Paper M1

Operating System

Submit on or before 7/8/2020

1. a. what is operating system. 1

   b .what is scheduling. 1

   c. what is long term scheduler. 1

   d. what do you mean by deadlocks. 1

   e. what is fragmentation. 1

2. a. what is the necessary condition for deadlock. 2

   b. what is spooling. 2

   c. what do you mean by disk scheduling. 2

   d. write about two page replacement algorithm. 2

   e. what is user thread and kernel thread. 2

3. a. what are the different types of operating system. 3

   b. write the function of medium term and short term scheduler. 3

   c. write about deadlock recovery. 3

   d. what is safe state. Explain with example. 3

   e. write about deadlock prevention and avoidance. 3

4. a. write about different types of scheduling algorithm with merits and demerits using example. 10

   b. what is process and process state. Explain briefly a with example. 10

Paper M2

Database Management System

Submit on or before 7/8/2020

1. a. what is dbms. 1

   b. what is SQL. 1

   c. what do you mean by ddl and dml. 1

   d. what is the use of drop command in SQL. 1

   e. what is the use of selection in relational algebra. 1

2. a. write about simplified database system environment. 2

   b. what are the characteristics of database approach. 2

   c. what is foreign and primary key. 2

   d. difference between group by and having command in SQL. 2

   e. what is entity integrity constraint. 2

3. a. explain 3 schema architecture briefly. 5

   b. what do you mean by data independence. what are its types. explain briefly. 5

   c. explain 5 different SQL commands with example. 5

4. a. What is normalization? Why it is required? Write briefly. 10

   b. what are the desirable properties of a transaction. Explain state transition diagram. 10