

BCA Fourth Semester Examination, May - 2018

(Faculty of Science)

FIRST PAPER

Data Structure and Algorithms

Paper Code :4611

Time Allowed: Three Hours

Maximum Marks : 70

No supplementary answer book will be given to any candidate. Hence the candidates should write the answers precisely in the main answer book only.

(Attempt all six questions)

Part I (Question No. 1& 2) is compulsory & Part II (Question No. 3, 4, 5 & 6) has internal choice.

PART-I

1. Answer any 10 questions. Each question carries 1 mark.

10x1= 10

(Words limit 20-25 words)

- a) What is running time of a program?
- b) What is Garbage Collection?
- c) What is Time –Complexity?
- d) What are the characteristics of Algorithm?
- e) What do you mean by Abstraction?
- f) Differentiate between linear search and binary search.
- g) What is String?
- h) What are two dimensional Arrays?
- i) What is Adjacency Matrix?
- j) What do you mean by Skip List?
- k) What is Polish Notation?
- l) What is a Thread?

2. Attempt all questions. Each question carries 5 marks.

4x5=20

(Word limit 50 words each)

- a) Define perfectly balanced tree.
- b) What are the drawbacks of binary search trees?
- c) Explain the doubly circular linked list.
- d) What are the advantages of an array?

P.T.O

Time Allowed: Three Hours

Maximum Marks : 70

(1) No supplementary answer book will be given to any candidate. Hence the candidates should write the answers precisely in the main answer book only.

(2) All the parts of one question should be answered at one place in the answer book.

(Attempt all six questions)

Part I (Question No. 1 & 2) is compulsory & Part II (Question No. 3, 4, 5 & 6) has internal choice.

PART-I

1. Answer any 10 questions. Each question carries 1 mark.

10x1= 10

(Words limit up to 20 words each)

- a) Write the full form of PHP.
- b) Write about Server.
- c) Write about Scripting Language.
- d) Write about GET method in PHP.
- e) What do you mean by Cookies?
- f) Write about MySQL.
- g) Write about include () in PHP.
- h) What is Print () and echo () in PHP ?
- i) Write about alter table in MySQL.
- j) Write the names of operations which you can perform on database.
- k) What is \$_GET variable?
- l) What is X+ mode in Fopen () used for ?

2. Attempt all questions. Each question carries 5 marks.

4x5=20

(Word limit up to 50 words each)

- a) Explain array with example in PHP.
- b) Write about Loop in PHP.
- c) Write the query to insert a data in table.
- d) In how many ways can you pass parameters to a function? Explain with example.

P.T.O

BCA Fourth Semester Examination, May - 2018**(Faculty of Science)****THIRD PAPER****Advanced Database Concepts**

Paper Code : 4631

Time Allowed: Three Hours**Maximum Marks : 70**

No supplementary answer book will be given to any candidate. Hence the candidates should write the answers precisely in the main answer book only.

(Attempt all six questions)

Part I (Question No. 1 & 2) is compulsory & Part II (Question No. 3, 4, 5 & 6) has internal choice.

PART-I

1. Answer any 10 questions. Each question carries 1 mark.

10x1= 10

(Words limit up to 20 words each)

- a) What is Serializability ?
- b) Define Concurrent Executions.
- c) What is Deadlock?
- d) What is Locked Based Protocols?
- e) What is Package in PL \ SQL?
- f) Write Basic Loop statement structure in PL\SQL.
- g) What is Intra Operation Parallelism ?
- h) What is Single Table Inheritance ?
- i) Name two Database System Architecture.
- j) What are Triggers ?
- k) What is IO Parallelism ?
- l) What is Transaction ?

2. Attempt all questions. Each question carries 5 marks.

4x5=20

(Word limit upto 50 words each)

- a) Draw a State diagram and explain Transaction States .
- b) Describe Commit Protocol for Distributed Database.
- c) What is Exception Handling in PL\SQL?
- d) Define Complex Data types in object based database.

P.T.O

BCA Fourth Semester Examination, May - 2018**(Faculty of Science)****FOURTH PAPER****Data Communication and Net Working**

Paper Code:4641

Time Allowed: Three Hours**Maximum Marks : 70**

No supplementary answer book will be given to any candidate. Hence the candidates should write the answers precisely in the main answer book only.

(Attempt all six questions)**Part I (Question No. 1& 2) is compulsory & Part II (Question No. 3, 4, 5 & 6) has internal choice.****PART-I****1. Answer any 10 questions. Each question carries 1 mark.****10x1= 10**

- a) Define Internet. What is its need?
- b) What are the basic components of a Network?
- c) What is a Protocol?
- d) What is Multiplexing?
- e) What is Communication Channel? Name some basic types of communication channel.
- f) Distinguish between Serial and Parallel Transmission.
- g) What is the purpose of bridge?
- h) What is a Gateway?
- i) What are the algorithms used for congestion control in TCP?
- j) What is Bluetooth?
- k) Write the full form of DHCP.
- l) Write about the uses of Wi-Fi.

2. Attempt all questions. Each question carries 5 marks.**4x5=20**

- a) Difference between LAN, MAN and WAN.
- b) Explain the error correcting codes.
- c) Explain about Transport Layer Services.
- d) What is the difference between Baseband and Broadband connection?

P.T.O