COMPUTER SCIENCE (10+2)

Roll. No…………………

Time Allowed: 3 Hours   Maximum Marks: 60

Candidates are required to give their answers in their own words as far as practicable.

Multiple Choice Questions :   <mark>(12*1 = 12)</mark>

1. Which of the following is an example of a strong password
   a.   1234
   b.   Neeru123
   c.   Cmps@123##
   d.   None of above

2. Ravi wants to create a new directory on Linux desktop . Which command should be used by him.
   a.   Ls
   b.   Cd
   c.   Pwd
   d.   mkdir

3. What is Full form of LVM
   a.   Logical Volume Management
   b.   Local Volume Management
   c.   Live Volume Management
   d.   Least Volume Managment

4. Linux and window both are same operating system . Is this True ?
   a.   True
   b.   False
   c.   Not Sure
   d.   Both are operating system

5. Images made up of geometrical shapes are ?
   a.   Bitmap Images
   b.   Vector Images
   c.   Both Type
   d.   JPEG images

6. If you are designing a logo in CorelDRAW, you would like to keep the quality of your logo to be usable across different media So, how should we do it properly while exporting the logo?

   a. Export logo as high quality JPEG to use over all applications
   b. Export the logo as a vector format (SVG, EPS etc..This ensures that it retains its scalability and clarity.
   c. Export the logo and PNG with a transparent background, high resolution
   d. Export Logo as JPEG with high resolution

7. Which of the following is code used for inserting external style sheet in PHP
   a.   <link rel="stylesheet" type="text/css" href="styles.css">
   b.   <style src="css/styles.css"></style>
   c.   <link rel="stylesheet" href="/css/styles.css">
   d.   None of Above

8. What is output of Following code
   $number = 15;

   ```
   if ($number > 20)
    {
      echo "Greater than 20";
   }
   Else
    {
      echo "20 or less";
   }
   ```

   a.   Greater than 20
   b.   20 or less
   c.   15
   d.   No result

9. Let's say you have 2 tables;) one for Orders and another Products in an e-commerce database Each order may include multiple products, and every product can be a part of more than one order. How do you put the primary and foreign keys in place?

   a)   Using OrderID as the primary key in Orders and ProductID as the primary key in Products then creating an orderItems table of connecting two main tables through it using constitutional foreign keys(OrderId,product ID).

    b)   Make ProductName as the primary key in Products Table, and OrderNumberas the primaryKeyin OrdersTable.

    c)   Use OrderID as a primary key for both Orders and Products tables

    d)   Have the ProductID as the primary key in this Products table and OrderID as a foregin key in an associated Orders tablerias

10. Which of the following is an example of DBMS
   a.   Mysql
   b.   Google
   c.   PHP
   d.   Javascript

11. which command is used in PL/sql to show data of those students who have less than 50% marks in table CS.
   a.   SELECT * FROM CS WHERE Marks < 50;
   b.   Select CS where marks>50%;
   c.   SELECT * FROM CS WHERE Marks >50;
   d.   Select all from CS where Marks<50;

12. You are about to make a purchase on an online shopping site and notice that the URL shows "http://" instead of "https://". As you evaluate the risks and decide whether to proceed, which of the following considerations should be prioritized?

   a) "The absence of 'https://' indicates that the website does not use encryption to protect your payment details, increasing the risk of data interception and potential fraud."
   b) "The presence of 'http://' implies that the website may offer better user experience due to faster page loading times."
   c) "The 'http://' in the URL suggests that the website has limited options for payment methods, affecting your choice of payment."
   d) "The 'http://' protocol indicates that the website does not provide instant customer support for transaction issues."

Answer the following questions. (2+3=5)

13. What is use of shall commands in Linux . Write any two points . (2)
14. What is the difference between Linux and Window NT. Mention any three differences to support the same . (3)

Answer the following question (Maximum 100 words) (3+3=6)

15. Explain following commands in one line with syntax (any three) (1*3=3)
    i.   Cd
    ii.   Echo
    iii.   Printf
    iv.   Rmdir
    v.   LS
    vi.   who

16.   Describe the concept of input and output redirection with appropriate examples. (3)

Answer the following questions (word Limit 150-200 words) (4*3=12)

17.   Explain any two tools used in corel draw . (2+2=4)

18.   Define what a variable is in PHP and discuss the different variable scopes within the language. (1+3=4)
19.   You are tasked with designing a school logo using CorelDRAW. The logo should include a combination of text and a desired vector shape. Explain the basic steps you would follow to create this logo, including how to lock objects in this logo. (2+2=4)

Answer the following question (Word limit 300 words) (5*2=10)

20.   What is a Data Dictionary in the context of database management? Describe the different types of Data Dictionaries and explain how each type serves a unique purpose in managing and organizing data. (2+3=5)
21. Amazon and Flipkart operate in both B2C (Business-to-Consumer) and B2B (Business-to-Business) e-commerce models. Explain how these platforms utilize both types of e-commerce. (5)

Answer the following questions with proper programming code (5*3=15)

22. You are developing a student grading system for a class using PHP. The grades should be given based on students %age score and display a message .Using if-else statement in PHP , explain how you would implement the following grading criteria: (5)

1. Assign a grade of "A" for scores 90% and above.
2. Assign a grade of "B" for scores between 80% and 60%.
3. Assign a grade of "C" for scores between 50% to 40%
4. Assign Grade D for score below 40%
5. Display a message for the student, such as "Excellent", "Good", "Fair", based on their grade.

23. You are assigned the responsibility of designing and managing a database for a school's student records using MySQL. Your task involves creating a table named studentDB to store detailed student information such as Name, Class, Roll No, Student ID, and Address. How would you write and execute the MySQL commands to create this table? Additionally, explain the purpose of each command and the role of each column in the context of managing student records effectively. (5)

24 (i) Create a program in PL/SQL to display greater between 3 given Numbers (3)

(ii) Create a program in Pl/SQL to determine whether the given number is even or odd (2)

Blueprint for Marks Distribution :

Sr No	Type of Question	Marks Awarded	No of Question	Total Marks
1.	MCQ	1	12	1*12=12
2.	Very Short Answer Type Questions	5 (2+3)	2	5
3.	Short Answer Type questions	3	2	6
4.	Long Answer Type Questions	4	3	12
5.	Very Long answer Type Questions	5	2	10
6.	Programming based questions	5	3	15
			Total Question : 24	Total Marks : 60

According to paper scheme of HP board (Computer science) choices can be given in each questions (from question no 2 to 6)

Blue Print of Sample paper according to difficulty Level:
Subject : Computer Science
Class : 12th

Level	MCQ	One Line Question	Short Answer type Question	Long answer type question	Very Long Ans Type Question	Programming
Easy	Q No 2,3,4,10 = **4 Mcq**	Q No 13,14 = **2 Questions**	Q No 15 = **1 Question**	Q No 17 = **1 Question**	-	Q No 24(I and ii part) = 1 Question
Moderate	Q No 1,5,7,8,11 = **5 MCQ**	-	Q. No 16 -= **1 Question**	Q No 18 = **1 Question**	Q No 20 = 1 Question	Q No 22 = 1 Question
HOD	Q No 6,9,12 = **3 MCQ**	-	-	Q No 19 = **1 Question**	Q No 21 = 1 Question	Q No 23 = 1 Question