B25–CS (E) (Th)

Subject Code : 34

2 0 2 5

COMPUTER SCIENCE (E)

(Theory)

Full Marks : 70
Pass Marks : 21

Time : 3 hours

The figures in the margin indicate full marks for the questions.

1. Choose the correct answer :   1×4=4

(a) A _____ is a network device which is used to interconnect two or more heterogeneous computer networks.

(i) HUB

(ii) switch

(iii) access point

(iv) None of the above

(b) _____ is a simple design language intended to simplify the process of making web pages presentable.

(i) HTML

(ii) CSS

(iii) JavaScript

(iv) PHP

(c) The _____ command is used to change or modify data values in a table.

(i) ALTER

(ii) UPDATE

(iii) SELECT

(iv) ERASE

(d) _____ is the process of acquiring properties of one class to the other.

(i) Abstraction

(ii) Polymorphism

(iii) Inheritance

(iv) Encapsulation

2. Fill in the blanks :   1×4=4

(a) _____ are formed by connecting devices from multiple locations across the globe.

(b) A tag is said to be _____ tag if it along with a closing tag appears at the end.

(c) _____ statements are used to give/withdraw access privileges to the database user.

(d) _____ is defined as wrapping up of data and information under a single unit.

3. State whether the following statements are True or False :   1×4=4

(a) Local area networks are normally set up for individual use within a limited geographical range.

(b) The statements in DML are used to add/modify and delete the database structure.

(c) Do-while loop can also be called as entry controlled loop.

(d) Dynamic memory allocation technique cannot be used to allocate memory for structure variables.

4. Answer the following questions in *one* word each : 1×8=8

    (a) It is a protocol designed to send outgoing e-mails. What it is called?

    (b) It is the command used to determine your computer's networking information. What it is called?

    (c) It is a special code for 'marking up' text in order to turn it into web pages. What it is called?

    (d) This tag is used to separate different parts of the text from one another. What is the tag here?

    (e) These tags are used to give the text a visual appearance. What is the tag here?

    (f) We can use this operator while viewing records in a table as well as performing data manipulation operations such as INSERT, UPDATE and DELETE. What is the operator here?

    (g) It is a name of the memory location where data is stored. What it is called?

    (h) It is a user defined blueprint or prototype from which objects are created. What it is called?

5. Answer the following questions : 2×12=24

    (a) What is HTTP?

    (b) What is the use of Access Point?

(c) What is the use of logical tag?

(d) Explain why table tag is used.

(e) What are MySQL database queries?

(f) What is constraint? Name any two constraints.

(g) What is the use of type attribute with an unordered list?

(h) How do we create an array?

(i) What are the different components of a function?

(j) Mention any two disadvantages of procedure-oriented programming.

(k) Why are pointers useful in C?

(l) What will be the output of the following program?

```
#include<stdio.h>
int main()
{
        char x = 'A';
        char *ptr;
        ptr = &x;
        printf("\n Value of x using pointer is %C", *ptr);
        return 0;
}
```

[Contd.

6. Answer the following questions : 3×3=9

(a) What are the basic SQL commands?

(b) Write any two limitations of array. Can we store our name and roll number in the same array?

(c) Can we have two functions with the same name but with different numbers of parameters in a single C program? Write a C program to justify the answer.

7. Answer the following questions : 4×3=12

(a) Differentiate between internal CSS and external CSS.

(b) Write a C program to find the summation of digits of a given number.

(c) What is nested loop? Why do we use nested loops in our program?

8. Answer the following questions :

(a) Create a table GARMENTS with PrCode as the primary key. Decide your own data types. Insert records as shown in the table below : 2

PrCode	Category	Brand	Price	Year of Manufacture
TR01	Trouser	Park Avenue	5,000	2023
SH01	Shirt	Peter England	1,500	2024
TE01	Tie	Park Avenue	1,100	2024
TS01	T-shirt	Puma	900	2022
TR02	Trouser	Jockey	4,800	2022
TE02	Tie	Peter England	1,800	2023

(b) Write the queries for the following (any *three*) : 1+1+1=3

(i) Display the details of all garments in ascending order of price.

(ii) Display the brand and price of the category 'Trouser'.

(iii) Display the category and price of all the products manufactured before 2023.

(iv) Remove the details of all the garments under Puma brand.

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