MOHANLAL SUKHADIA UNIVERSITY, UDAIPUR BACHELOR OF COMPUTER APPLICATION (BCA Annual Scheme)

Course of Study and Examination

(To be offered in affiliated colleges from session 2018-21)

- **1. Duration of the Course:** The BCA (Annual Scheme) course will be of three years duration. Each year will be approximately 10 months (minimum 180 working days) duration.
- 2. **Medium of Instruction:** The medium of instruction and examination shall be English/Hindi.
- **3.** Eligibility: The candidate must have passed 10+2 examinations with at least 50% marks in aggregate (Pass marks for SC/ST candidates or as per Govt. rules)

I Year (With effect from 2018-21)

| Paper | Paper Name | Duration Of Exam(Hours) | Total |
|--------------|---|----------------------------|-------|
| PAPER-I | Introduction To Information Technology and PC | 3 | 100 |
| (BCA-101) | Packages | 3 | 100 |
| PAPER –II | Business Communication | 3 | 100 |
| (BCA-102) | Dusiness Communication | 3 | 100 |
| PAPER-III | Problem Solving through C Programming | 3 | 100 |
| (BCA-103) | 1 Toolem Solving unough C 1 Togramming | 3 | 100 |
| PAPER-IV | Basic Physics | 3 | 100 |
| (BCA-104) | Dusic I hysics | 3 | 100 |
| PAPER-V | Basic Mathematics | 3 | 100 |
| (BCA-105) | Dusic Municipaties | 3 | 100 |
| PAPER-VI | Computer Organization | 3 | 100 |
| (BCA-106) | Computer Organization | | |
| Practical-I | PC Software Packages Lab | 5 | 200 |
| (BCA-107) | 1 C Software 1 dekages Edo | 3 | 200 |
| Practical-II | C Programming Lab | 5 | 200 |
| (BCA-108) | C 110gramming Lab | | 200 |
| 1209 | Environment Studies | 3 | 100 |
| 1704 | English | 3 | 100 |
| | Total | | 1200 |

II Year (With effect from 2019-21)

| Paper | Paper Name Duration Of | | | |
|--------------|---------------------------------------|-------------|------|--|
| | | Exam(Hours) | | |
| PAPER-I | Computer Communication and Networks | 3 | 100 | |
| (BCA-201) | Computer Communication and Networks | 3 | 100 | |
| PAPER –II | Datahasa managamant Systam | 3 | 100 | |
| (BCA-202) | Database management System | 3 | 100 | |
| PAPER-III | Fundamentals of Operating System | 3 | 100 | |
| (BCA-203) | Tundamentals of Operating System | 3 | 100 | |
| PAPER-IV | Data atmatura | 3 | 100 | |
| (BCA-204) | Data structure | 3 | 100 | |
| PAPER-V | System Analysis And Design | 3 | 100 | |
| (BCA-205) | System Analysis And Design | 3 | 100 | |
| PAPER-VI | Object Oriented Programming using C++ | 3 | 100 | |
| (BCA-206) | Object Oriented Programming using C++ | 3 | 100 | |
| Practical-I | Detabase management system Lab | 5 | 200 | |
| (BCA-207) | Database management system Lab | 3 | 200 | |
| Practical-II | Data atmustures lab | 5 | 200 | |
| (BCA-208) | Data structures lab | 3 | 200 | |
| 1705 | Hindi | 3 | 100 | |
| | Total | | 1100 | |

III Year (With effect from 2020-21)

| Paper | Paper Name | Duration Of Exam(Hours) | Total |
|-------------------------------------|-------------------------------|----------------------------|-------|
| PAPER-I | Java Programming | 3 | 100 |
| (BCA-301) PAPER –II (BCA-302) | Information Systems | 3 | 100 |
| PAPER-III (BCA-303) | Cloud Computing | 3 | 100 |
| PAPER-IV (BCA-304) | Wireless and Mobile Computing | 3 | 100 |
| PAPER-V (BCA-305) | Web Technology | 3 | 100 |
| Practical-I (BCA-306) | Java Programming lab | 5 | 200 |
| Practical-II (BCA-307) | Web and Mobile Technology Lab | 5 | 200 |
| Practical-III (BCA-308) | Project | 5 | 200 |
| | Total | | 1100 |

BCA 308: PROJECT

In house project must be done by each student on simple applications using any computer language/RDBMS/Web design/visual programming etc.

The total work must be of minimum 180 hours per student. The internal guide must schedule the work & evaluate internally from time to time.

The project report must be prepared for the external examination. Monthly report of the students must be taken to monitor progress and must be placed for evaluation by external examiner. Projects submitted by the students shall be evaluated during external evaluation to ensure independent contribution and proficiency acquired by the students.

Note: Students must be allotted projects in the beginning of the session. Candidates submitting readymade projects/copied/projects developed by professionals in the market etc shall be awarded zero marks.

Two copies of the project report and the software developed must be submitted to the external examiner. One copy of the project shall be returned to the student with the signature of external examiner.

MOHANLAL SUKHADIA UNIVERSITY, UDAIPUR

BACHELOR OF COMPUTER APPLICATION

(Semester Scheme with Choice Based Credit System) (Effective from session 2020-23)

1. Duration of the Course

The Bachelor of Computer Application (B.C.A) which will be known as BCA (Semester Scheme with Choice Based Credit System) course will consist of six semester's duration which will be conducted in three years. Each semester will be approximately 5 months (minimum 90 working days in a semester) duration.

2. Eligibility:

Candidates seeking admission to the first semester of BCA programme must have passed 10+2 examination all faculty (Science, Commerce & Science) with at least 50% marks.

3. **Admissions**: Admissions to the first semester of B.C.A shall be made, through merit conducted by the University. The course will be initially offered only in the university campus under Faculty of Science

4. Medium of Instruction

The medium of instruction and examination shall be English.

5. No. of Seats

Total 180 seats on self-finance basis

6. Curriculum

- 6.1 B.C.A. Programme has a three year, six semester prescribed course structure which in general terms is known as curriculum. It prescribes courses to be studied in each semester as given under courses of study and examination
- **6.2** B.C.A Programme shall have a curriculum and course contents (syllabi) for the courses recommended by the committee courses in Informatics and Computational Sciences and approved by the academic council of the university.
- **6.3** The Programme shall follow a credit based semester system. Each academic year is divided in to two semesters as prescribed in 6.1

6.4 Course Credit System/Structure

In general a certain quantum of work measured in terms of credits is laid down as the requirement for a particular degree. A student earns the credits for a particular course by fulfilling the academic requirements viz. attendance and evaluation. The total credits required for completing the B.C.A. program shall be 172. The total number of credits in each semester (I to V semester) shall be 34 and 18 in the VI semester. Number of credits for a course in any semester is calculated as follows.

| S. No. | Course | Credits |
|--------|---------------------------------|---------|
| 1 | One Lecture or tutorial hr/week | 1 |
| 2 | Two Laboratory hours/week | 1 |
| 3 | Seminar 4hrs/week | 2 |
| 4 | Full semester project | 18 |

BCA Semester – V

| | | | | Ma | Max. Marks | |
|-----------------------------------|--|-------|---------|---------------------|------------------------|-------|
| Paper | Paper Name | L-T-P | Credits | University Exam. | Internal Assessment | Total |
| Paper-I (BCA-S501) | Software Engineering | 3-0-2 | 4 | 80 | 20 | 100 |
| Paper-II (BCA-S502) | Data mining | 3-0-0 | 4 | 80 | 20 | 100 |
| Paper-III BCA-S503 | Web Technology | 3-1-0 | 4 | 80 | 20 | 100 |
| Paper-IV BCA- S504A /S504B | Elective A. Network management & Security B. Client Server Computing | 3-1-0 | 4 | 80 | 20 | 100 |
| Paper-V (BCA-S505) | Practical-I: Data mining Lab | 0-0-8 | 4 | 80 | 20 | 100 |
| Paper-VI (BCA-S506) | Practical-II Minor Project Based on Web technology | 0-0-8 | 4 | 80 | 20 | 100 |
| Paper-VII (BCA- S507A/S507B | Practical Elective(Choose one from following) A. Web Development Lab B. Advanced Web Tools | 0-0-4 | 2(AP) | | 50 | 50 |
| Paper-VIII (BCA-S508) | Seminar | 4 | 2 | | 50 | 50 |
| | TOTAL | | 28 (26) | 480 | 220 | 700 |

BCA Semester – VI

| Paper | Paper Name | Credits | Ma | | Total |
|------------|------------|---------|------------|------------|-------|
| | | | University | Internal | |
| | | | Exam. | Assessment | |
| Paper-I | Project | 18 | 350 | 100 | 450 |
| (BCA-S601) | | | | | |
| | | 18 | | • | 450 |

Total Credits: 172, 158 credits for calculation of CGPA

BCA VI Semester

BCA-S601: PROJECT

In house project must be done by each student on simple applications using any computer language/RDBMS/Web design/visual programming etc.

The total work must be of minimum 180 hours per student. The internal guide must schedule the work & evaluate internally from time to time.

The project report must be prepared for the external examination. Monthly report of the students must be taken to monitor progress and must be placed for evaluation by external examiner. Projects submitted by the students shall be evaluated during external evaluation to ensure independent contribution and proficiency acquired by the students.

Note: Students must be allotted projects in the beginning of the session. Candidates submitting readymade projects/copied/ projects developed by professionals in the market etc shall be awarded zero marks.

Two copies of the project report and the software developed must be submitted to the external examiner. One copy of the project shall be returned to the student with the signature of external examiner.