

**B.S.ABDUR RAHMAN  
UNIVERSITY**

B.S.ABDUR RAHMAN INSTITUTE OF SCIENCE & TECHNOLOGY  
(Estd.u/s 3 of the UGC Act, 1956)



(FORMERLY B.S.ABDUR RAHMAN CRESCENT ENGINEERING COLLEGE)  
Seethakathi Estate, G.S.T. Road, Vandalur, Chennai - 600 048.

**REGULATIONS 2016**

**For**

**BACHELOR OF COMPUTER APPLICATIONS (BCA)/**

**BACHELOR OF COMPUTER SCIENCE (B.Sc)**

**DEGREE PROGRAMME**

**(For candidates to be admitted from the academic year 2016-2017)**

**B.S. ABDUR RAHMAN UNIVERSITY, CHENNAI 48.**

**REGULATIONS -2016 FOR BACHELOR OF COMPUTER APPLICATIONS (BCA)/  
BACHELOR OF COMPUTER SCIENCE (B.Sc)  
DEGREE PROGRAMME (Semester Scheme)**

***(Candidates to be admitted from the academic year 2016-2017 onwards)***

**1.0 PRELIMINARY DEFINITIONS AND NOMENCLATURE**

In these Regulations, unless the context otherwise requires

- i) **"Programme"** means Under Graduate Degree Programme in Computer Applications.
- ii) **"Course"** means a theory or practical subject that is normally studied in a semester.
- iii) **"University"** means B.S.Abdur Rahman University, Chennai, 600048.
- iv) **"Department"** unless otherwise specifically mentioned means Department of Computer Applications.
- v) **"Academic Council"** means the Academic Council of this University.
- vi) **"Dean (Academic Affairs)"** means Dean (Academic Affairs) of B.S.Abdur Rahman University.
- vii) **"Dean (Student Affairs)"** means Dean(Student Affairs) of B.S.Abdur Rahman University.
- viii) **"Controller of Examinations"** means the Controller of Examinations of B.S.Abdur Rahman University who is responsible for conduct of examinations and declaration of results.

**2.0 PROGRAMME OFFERED, DURATION AND ELIGIBILITY CRITERIA**

**2.1 U.G. Programme Offered**

The U.G. Programme and its eligibility criteria are as follows:

<b>Degree</b>	<b>Mode of Study</b>
B.C.A	Full Time
B.Sc	Full Time

**2.2 Duration of the Programme**

The duration of the undergraduate program in science shall be six semesters (three academic year) in the Institution during the complete working hours for curricular, co-curricular and extra-curricular activities assigned to them for the fulltime programme.

## **2.3 ELIGIBILITY CRITERIA**

- 2.3.1** Students for admission to the first semester of the Under Graduate Degree Programme in science must have passed the Higher Secondary certificate examination with English & mathematics as their core subjects or any other degree examination of any University or authority accepted by this University as equivalent thereto.
- 2.3.2** Eligibility conditions for admission such as class obtained, number of attempts in the qualifying examination and physical fitness will be as prescribed by this University from time to time.
- 2.3.3** The candidates must have obtained 50% of 45% of the aggregate marks (total marks) for the above qualifying examination depending on the reservation policy of the University.

## **2.4 STREAMS OF STUDY**

Taking into consideration the rapid developments in technology, skills required by the industry and current needs of IT industry, the following are offered

1. B.C.A (specialization in Cloud Technology and Information Security)
2. B.C.A (specialization in Information Security and Mobile Applications)
3. B.Sc (Computer Science)

## **2.5 CURRICULUM STRUCTURE**

The UG Programme, BCA/B.Sc consist of the following components as prescribed in the curriculum

1. Core Courses
2. Elective Courses
3. Project Work
4. Learning Labs.
5. Value Enhancing Courses

- 2.6** The curriculum and syllabus of UG programme shall be approved by Board of Studies for Computer Applications and Academic Council of this University.
- 3.7** The minimum and maximum periods of completion of the UG program respectively are three years (6 semesters) and four years (10 semesters) subject to the decisions to be taken by the Academic Council.
- 3.8** The minimum number of credits to be earned for the successful completion of the program shall be specified in the curriculum of the respective streams of specializations.
- 3.9** The curriculum of BCA programme shall be so designed such that the minimum prescribed credits required for the award of the degree shall be in the 120-130.

**3.10** Credits will be assigned to the courses for all UG programmes as follows:

- One credit for one lecture period per week.
- One credit for one tutorial period per week.
- One credit each for lab sessions/project of two or three periods per week.
- One credit each for value added courses of two or three periods per week.

**2.11** The number of credits registered by a student in non-project semester and project semester should be within the range as follows:

Non Project Semester: 20-24

Project Semester: 23-25

**2.12** Electives from the curriculum are to be chosen with the approval of the Head of the Department.

### **3.0 MEDIUM OF INSTRUCTION**

The medium of Instruction, Examination, Project, and Value Enhanced Courses will be in English only.

### **4.0 COURSE DELIVERY**

All courses prescribed in the curriculum shall be taught by qualified staff as per the guidelines of UGC for UG courses in Sciences with enough industrial experience.

### **5.0 PROJECT WORK/THESIS/DISSERTATION**

**5.1.1** Project work / Thesis / Dissertation shall be carried out under the supervision of a qualified teacher in the concerned Department.

**5.1.2** The Project Report/Thesis / Dissertation report / Drawings prepared according to approved guidelines and duly signed by the supervisor(s) and the Head of the Department shall be submitted to the concerned department.

**5.1.3** The deadline for submission of final Project Report / Thesis / Dissertation is within 30 calendar days from the last working day of the semester in which Project / Thesis / Dissertation is done.

**5.1.4** If a student fails to submit the Project Report / Thesis / Dissertation on or before the specified deadline he / she is deemed to have not completed the Project Work / Thesis / dissertation and shall re-register the same in a subsequent semester.

**5.1.5** A student who has acquired the minimum number of total credits prescribed in the Curriculum for the award of Under Graduate Degree will not be permitted to enroll for more

courses to improve his/her cumulative grade point average (CGPA).

## 6.0 CLASS ADVISOR

A faculty member/Industry member will be nominated by the HOD as Class Advisor for the whole class.

He/she is responsible for maintaining the academic, curricular and co-curricular records of all students throughout their period of study.

## 7.0 FACULTY ADVISOR

To help the students in planning their courses of study and for general counseling on the academic programme, the Head of the Department of the students will attach a certain number of students to a faculty member of the department who shall function as Faculty Advisor for the students throughout their period of study. Such Faculty Advisor shall offer advice to the students on academic and personal matters, and guide the students in taking up courses for registration and enrolment every semester.

## 8.0 CLASS COMMITTEE

8.1 Every class of the UG Programme will have a Class Committee constituted by the Head of the Department as follows:

- i. Teachers of all courses of the programme.
- ii. One senior faculty preferably not offering courses for the class, as Chairperson.
- iii. Minimum two students of the class, nominated by the Head of the Department.
- iv. Class Advisor / Faculty Advisor of the class - Ex-Officio Member
- v. Professor in-charge of the UG Programme - Ex-Officio Member.

8.2 The Class Committee shall be constituted by the respective Head of the Department of the students in consultation with participating industry.

8.3 The basic responsibilities of the Class Committee are to review periodically the progress of the classes to discuss problems concerning curriculum and syllabi and the conduct of classes. The type of assessment for the course will be decided by the teacher in consultation with the Class Committee and will be announced to the students at the beginning of the semester. Each Class Committee will communicate its recommendations to the Head of the Department and Dean (Academic Affairs). The class committee, **without the student members**, will also be responsible for finalization of the semester results and award of grades.

8.4 The Class Committee is required to meet at least thrice in a semester, first within a week of the commencement of the semester, second, after the first assessment and the third, after the semester-end examination to finalize the grades.

## 9.0 INDUSTRY – DEPARTMENT MONITORING COMMITTEE

**9.1** This committee will be constituted by the Vice-Chancellor with the following members:

1. Industry co-ordinator of the program
2. Dean of the School
3. HoD
4. Senior faculty nominated by HoD
5. Industry Teaching Staff

The committee shall meet as often as possible and exercise the total quality of the programme and address issues such as uniform evaluation, quality of test papers and so on whereas for B.Sc degree programme department monitoring committee will be constituted.

## **10.0 REGISTRATION AND ENROLMENT**

**10.1** For the first semester every student has to register and enroll for all the courses.

**10.2** For the subsequent semesters registration for the courses will be done by the student during a specified week before the semester-end examination of the previous semester. The curriculum gives details of the core and elective courses, learning labs, value enhanced courses, projects to be taken in different semester with the number of credits. The student should consult his/her Faculty Adviser for the choice of courses. The Registration form shall be filled in and signed by the student and the Faculty Adviser.

**10.3** From the second semester onwards all students shall pay the prescribed fees and enroll on a specified day at the beginning of a semester.

**10.4 A student should have registered for all preceding semesters before registering for a particular semester**

## **11.0 TEMPORARY BREAK OF STUDY FROM THE PROGRAMME**

A student may be permitted by the Dean (Academic Affairs) to avail temporary break of study from the programme up to a maximum of two semesters for reasons of ill health or other valid grounds. Such student has to rejoin only in the same semester from where he left. However the total duration for completion of the programme shall not exceed the prescribed maximum number of semesters (vide clause 2.7).

## **12.0 MINIMUM REQUIREMENTS TO REGISTER FOR PROJECT / THESIS / DISSERTATION**

**12.1** A student is permitted to register for project semester, if he/she has earned the minimum number of 100 credits till 5<sup>th</sup> semester.

**12.2** If the student has not earned minimum number of credits specified, he/she has to earn the required credits, at least to the extent of minimum credits specified in clause 12.1 and then register for the project semester.

## **13.0 DISCIPLINE**

**13.1** Every student is required to observe discipline and decorous behavior both inside and

outside the campus and not to indulge in any activity, which will tend to bring down the prestige of the Institution.

**13.2** Any act of indiscipline of a student reported to the Head of the Institution will be referred to a Discipline and Welfare Committee for taking appropriate action.

**13.3** Every student should have been certified by the HOD that his / her conduct and discipline have been satisfactory.

#### **14.0 ATTENDANCE**

**14.1** Attendance rules for all Full Time Programme and Part time - day Time Programmes are given in the following sub-clause.

**14.2** A student should secure not less than 75% overall attendance in that semester taking into account the total no. of periods in all courses put together attended by the student as against the total no. of periods in all courses offered during that semester. If a student who could secure overall attendance between 65% and 75% only in a particular semester due to medical reasons (hospitalization / accident /specific illness) or due to participation in the College / University / State / National / International level sports events with prior permission from the Officials concerned shall be given exemption from the prescribed attendance requirement and he / she shall be permitted to appear for the current semester examinations.

***The students who do not fulfill the above attendance requirement will not be permitted to write the semester end examination and will not be permitted to move to next semester. Such students should repeat all the courses of the semester in the next Academic year.***

#### **15.0 ASSESSMENTS AND EXAMINATIONS**

**15.1** The following rule shall apply to the UG programs in Science

For lecture-based courses, normally a minimum of two assessments will be made during the semester. The assessments may be combination of tests and assignments. The assessment procedure as decided in the Class Committee will be announced to the students right from the beginning of the semester by the course teacher.

**15.2** There shall be one examination of three hours duration, at the end of the semester, in each lecture based course.

**15.3** The evaluation of the Project work will be based on the project report and a Viva-Voce Examination by a team consisting of the supervisor concerned, an Internal Examiner and External Examiner to be appointed by the Controller of Examinations.

**15.4** At the end of industrial internship, the student shall submit a certificate from the organization and also a brief report. The evaluation will be made based on this report and a Viva-Voce Examination, conducted internally by a Departmental Committee constituted by the Head of

the Department.

## 16.0 MODE OF EVALUATION

16.1 The following shall be the weightages for different courses:

- i) **Lecture based course**
  - Two continuous assessments - 50%
  - Semester-end examination - 50%
- ii) **Laboratory based courses**
  - Laboratory work assessment - 75%
  - Semester-end examination - 25%
- iii) **Project work**
  - Periodic reviews - 50%
  - Evaluation of Project Report by External Examiner - 20%
  - Viva-Voce Examination - 30%

16.2 Appearing for semester end examination for each course (Theory and Practical) is mandatory and a student should secure a minimum of 40% marks in semester end examination for the successful completion of the course.

16.3 The markings for all tests, tutorial, assignments (if any), laboratory work and examinations will be on absolute basis. The final percentage of marks is calculated in each course as per the weightages given in clause 17.1.

## 17.0 COURSEWISE GRADING OF STUDENTS AND LETTER GRADES

17.1 Based on the semester performance, each student is awarded a final letter grade at the end of the semester in each course. The letter grades and the corresponding grade points are as follows, but grading has to be relative grading

Letter grade	Grade points
S	10
A	9
B	8
C	7
D	6
E	5
U	0
W	-
I	-
AB	-

Flexible range grading system will be adopted



“**W**” denotes withdrawal from the course.

“**I**” denotes inadequate attendance and hence prevention from semester-end examination

“**U**” denotes unsuccessful performance in a course.

“**AB**” denotes absent for the semester end examination

**17.2** A student is considered to have completed a course successfully if he / she secure five grade points or higher. A letter grade ‘U’ in any course implies unsuccessful performance in that course.

**17.3** A course successfully completed cannot be repeated for any reason.

## **18.0 AWARD OF LETTER GRADE**

**18.1** A final meeting of the Class Committee without the student member(s) will be convened within ten days after the last day of the semester end examination. The letter grades to be awarded to the students for different courses will be finalized at the meeting.

**18.2** After finalization of the grades at the class committee meeting the Chairman will forward the results to the Controller of Examinations, with copies to Head of the Department and Dean (Academic Affairs).

## **19.0 DECLARATION OF RESULTS**

**19.1** After finalization by the Class Committee as per clause 17.1 the Letter grades awarded to the students in the each course shall be announced on the departmental notice board after duly approved by the Controller of Examinations.

**19.2** In case any student feels aggrieved about the results, he/she can apply for revaluation after paying the prescribed fee for the purpose, within one week from the announcement of results.

A committee will be constituted by the concerned Head of the Department comprising of the Chairperson of the concerned Class Committee (Convener), the teacher concerned and a teacher of the department who is knowledgeable in the concerned course. If the Committee finds that the case is genuine, it may jointly revalue the answer script and forward the revised marks to the Controller of Examinations with full justification for the revision, if any.

**19.3** The “U” and “AB” grade once awarded stays in the grade sheet of the students and is not deleted when he/she completes the course successfully later. The grade acquired by the student later will be indicated in the grade sheet of the appropriate semester.

## **20.0 GRADE SHEET**

**20.1** The grade sheet issued at the end of the semester to each student will contain the following:

- (i) the credits for each course registered for that semester.

- (ii) the performance in each course by the letter grade obtained.
- (iii) the total credits earned in that semester.
- (iv) the Grade Point Average (GPA) of all the courses registered for that semester and the Cumulative Grade Point Average (CGPA) of all the courses taken up to that semester.

**20.2** The GPA will be calculated according to the formula

$$GPA = \frac{\sum_{i=1}^n (C_i)(GP_i)}{\sum_{i=1}^n C_i}$$

Where n = number of courses

where  $C_i$  is the number of credits assigned for  $i^{th}$  course

$GP_i$  - Grade point obtained in the  $i^{th}$  course

For the cumulative grade point average (CGPA) a similar formula is used except that the sum is over all the courses taken in all the semesters completed up to the point of time.

**'I' and 'W' grades will be excluded for GPA calculations.**

**'U', 'AB' 'I' and 'W' grades will be excluded for CGPA calculations.**

**20.3** Classification of the award of degree will be as follows:

<b>CGPA</b>	<b>Classification</b>
8.50 and above, having completed all courses in first appearance	First class with Distinction
6.50 and above, having completed within a period of 2 semesters beyond the programme period	First Class
All others	Second Class

However, to be eligible for First Class with Distinction, a student should not have obtained U or I grade in any course during his/her study and should have completed the PG Programme within a minimum period covered by the minimum duration (clause 3.1) plus authorized break of study, if any (clause 8). To be eligible for First Class, a student should have passed the examination in all courses within the specified minimum number of semesters reckoned from his/her commencement of study plus two semesters. For this purpose, the authorized break of study will not be counted. The students who do not satisfy the above two conditions will be classified as second class. For the purpose of classification, the CGPA will be rounded to two decimal places. For the purpose of comparison of performance of students and ranking, CGPA will be considered up to three decimal places.

## **21.0 ELIGIBILITY FOR THE AWARD OF THE BCA /B.Sc DEGREE**

**21.1** A student shall be declared to be eligible for the award of the BCA Degree, if he/she has:

- i) successfully acquired the required credits as specified in the Curriculum corresponding to

his/her programme within the stipulated time,

ii) no disciplinary action is pending against him/her.

**21.2** The award of the degree must be approved by the University.

## **22.0 POWER TO MODIFY**

Notwithstanding all that have been stated above, the Vice-Chancellor has the right to modify any of the above regulations from time to time based on the recommendation of Industry-Department monitoring committee. Major changes of regulations have to be approved by the academic council.