

# **B.Sc Computer Science/ BCA (I Year)**

**2014 -2015**

## **ASSIGNMENT TOPICS**



## **School of Distance Education**

**UNIVERSITY OF KERALA**

**SENATE HOUSE CAMPUS, PALAYAM**

**THIRUVANANTHAPURAM – 695 034**

**Phone: 0471 2300148, 2300137**

## **INSTRUCTIONS FOR SUBMISSION OF ASSIGNMENT FOR B.Sc CS/ BCA CS FIRST SEMESTER**

***Last Date for Assignment Submission: 10<sup>th</sup> April 2015***

Please note the following instructions for submission of Assignments:

- *These assignments are to be submitted only by those students who have registered for B.Sc CS/ BCA First Semester Course in the School of Distance Education (SDE).*
- *Students are required to remit an amount @ Rs. 100/ per year as fee for assignment. Those who failed to submit their assignment during the respective year of study would be charged @ Rs. 200 (After 1 year and within 2 years of course completion) and Rs 500 (after 2 years of course completion) as fee for late submission of assignment. This should be remitted at the university cash counter.*
- *Students should submit their assignments on or before 10<sup>th</sup> April 2015*
  - ✓ *Those who had taken admission directly in SDE (SDE Regular Students) should submit their assignments to the Course Coordinator, School of Distance Education, University of Kerala, Senate House Campus, Palayam, Trivandrum- 695 034, irrespective of the study centre where they had attended the PCP. It is the student's responsibility to ensure that the assignments reach SDE on or before the due date. No excuses of any kind for late or non-submission of assignments will be entertained.*
  - ✓ *Those who had taken admission through Learner Support Centers (LSCs) should submit their assignments to the Centre Coordinator of the respective LSC where he/she had taken admission*
- *Submission of assignments after the due date (10/04/2015) will not be entertained at any cost. Genuine cases may be considered after the prior permission of the Director by charging a sum of rupees as fine. The amount of fine will be fixed as per the directions and orders given by the SDE Director from time to time. This should be remitted in SDE Office itself (not at University cash counter).*
- *If a student is unable to submit the assignment(s) in person, the student may at his / her own risk submit the assignment(s) through an acquaintance, fellow student or by courier.*
- *If assignments are sent by Speed Post / courier, at the top of the envelope the student should clearly write in BOLD letters. "ASSIGNMENT FOR B.Sc CS/ BCA FIRST SEMESTER SDE"*
- *For each subject's assignment the **maximum marks** obtainable are **Ten**.*
- *For each subject's assignment, there will be two assignments.*
- *Total number of pages for each sets of assignment should not exceed 20 pages including facing sheet, table of content and reference.*
- *For each paper/subject, assignment should be Hand Written by the student himself. If mismatching of handwriting is found at any stage (even after the publication of result) the assignment submitted would not be valued and such assignments may be given zero marks or marks awarded may be cancelled.*

- *Students are advised that in case two or more students' assignments are too similar in content, nature, the Course Coordinator would at his / her discretion decide on the quantum of marks to be awarded, irrespective of how good the submitted assignments are. It is more than likely that the minimum possible marks (if any) may be awarded to all such involved assignments.*
- *Only A4 / **Journal / Assignment paper** should be used for the Assignment Writing. Only one side of a paper should be used for writing.*
- ***Separate sets** of assignments should be made for each subject.*
- *A cover page (facing sheet) as per the format given below on last page should be attached on the top of the set for each paper/subject.*
- *Finally for a particular year, one file/ cover/ container should be made for all subjects.*
- *Assignments should not be copied, should be clear, legible, well presented.*
- *Illustrate your answer by giving suitable examples and draw graphs or diagrams wherever necessary.*
- *Students are also advised to quote sources (if any) of data, facts, sketches, drawings etc in their assignments.*
- *Students should draw a table of content (Index) immediately after the facing sheet and should write the reference/ bibliography at the end of the assignment.*
- *Marks may be awarded by considering the **quality of the content, neatness, style of presentation, legibility in handwriting, attractiveness, introductory and concluding remarks, number of references, quotations etc.***

**In case of any query contact the**

**COURSE COORDINATOR OF COMPUTER SCIENCE  
SCHOOL OF DISTANCE EDUCATION,  
UNIVERSITY OF KERALA,  
THIRUVANANTHAPURAM -695 034  
E-mail : [sdecsdept@gmail.com](mailto:sdecsdept@gmail.com)**

**Last Date for Assignment Submission: 10<sup>th</sup> April 2015**

Maximum Marks: **20 (Twenty)**

Date of Submission: on or before **10/04/2015**

## **TECHNICAL COMMUNICATION**

### *Assignment 1*

1. Describe in your own words the essential factors involved in listening procedure. Also distinguish between hearing and listening. Present your answers with appropriate examples.
2. How do you classify speech sounds? Describe in your own words-vowels, consonants, phonemes, phonology, phonetics, phones and allophones. Your answer should be supported by suitable examples.

### *Assignment 2*

1. What are the major influences of Science & Technology on English? And also describe the barriers of effective communication.
2. Describe the different types of telephone conversations – personal, official, making enquiries, how to begin and conclude conversation.

## **DISCRETE MATHEMATICS**

### *Assignment 1*

Two state devices, Representation of discrete structures, data structures, storage structures, sequential allocation, pointers and linked allocation.

### *Assignment 2*

Lattices as partially ordered sets, properties of lattices, lattices as algebraic systems, sub lattices, Bi-connected components and articulation.

## **DIGITAL ELECTRONICS**

### **Assignment 1**

1. What is meant by rectification? What are the different types of rectifiers? Explain a Half wave rectifier and Full wave rectifier with suitable diagram. Derive an expression for efficiency of each.
2. a) What are the different types of Number System? Explain conversion between decimal to binary, binary to decimal, decimal to hexadecimal, hexadecimal to decimal etc.  
b) Explain Floating point numbers and their operations.

### **Assignment 2**

1. What are flip flops and latches? Explain with truth table and diagram S-R flip flop, J-K flip flop, T flip flop.
2. What are adders? Explain with diagram and truth table a Half adder and Full adder. Explain TTL and ECL families.

## **COMPUTER ORGANISATION**

### **Assignment 1**

1. A) Explain various addressing modes and instruction formats of 8085 microprocessor?  
B) Explain various Bus Architectures.
2. A) Differentiate between Micro-programmed and Hard wired control Unit?  
B) Differentiate between RISC and CISC?

### Assignment 2

1. Explain the following

- A) Multiple Module Memories.
- B) Memory Inter leaving
- C) Multilevel Organization of Cache memory

2. A) Explain DMA and DMA Controllers.

B) Write short notes on UART and RS-232.

## **PROGRAMMING IN C**

### Assignment 1

- 1. Differentiate between top-down and bottom-up approach with examples?
- 2. A) Explain storage Classes in C with examples.  
B) Explain different control structures in C with example.

### Assignment 2

- 1. Explain the concept of
  - A) Modular Programming
  - B) Dynamic Memory Allocation
- 2. A) Explain Multi dimensional arrays with its memory allocation with example.  
B) Explain various Library functions for File handling with example.

## **PRINCIPLES OF ACCOUNTANCY & MANAGEMENT**

### Assignment 1

- 1. What you mean by Motivation? Explain different theories of Motivation.
- 2. Explain the different functions of Production and operations management.

*Assignment 2*

1. A) What is Marginal costing? Explain the tools and techniques used in Marginal costing.  
B) What do you mean by recruitment? Explain the different sources of recruitment process.
2. Explain the term Product Life Cycle and its phases.



# School of Distance Education

## UNIVERSITY OF KERALA

SENATE HOUSE CAMPUS, PALAYAM, TRIVANDRUM – 695 034

Phone: 0471 2300148, 2300137, website: [www.ideku.net](http://www.ideku.net)

### ASSIGNMENT

Course : ----- (Semester) -----

Year of admission: -----

Paper Code : -----

Title of the Paper : -----

#### Name and Address of the Contact Centre

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#### SDE Enrolment Number

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#### Exam Register Number (Compulsory)

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#### Name and Address of the Student

Student's Name: -----

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Address: -----

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Phone No: -----

Mobile : -----

**Date of Submission:** -----

#### **FOR OFFICE USE ONLY**

Marks Awarded

20

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Name and Signature of the Evaluator