Operating System

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1 .By operating system, the resource management can be done via

a) time division multiplexing

b) space division multiplexing

c) both time and space division multiplexing

d) none of the mentioned

**Answer : c**

2.To access the services of operating system, the interface is provided by the

a) System calls

b) API

c) Library

d) Assembly instructions

**Answer : a**

3.A process stack does not contain

a) Function parameters

b) Local variables

c) Return addresses

d) PID of child process

**Answer : d**

4. A situation where several processes access and manipulate the same data concurrently and the outcome of the execution depends on the particular order in which access takes place is called :

a) data consistency

b) race condition

c) aging

d) starvation

**Answer : b**

5. An un-interruptible unit is known as :

a) single

b) atomic

c) static

d) none of the mentioned

**Answer : b**

6.If the semaphore value is negative :

a) its magnitude is the number of processes waiting on that semaphore

b) it is invalid

c) no operation can be further performed on it until the signal operation is performed on it

d) none of the mentioned

**Answer : a**

7.The \_\_\_\_\_\_\_\_\_ present a uniform device-access interface to the I/O subsystem, much as system calls provide a standard interface between the application and the operating system.

a) Devices

b) Buses

c) Device drivers

d) I/O systems

**Answer : c**

8. When the entries in the segment tables of two different processes point to the same physical location :

a) the segments are invalid

b) the processes get blocked

c) segments are shared

d) all of the mentioned

**Answer : c**

9.Using EDF algorithm practically, it is impossible to achieve 100 percent utilization due to :

a) the cost of context switching

b) interrupt handling

c) power consumption

d) all of the mentioned

**Answer : a**

10.Using a pager :

a) increases the swap time

b) decreases the swap time

c) decreases the swap time & amount of physical memory needed

d) increases the amount of physical memory needed

**Answer : c**

**DBMS**

1. Database \_\_\_\_\_\_\_\_\_\_ which is the logical design of the database, and the database \_\_\_\_\_\_\_ which is a snapshot of the data in the database at a given instant in time.

a) Instance, Schema

b) Relation, Schema

c) Relation, Domain

d) Schema, Instance

**Answer : d**

2.A domain is atomic if elements of the domain are considered to be \_\_\_\_\_\_\_\_\_\_\_\_ units.

a) Different

b) Indivisible

c) Constant

d) Divisible

**Answer : b**

3. Select name, course\_id from instructor, teaches where instructor\_ID= teaches\_ID;

This Query can be replaced by which one of the following ?

a) Select name,course\_id from teaches,instructor where instructor\_id=course\_id;

b) Select name, course\_id from instructor natural join teaches;

c) Select name ,course\_id from instructor;

d) Select course\_id from instructor join teaches;

**Answer : b**

4.Transaction processing is associated with everything below except

a) Conforming a action or triggering a response

b) Producing detail summary or exception report

c) Recording a business activity

d) Maintaining a data

**Answer : a**

5. Which of the following is true regarding views ?

a) The user who creates a view cannot be given update authorization on a view without having update authorization on the relations used to define the view

b) The user who creates a view cannot be given update authorization on a view without having update authorization on the relations used to define the view

c) If a user creates a view on which no authorization can be granted, the system will allow the view creation request

d) A user who creates a view receives all privileges on that view

**Answer : c**

6.What type of join is needed when you wish to include rows that do not have matching values?

a) Equi-join

b) Natural join

c) Outer join

d) All of the mentioned

**Answer : c**

7.A table on the many side of a one to many or many to many relationship must:

a) Be in Second Normal Form (2NF)

b) Be in Third Normal Form (3NF)

c) Have a single attribute key

d) Have a composite key

**Answer : d**

8.Empdt1(empcode, name, street, city, state,pincode).

For any pincode, there is only one city and state. Also, for given street, city and state, there is just one pincode. In normalization terms, empdt1 is a relation in

a) 1 NF only

b) 2 NF and hence also in 1 NF

c) 3NF and hence also in 2NF and 1NF

d) BCNF and hence also in 3NF, 2NF and 1NF

**Answer : b**

**9.** What is the best way to represent the attributes in a large database?

a) Relational-and

b) Concatenation

c) Dot representation

d) All of the mentioned

**Answer : b**

10.The operation which is not considered a basic operation of relational algebra is

a) Join

b) Selection

c) Union

d) Cross product

**Answer : a**