S. S. JAIN SUBODH P.G.(AUTONOMOUS) COLLEGE, JAIPUR

Affiliated to University of Rajasthan, Jaipur

I CIA BCA III Semester Test, Sep. - 2018

Database Management System

Max. Marks: 30   Duration: 1 Hour

Instructions to the Candidates

Note - Section A : Consists of three short answer type questions, each carrying 7.5 marks. The candidates are required to attempt any two (7.5x2=15 marks)

Section B : Consists of one descriptive question of 15 marks with an internal choice.

Section A

1. What is Database Management System? Explain its advantages.

2. What is logical and physical data independence?

3. Write short notes on :-

   a) Instances and Schemas

   b) Role of DBA

Section B

4. Explain 2- tier and 3- tier architecture of DBMS with the help of a diagram.

OR

What are Data Models? Explain its various types.

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I CIA BCA III Semester Test, Sep. - 2018
Advance Java Programming

Max. Marks: 30   Duration: 1 Hour

Instructions to the Candidates

Note:- Section A : Consists of three short answer type questions, each carrying 7.5 marks. The candidates are required to attempt any two (7.5x2=15 marks)

Section B : Consists of one descriptive question of 15 marks with an internal choice.

Section A

1. Explain different Data Types available in Java.
2. With the help of suitable examples, discuss various Logical Operators of Java.
3. Describe the following-
   a. class   b. object   c. data abstraction

Section B

4. Explain various features of Java Language.

OR

Explain the following with example(s) (Any Two)
a) Conditional statement
b) Iterative (Looping) statement
c) Relational operators

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Operating System Fundamentals

Max. Marks: 30

Duration: 1 Hour

Instructions to the Candidates

Note - Section A Consists of three short answer type questions each of 2.5 marks. The candidates are required to attempt any two (2 ×2 = 5 marks)

Section B Consists of one descriptive question of 15 marks with an internal choice

Section A

1. Explain various characteristics of operating system.

2. Explain FCFS and SJF CPU scheduling algorithms.

3. What is a Process? Explain various Process States using a diagram.

Section B

4. What is Operating System? Explain Batch, Multiprogramming and Time Sharing Operating Systems.

OR

Explain the Following:

(i) Explain different types of schedulers.

(ii) Find Average Waiting Time using Round Robin Scheduling algorithm.

Time Quantum = 3

Process	Burst Time
P_1	8
P_2	2
P_3	5
P_4	6

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I CIA BCA III Semester Test, Sep. - 2018
System Analysis and Design

Max. Marks: 30   **Duration: 1 Hour**

Instructions to the Candidates

Note:- Section A : Consists of three short answer type questions, each carrying 7.5 marks. The candidates are required to attempt any two (7.5x2=15 marks)

Section B : Consists of one descriptive question of 15 marks with an internal choice.

Section A
1. What do you mean by System Analysis and Design?
2. Define System. Explain its characteristics.
3. Explain Information System?

Section B
4. Explain all the steps of System Development Life Cycle.

OR

Explain different types of Systems and it's elements?