

Attempt any four of the following:

1. What is UNIX? Draw the structure of UNIX and explain its various components.
2. (ii) Get part numbers weighing 25 and 35. Morning", "Good Noon", "Good Evening" or
(iii) Get the name of suppliers who supply part 2. is returning.
3. (iv) Get the names of suppliers whose name begins with V.
2. What is Normalization? Describe third normal form (3NF) with a suitable example.
5. Construct an ER Diagram for the course registration process of students.
3. What is Embedded SQL? What are the kinds of application where it is used? Describe with the help of example.

Attempt any four of the following:

1. Explain the various data types of C language. Write a C program to find the largest number among three given numbers.
2. Describe the various phases of waterfall model along with its advantage and disadvantages.
3. Differentiate between testing and debugging. Explain Spiral model of software development.
4. What is the significance of code review in software development? Describe the various phases/processes involved in user interface design.
5. Why C is known as middle level language? List the various features of C language.
6. Write a program in C to check the given year is leap year or not.

Attempt any two of the following:

1. What is inheritance? Describe the multiple inheritance along with its advantages with a suitable examples.
2. What are the concepts behind Object oriented programming? Describe the data abstraction and polymorphism with a suitable example.
3. Define Abstract class, Common base class and relationship with a suitable example. Illustrate the various applications of object oriented concepts.

Attempt any two of the following:

1. Briefly describe the DDL, DML, and DCL. Consider the following three relation in which S# is supplier code P# is product code and QTY is quantity and other carry their respective meanings:

S(S#,SNAME,SCITY, TURNOVER),

P(P#, WEIGHT, COLOR, COST, SELLING PRICE),

SP(S#,P#,QTY)

Write appropriate SQL statement for the followings :

- (i) Get all the details of suppliers who operate from Delhi.