

**Directorate of Distance Education  
Swami Vivekanand Subharti University  
I Year**

## **BACHELOR OF COMPUTER**

### **APPLICATION**

**(BCA)**

**BCA/ASSIGN/I/YEAR/A-2015-16**

### **Assignments**

**For June Academic Batch-2015-16**

**BCA-01, BCA-02, BCA-03, BCA-04,**

**BCA-05, BCA-06, BCA-07**



**DIRECTORATE OF DISTANCE EDUCATION  
SWAMI VIVEKANAND SUBHARTI UNIVERSITY**

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**Detail of Program**

Course Code	SLM Code	Name of the subject	Page No
BCA-1	C-101	Computer Fundamentals & Programming in C	3
BCA-2	C-106	Mathematics	4
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	M-203	(B) Business Communication	
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Course Code : BCA -1  
Course Title : Computer Fundamentals & Programming in C  
Assignment No. : BCA -1/C-101/ A-2015-16  
SLM Code : C-101  
Maximum Marks : 20  
Words : 100 words

Attempt all questions.

All questions carry equal marks.

Total Marks: 20

Q.1 Write a C function to swap two given numbers using call by reference mechanism.

Q.2 What is looping?

Q.3 Write a C program to read the internal test marks of 25 students in a class and show the number of students who have scored more than 50% in the test. Make necessary assumptions.

Q.4 Write a function to find the area of a triangle whose length of three sides is given.

Q.5 Write short note on concept of Virtual & Cache Memory?

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Course Code : BCA -2  
Course Title : Mathematics  
Assignment No. : BCA -2/C-106/ A-2015-16  
SLM Code : C-106  
Maximum Marks : 20  
Words : 100 words

Attempt all questions.

All questions carry equal marks.

Total Marks: 20

Q.1. Define a set and give examples to illustrate the difference between a collection and a set. What are the different ways to specify a set Give examples.

Q.2. Explain the Characteristics of Circle, Parabola, Ellipse.

Q.3. What is the definition of Sets?

Q.4. Find the point on the curve  $y = x^3 - 11x + 5$  at which the tangent has the equation  $y = x - 11$ .

Q.5. Show that  $2.4.6.8 \dots$  to  $n$  factors  $= 2^n \times n!$

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Course Code : BCA -3  
Course Title : Data Structure through C  
Assignment No. : BCA -3/C-104/ A-2015-16  
SLM Code : C-104  
Maximum Marks : 20  
Words : 100 words

Attempt all questions.

All questions carry equal marks.

Total Marks: 20

Q.1. Write an algorithm for the implementation of a circular doubly linked list

Q.2. What are the advantages of Arrays and Pointers?

Q.3. What is the Priority Queue?

Q.4. What is a row major order?

Q.5. Discuss various operations that can be performed on strings .

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Course Code : BCA -4  
Course Title : Data Base Management System  
Assignment No. : BCA -4/C-103/ A-2015-16  
SLM Code : C-103  
Maximum Marks : 20  
Words : 100 words

Attempt all questions.

All questions carry equal marks.

Total Marks:20

Q.1 What do you understand by Multiple Views of the database?

Q.2 Distinguish between DBMS & RDBMS.

Q.3 Describe Entity Relationship Model with an example.

Q.4 Describe with example the use of the following functions:

INSERT

UPDATE

DELETE

CREATE

DROP

ALTER

Q.5 Write short notes on:-

(i) Client / Server Architecture

(ii) Distributed DBMS



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Course Code : BCA -5  
Course Title : Discrete Mathematics  
Assignment No. : BCA -5/C-107/ A-2015-16  
SLM Code : C-107  
Maximum Marks : 20  
Words : 100 words

Attempt all questions.

All questions carry equal marks.

Total Marks:20

Q.1. Prove that every subgroup of a cyclic group is cyclic

Q.2. Find all eigen values and basis for eigen space if the linear operator

$T: \mathbb{R}^2 \rightarrow \mathbb{R}^2$  is given by  $T(x,y) = (x + 2y, 3x + 2y)$ .

Q.3. Prove that the vectors  $(a_1, a_2)$  and  $(b_1, b_2)$  in  $V_2(F)$  are L.D. if  $a_1 b_2 - a_2 b_1 = 0$ .

Q.4. Explain the Dijkstra's Algorithm with example.

Q.5. Discuss the various applications of graph in computer science in detail.

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Course Code : BCA -6  
Course Title : Principles of Management / Business Communication  
Assignment No. : BCA -6/M-201, M-203/ A-2015-16  
SLM Code : M-201, M-203  
Maximum Marks : 20  
Words : 100 words

Attempt all questions.

All questions carry equal marks.

Total Marks: 10

**Principles of Management**

Q.1 What is Selection and its process?

Q.2 What is Management and its nature & scope?

Q.3 Define Decentralization and delegation of Authority?

Q.4 Define the Term 'Planning' and its Process.

Q.5 Write short note on

(A) Performance Appraisal (B) Training and Development (C) Recruitment

Total Marks: 10

**Business Communication**

Q.1 Why effective communication is necessary? Briefly explain communication process?

Q.2 Differentiate between upward & downward Communication?

Q.3 What are the barriers of Communication? Also explain Grapevine communication?

Q.4 What is Report? What are the various steps in Business Report writing?

Q.5 Write short note on

(A) Group Discussion (B) Mock Interview (C) Memorandum



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Course Code : BCA -7  
Course Title : Computer Organization  
Assignment No. : BCA -7/C-108/ A-2015-16  
SLM Code : C-108  
Maximum Marks : 20  
Words : 100 words

Attempt all questions.

All questions carry equal marks.

Total Marks: 20

**Computer Organization**

Q.1 What are Boolean operators? What is their utility?

Q.2 Perform the following additions using number system only.

(i)  $1011_2 + 11_2$

(ii)  $111_2 + 0101_2$

(iii)  $1010_2 + 10_2$

(iv)  $110011_2 + 1100_2$

Q.3 What are the different types of instruction? Is there any impact of addressing modes in instruction set design of a machine?

Q.4 Perform the logic AND, OR and XOR with the two binary strings 10011001 and 10101010

Q.5 Convert the following

(a)  $(AB6)_{16}$  into decimal

(b)  $(AF9.B0D)_{16}$  into binary

(c)  $(1248.56)_{10}$  into hexadecimal