



Subject : Fundamentals of Information Technology

B.C.A. - I / ~~II~~ / ~~III~~

Day : Monday

Date : 11/04/2016



Time : 02.00 PM TO 05.00 PM

Max Marks : 100 Total Pages : 1

N.B.

- 1) Answer any **FOUR** questions from Section – I and any **TWO** questions from Section – II.
- 2) Both sections should be written in the **SAME** answer book.
- 3) Figures to the **RIGHT** indicate full marks.

SECTION - I

- Q.1 a) What is computer? Draw block diagram of computer. (07)
- b) List and explain some important characteristics of a computer. (08)
- Q.2 How many types of storage a computer system normally uses? Justify the need for each type. (15)
- Q.3 Differentiate between the following: (15)
- a) High Level Language Vs Low Level Language
 - b) Application software Vs System software
 - c) Compiler Vs Interpreters
- Q.4 In context of Magnetic Tape Storage define the following terms : (15)
- i) Inter-Record gap ii) Inter-Block gap
 - iii) Blocking iv) Blocking factor
- Q.5 How many types of Softwares are there? Write at least two examples of each. (15)
- Q.6 What is an Operating System? Why it is necessary for a computer system? List different types of Operating System. (15)
- Q.7 Write short notes on any **THREE** of the following: (15)
- a) Output devices
 - b) Database Management System
 - c) Assembler
 - d) MS-DOS

SECTION - II

- Q.8 What is Computer Networks? Explain different types of data transmission media used in Computer Networks? (20)
- Q.9 Convert the following decimal numbers into binary number and Hexadecimal number system: (20)
- i) (1024)₁₀ ii) (128)₁₀ iii) (64)₁₀ iv) (25)₁₀ v) (275)₁₀
- Q.10 What are different types of File organization? Explain in detail. (20)



Subject : Database Management Theory

B.C.A. - I / II / III

Day : Wednesday

Date : 13/04/2016



Time : 02.00 PM TO 05.00 PM

Max Marks : 100 Total Pages : 1

N.B.:

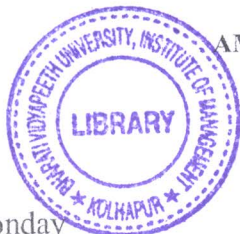
- 1) Attempt any **FOUR** questions from Section –I. Each question carries **15** marks.
- 2) Attempt any **TWO** questions from Section –II. Each question carries **20** marks.
- 3) Answers to both the sections should be written in **SAME** answer book.

SECTION-I

- Q.1 Define DBMS. Explain advantages of DBMS over traditional file system.
- Q.2 Explain the 3 tier architecture of DBMS with the help of a diagram.
- Q.3 Explain Codd's Rules in detail.
- Q.4 Explain the following terms associated with ER diagrams:
i) Weak Entities
ii) Cardinality Ratios
iii) Attributes
- Q.5 What is a transaction? Explain ACID properties of a transaction in detail.
- Q.6 What is recovery? Explain the various types of failures that may occur in a database environment?
- Q.7 Write short notes on the following:
a) DBA
b) B+ trees
c) Functional Dependencies

SECTION-II

- Q.8 Draw an ER diagram for Library Management System.
- Q.9 What is Normalization? Explain 1NF, 2NF and 3NF with example.
- Q.10 What is Relational Algebra? Explain the various relational algebra operators in detail.



Subject : C Programming - I

B.C.A. - I / H / III

Day : Monday

Date : 18/04/2016



29225

Time : 02.00 PM TO 05.00 PM

Max Marks : 100 Total Pages : 1

N.B.

- 1) Attempt any **FOUR** questions from Section – I. Each question carries **15** marks.
- 2) Attempt any **TWO** questions from Section – II. Each question carries **20** marks.
- 3) Answers to both the sections should be written in the **SAME** answer book.

SECTION – I

- Q.1** Explain in brief concepts of Machine, Assembly and Higher Level Languages. (15)
- Q.2** a) Explain the formatted input and output functions in C language. (08)
b) Describe executable and non - executable statements. (07)
- Q.3** What is function? Explain different types of functions in detail. (15)
- Q.4** Explain in brief iteration statements in C. (15)
- Q.5** What is an array? Explain various types of array in C. (15)
- Q.6** What is string? Explain various string manipulation functions in C. (15)
- Q.7** Write short notes on any **TWO**: (15)
a) Call by value
b) Operators and operands
c) Types of errors.

SECTION - II

- Q.8** Write a menu driven program in C using functions to calculate square, cube and square root of a given number (20)
- Q.9** a) Write a C program to display sum of digits of given integer number. (10)
b) Write a C program to display factorial of a given number. (10)
- Q.10** Write a C program to display all array elements in descending order using bubbles sort technique. (20)

*

*

*



Subject : Principles of Management

B.C.A. - I / H / III

Day : Thursday

Date : 21/04/2016



Time : 02.00 PM TO 05.00 PM

Max Marks : 100 Total Pages : 1

N.B:

- 1) Solve **ANY FOUR** questions from Section-I.
- 2) Solve **ANY TWO** questions from Section-II.
- 3) Figures to the right indicate **FULL** marks.

SECTION-I

- Q.1 Explain different levels of Management with suitable examples. (15)
- Q.2 Discuss in brief how Evolution of Management takes place from industrial revolution. (15)
- Q.3 Explain different steps involved in planning. (15)
- Q.4 Explain different forms of organization with appropriate examples. (15)
- Q.5 Illustrate Co- ordination process and its importance for an organization. (15)
- Q.6 Discuss concept and Characteristics of control?
- Q.7 Write Short Notes on **ANY TWO** of the following: (15)
- a) Delegation
 - b) Motivation
 - c) Quality Control

SECTION-II

- Q.8 "Management is an art, science and profession" Discuss. (20)
- Q.9 Explain the functions and qualities of leadership with suitable examples. (20)
- Q.10 Explain the concept of decision making of an organization with examples. (20)

* * * * *