b>DISCIPLINE-SPECIFIC ELECTIVES (Any One)</b>				
4	Security Analysis & Portfolio Management	Semester End Examination	80	40

	Goods and Service Tax			
	Industrial & Labour Laws	Internal Assessment	20	
	E-Commerce	Total	100	
<b>OPEN ELECTIVES(Any One)</b>				
5	Gandhian Economics	Semester End Examination	80	40
	Introduction to Public Administration			
	Intellectual Property Rights	Internal Assessment	20	
	Constitution of India and Human Rights	Total	100	
<b>PROJECT WORK (IT)</b>				
6	Project (Software/Web based)	Project Work: 50 External Examiner: 30 Internal Examiner: 20	100	<b>40</b>
Total			600	240



**APPENDIX- III  
(WORKLOAD)**

**Odd Semesters (July to November)**

B.Com. Computer Application Semester – I				B.Com. Computer Application Semester – III				B.Com. Computer Application Semester – V			
S. No.	Subjects	No. of Periods		S. No.	Subjects	No. of Periods		S. No.	Subjects	No. of Periods	
		T	P			T	P			T	P
1.	Financial Accounting- I	5		1.	Cost Accounting	5		1.	Auditing & Corporate Governance	5	
2.	Business Economics	5		2.	Company Law & Secretarial Practice	5		2.	Indian Financial System	5	
3.	Programming in C	3	B1-4	3.	Web Designing & HTML	3	B1-4	3.	Core Java	3	B1-4
			B2-4				B2-4				
4.	Information System & Information Technology	3	B1-4	4.	Programming in C#	3	B1-4	4.	Python	3	B1-4
			B2-4				B2-4				
5.	Mathematics	5		5.	MIS and System Analysis	5		5.	DISCIPLINE-SPECIFIC ELECTIVES(Any One)	5	
									Indian Banking & Insurance System		
6.	English Language Skills	5		6.	Computer Applications in Business	3	B1-4	6.	International Trade & Business Administration	5	
							B2-4		Human Resource Management		
									Entrepreneurship Development		
								6.	GENERIC ELECTIVES (Any One)	5	
									Quantitative Aptitude and Logical Reasoning		
									Econometrics		
									E-Governance		
									Introduction to Travel & Tourism		
Total Periods		26 (IT-6)	16 (IT)	Total Periods		24 (IT-14)	24 (IT)	Total Periods		26 (IT-6)	16 (IT)

### Even Semesters (December to April)

B.Com. Computer Application Semester – II				B.Com. Computer Application Semester – IV				B.Com. Computer Application Semester – VI						
S. No.	Subjects	No. of Periods		S. No.	Subjects	No. of Periods		S. No.	Subjects	No. of Periods				
		T	P			T	P			T	P			
1.	Financial Accounting -II	5		1.	Management Accounting	5		1.	Corporate Tax Planning	5				
2.	Monetary Economics	5		2.	Business Laws	5		2.	Adv. Java and Android	3	B1-4 B2-4			
3.	Operating System & Computer Hardware and Networking	3	B1-4 B2-4	3.	VB.NET	3	B1-4 B2-4	3.	ASP. NET	3	B1-4 B2-4			
4.	Programming in C ++	3	B1-4 B2-4	4.	Dynamic Web Designing (PHP & MySql)	3	B1-4 B2-4							
5	Business Ethics and Corporate Culture	5		5	Database Management Systems and Oracle	3	B1-4 B2-4	4.	DISCIPLINE-SPECIFIC ELECTIVES(Any One)	5				
6	English Language Skills	5		6	Environmental Studies	5			Security Analysis & Portfolio Management	5				
									Goods and Service Tax					
									Industrial & Labour Laws					
									E-Commerce		5.	OPEN ELECTIVES (Any One)	5	
									Gandhian Economics					
									Introduction to Public Administration					
	Intellectual Property Rights													
	Constitution of India and Human Rights		6.	PROJECT WORK (Software/Web based)	3	B1-04 B2-04								
Total Periods		26 (IT-6)	16 (IT)	Total Periods		24 (IT-9)	24 (IT)	Total Periods		24(IT-9)	24 (IT)			

**Total Subject-wise Workload: English 05; Commerce: 50; IT: 93**



APPENDIX-IV

A. PATTERN OF QUESTION PAPER (THEORY/NUMERICAL)

Time: 3.00 Hours

Marks: 80

		THEORY SUBJECTS	NUMERICAL SUBJECTS		
Q. No.	Sub-Question	Nature		Unit	Marks
1.	<b>LAQ's</b>		LAQ's		
	A	Theory	Problem	Unit No. I	10
	OR		OR		
2.	B	Theory	Problem	Unit No. I	10
	A	Theory	Problem	Unit No. II	10
	OR		OR		
3.	B	Theory	Problem	Unit No. II	10
	A	Theory	Problem	Unit No. III	10
	OR		OR		
4.	B	Theory	Problem	Unit No. III	10
	A	Theory	Problem	Unit No. IV	10
	OR		OR		
5.	B	Theory	Problem	Unit No. IV	10
		SAQ (Any Two)	SAQ (Any Two)	-	
	A	Theory	Theory	Unit No. I	4
6.	B	Theory	Theory	Unit No. I	4
	C	Theory	Theory	Unit No. I	4
		SAQ (Any Two)	SAQ (Any Two)		
	A	Theory	Theory	Unit No. II	4
7.	B	Theory	Theory	Unit No. II	4
	C	Theory	Theory	Unit No. II	4
		SAQ (Any Two)	SAQ (Any Two)		
	A	Theory	Theory	Unit No. III	4
8.	B	Theory	Theory	Unit No. III	4
	C	Theory	Theory	Unit No. III	4
		SAQ (Any Two)	SAQ (Any Two)		
	A	Theory	Theory	Unit No. IV	4
9.	B	Theory	Theory	Unit No. IV	4
	C	Theory	Theory	Unit No. IV	4
		VSAQ/OBJECTIVE (All)	VSAQ/OBJECTIVE (All)		
	A	Theory	Theory	Unit No. I	2
TOTAL	B	Theory	Theory	Unit No. II	2
	C	Theory	Theory	Unit No. II	2
	D	Theory	Theory	Unit No. IV	2
					80

N.B. Question Pattern is subject to change as per the exigencies of the syllabus/Units. Changes, if any, will be notified at the beginning of the session or well in advance before the examination.

B. PATTERN OF QUESTION PAPER IN INFORMATION TECHNOLOGY SUBJECTS/PAPERS (WITH PRACTICAL COMPONENT)

THEORY					INTERNAL	PRACTICAL		VIVA-VOCE					
Time: 2.00 Hours			Marks: 40		Marks:10	Time: 3.00 Hours/ Marks: 30		Marks: 20					
Q. No.	Sub-Question	Nature	Unit	Marks	10	Particulars	Marks	INT	EXT				
<b>LAQ's</b>													
1	A	Theory	Unit No. I	07			Writing a Program or Problem (Algorithm & Flowchart)	10	10	10			
	OR												
	B	Theory	Unit No. I	07									
2	A	Theory	Unit No. II	07				Execution on computer			15		
	OR												
	B	Theory	Unit No. II	07									
3	A	Theory	Unit No. III	07		Taking Hard							

	OR				Copy	Practical Record	5	10	10
4	B	Theory	Unit No. III	07					
	A	Theory	Unit No. IV	07					
	OR								
	B	Theory	Unit No. IV	07					
5.		<b>SAQ (Any One)</b>	-						
	A	Theory	Unit No. I	02					
	B	Theory	Unit No. I	02					
6.		<b>SAQ (Any One)</b>							
	A	Theory	Unit No. II	02					
	B	Theory	Unit No. II	02					
7.		<b>SAQ (Any One)</b>							
	A	Theory	Unit No. III	02					
	B	Theory	Unit No. III	02					
8.		<b>SAQ (Any One)</b>							
	A	Theory	Unit No. IV	02					
	B	Theory	Unit No. IV	02					
9.		<b>VSAQ/(All)</b>							
	A	Theory	Unit No. I	1					
	B	Theory	Unit No. II	1					
	C	Theory	Unit No. II	1					
	D	Theory	Unit No. IV	1					
Total				40	10	30	10	10	

**TOTAL MARKS: 100**

N.B. Question Pattern is subject to change as per the exigencies of the syllabus/Units. Changes, if any, will be notified at the beginning of the session or well in advance before the examination.

### C. PATTERN OF QUESTION PAPER (LANGUAGES)

Q. No.	Sub-Question	Unit	TIME: 3 Hours Nature of Question	MARKS: 80 Marks
	A	Unit No. I	LAQ	8
	B	Unit No. I	LAQ	8
2		Unit No. 1	SAQ's	16
3	A	Unit No. 1	VSAQ's	8
	B	Unit No. 1	VSAQ's	8
4	A	Unit No. II	LAQ's	8
	B	Unit No. II	SAQ's	8
5	A	Unit No. III	VSAQ's	8
	B	Unit No. IV	VSAQ's	4
	C	Unit No. IV	VSAQ's	4
TOTAL				80

N.B. Question Pattern is subject to change as per the exigencies of the syllabus/Units. Changes, if any, will be notified at the beginning of the session or well in advance before the examination.

## APPENDIX-V:

### PROJECT SYNOPSIS

The project synopsis/ proposal should be prepared in consultation with the guide. The project guide must be a person having minimum Qualification MCM / M.Sc. (Computer Science + Information Technology) /M.Sc. (Mathematics / Electronics / Statistics / Physics + Post B.Sc. Diploma in Computer Science & Application) / MCA. The project proposal should clearly state the objectives and environment of the proposed project to be undertaken. It should have the following outline/details:

Sr. No.	Format of Synopsis for Desktop Application	Sr. No.	Format of Synopsis for Web Application
1	Title of the Project	1	Title of the Project
2	Objectives of the Project	2	Objectives of the Project
3	Project Category (DBMS / RDBMS / OOPS etc.)	3	Project Category (DBMS / RDBMS / OOPS etc.)
4	Tools/Platform and Languages	4	Tools/Platform and Languages to be used
5	Complete Structure of the System	5	Complete Structure of the System
	Numbers of Modules and its Description		Number of pages and links (short description)
	Modular Chart / System Chart		Use / Information of Pages
	Data Structures or Tables		Feedback Form (if any)
	Data Structures or Tables		
	Process Logic of each Module.		
	Types of Report Generation.		
6	References	6	References
Note: Synopsis should not be more than 3-4 pages			

### Project Proposal (Synopsis)

The project proposal should be prepared in consultation with the guide. The project guide must be a person having minimum Qualification MCM / M.Sc. (Computer Science + Information Technology) / M.Sc. (Mathematics / Electronics / Statistics / Physics + Post B.Sc. Diploma in Computer Science & Application) / MCA. The project proposal should clearly state the objectives and environment of the proposed project to be undertaken. It should have full details as indicated in APPENDIX-V.

## APPENDIX-VI:

### PROJECT REPORT FORMAT

Final Project should be submitted to the Department/College as per the following format:

Sr. No.	Project Report Format
<b>1</b>	Front Page
<b>2</b>	Certificate Page
<b>3</b>	Acknowledgment Page
<b>4</b>	Declaration Page
<b>5</b>	Approved copy of Synopsis
<b>6</b>	Index or Content Page
<b>7</b>	<b>Contents</b>
	Introduction
	Objectives
	Preliminary System Analysis
	<ul style="list-style-type: none"> <li>• Preliminary Investigation</li> <li>• Present System in Use</li> <li>• Flaws in Present System</li> <li>• Need of New System</li> <li>• Feasibility Study</li> <li>• Project Category</li> </ul>
	Software & Hardware Requirement Specification
	Detailed System Analysis
	<ul style="list-style-type: none"> <li>• Data Flow Diagram</li> <li>• Numbers of Modules and Process Logic</li> <li>• Data Structures and Tables</li> <li>• Entity-Relationship Diagram</li> </ul>
	System Design
	<ul style="list-style-type: none"> <li>• Form Design</li> <li>• Source Code</li> <li>• Input Screen &amp; Output Screen</li> </ul>
	Testing & Validation Checks
	System Security Measures
	Implementation, Evaluation and Maintenance
	Future Scope of the project
<b>8</b>	Conclusion
	Bibliography & References

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