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

Affiliated to University of Rajasthan, Jaipur

I CIA B.C.A. III Semester Test, September- 2017

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

Q.1   Write the advantages of Database System over File Processing Systems.

Q.2   Discuss the role of a Database Administrator.

Q.3   Write short notes on :

(a) Instances

(b) Schemas

(c) Data Independence

Section B

Q.4   Explain the architecture of DBMS with the help of a diagram.

OR

What is Data Model? Explain its various types.

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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

Q.1   Define the terms JDK, JRE and JVM.

Q.2   What are the different data types available in Java ?

Q.3   How array are declared and initialized in Java ?

Section B

Q:4   Describe the various features of Java language.

OR

Explain the following control structures with example :

(a) For each

(b) Labeled.Break

(c) Switch

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Operating 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

Q.1 Explain various functions of Operating System.

Q.2 What is Scheduling ? Explain different types of schedulers.

Q.3 What is a Process ? Explain various Process states using a diagram.

Section B

Q.4 What is Operating System ? Discuss various types of operating Systems.

OR

Explain the following :

(a) Round Robin Scheduling

(b)

Process	AT	BT
P_1	0	5
P_2	1	3
P_3	2	3
P_4	4	1

Find Average Waiting Time using SRTF .

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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

Q.1   Define System ? Explain its characteristics.

Q.2   Explain Information System.

Q.3   What do you mean by System Analysis and Design?

Section B

Q.4   What do you mean by SDLC ? Explain all the steps in detail with a diagram.

OR

Explain different types of Systems .