DESIGN OF QUESTION PAPER
CLASS: X
SUBJECT: COMPUTER SCIENCE

TIME: 3 HOURS   FULL MARK : 80

1.   Weightage to Objectives:

Objectives	Knowledge (K)	Understanding (U)	Application (A)	Skill (S)	Total
Percentage of Marks	21	35	35	9	100
Marks	17	28	28	7	80

2.   Weightage to Form of Questions:

Form of Questions	LA 5 marks	SA1 4 marks	SA2 3 marks	SA3 2 marks	VSA 1 mark	Objective 1 mark	Total
No. of Questions	5	5	5	7	6		28
Marks Allocated	25	20	15	14	6		80
Estimated Time (in minutes)	60	45	35	28	12		180

3.   Weightage of Contents

Unit	Name of the Unit	Marks
1.1	Algorithm for problem Solving	**06**
1.2	Introduction to C language	**13**
1.3	Arrays	**10**
1.4	Strings	**07**
1.5	Functions	**07**
1.6	Basic Concepts of structure, Union & Pointer	**07**
2.1	Web Page designing using HTML	**20**
2.2	Hyperlink and Form	**10**

4.   SCHEME OF SECTION: Nil

5.   SCHEME OF SECTION: Nil

6.   DIFFICULTY LEVEL   :   Easy -20% , Average - 60%, Difficulty- 20%

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BLUE PRINT

Subject: Computer Science Class: X Mark: 80 Time: 3 Hours

Sl.No	Objective	KNOWLEDGE						UNDERSTANDING/*COMPREHENSION						APPLICATION/*EXPRESSION						SKILL				TOTAL
	Content unit/ Forms of Questions	E	SA I	SA-II	SA III	VSA	O	E	SA I	SA II	SA III	VSA	O	E	SA I	SA II	SA III	VSA	O	E	SA I	SA II	VSA	
1	**1.1: Algorithm for problem Solving**															6(2)								6(2)
2	**1.2: Introduction to C language**					2(2)		5(1)				1(1)			4(1)			`1(1)						13(6)
3	**1.3: Arrays**					1(1)			4(1)					5(1)										10(3)
4	**1.4: Strings**							5(1)									2(1)							7(2)
5	**1.5: Functions**			3(1)					4(1)															7(2)
6	**1.6: Basic Concepts of structure, Union & Pointer**				4(2)												2(1)	1(1)						7(4)
7	**2.1: Web Page designing using HTML**			3(1)	2(1)			5(1)	4(1)								2(1)				4(1)			20(6)
8	**2.2: Hyperlink and Form**				2(1)									5(1)								3(1)		10(3)
Marks with Form of Questions				6(2)	8(4)	3(3)		15(3)	12(3)			1(1)		10(2)	4(1)	6(2)	6(3)	2(2)			4(1)	3(1)		
Marks with no. of questions with objective		17(9)						28(7)						28(10)						7(2)				80(28)

Notes: (1) Figure within brackets indicate the number of questions and figure outside the brackets indicate marks.

(2)* Denotes that marks have been combined to form one question.

(3) This blue print is for the sample question paper. It will vary from questions to questions.

Summary:

Type of question	No. of Question	Marks	Total	Type of question	No. of Question	Marks	Total
Essay/Long Answer (E)/LA	5	5 each	25	Short Answer (SA3)	7	2 each	14
Short Answer (SA1)	5	4 each	20	Very Short Answer (VSA)	6	1 each	06
Short Answer (SA2)	5	3 each	15	Objective Type	Nil		

Full Mark: 80   Time : 3 hours

Answer all the questions

1. Define a variable.   1
2. Name the header file for pow( ).   1
3. Write the statement to print the biggest of two numbers by using ternary operator.   1
4. Give one point of difference between while and do-while statement.   1
5. What is the smallest element in an array a of size 100?   1
6. How a union is different from a structure?   1
7. Write the use of the following string functions: 2
   a) strcpy ( )
   b) strcat ( )

8. How you declare and initialize a pointer giving with example?   2
9. Consider a structure   2

```
       struct student
       {
               int roll;
               char name[20];
               char school[20];
               float fees;
       }x;
```
   What will be the size of x?
10. Find the output of the following program segment: 2

```
       int a, b, *P, *q;
       a=30;
       b=10;
       p=&a;
       q=&b;
       *p=(*p-*q)*5;
       *q= *p*3;
       printf("%d%3d", a,b);
```
11. What are container and empty elements? Give one example each.   2
12. Differentiate between: 2
       a. <FONT> and <BASEFONT> tags
       b.
 and <P> tags
13. What is a hyperlink? Name the tag used to define a hyperlink.   2
14. Write an algorithm to sum the first N natural numbers.   3
15. Draw the flowchart to find the GCD of two integers.   3
16. Write the form of a function. What are the actual and formal parameters?   3
17. a) How many levels in heading tag?   1
     b) Name the attributes of <HR> tag.   2

18. Write the HTML code to design a form using radio button in the following format.   3
           o   MALE
           o   FEMALE
           o   TRANSGENDER
19.   a) Rewrite the following statements by using switch statement: 2

```
           if (color==1)
                   printf("RED");
           else if ((color-==2)
                   printf("GREEN");
           else if (color==3)
                   printf("BLUE");
           else
                   printf("WRONG CHOICE");
```
     b) Write the for statement to print the following: 2
           1   4   9   16   25   36
20. a) How searching is done in binary search method?   2

b) What do you mean by the transposition of a matrix. Give an example. 2
21. a) Define a recursive function. 1
 b) Write a recursive function to find the factorial of a number. 3
22. a) Write the HTML code of the following: 2
  i) $(A+B)^2 = A^2 + B^2 + 2AB$
  ii) H_2SO_4
 b) Write the HTML code to insert an image SUN.JPG in drive D in a web page. 2
23. Write the HTML code to create a table in the format and style shown below: 4

STUDENT LIST

NAME	CLASS	SCHOOL
ROHIT	X	ABC
MINA	XI	MNP
KIRAN	XII	XYZ
		ALL ARE TOPPERS

24. Write a C Program to reverse and sum the digits of a number which contain more than one digit.
 5
25. Write a C Program to sort an array of numbers in ascending order. 5
26. Write a C Program to count the number of vowels and consonants in a string. 5
27. Write the HTML code to generate in the format and style shown below: 5

!!COMPUTER SYSTEM!!

1. HARDWARE
   - KEYBOARD
   - MONITOR
   - CPU
   - PRINTER
2. SOFTWARE
   iii. SYSTEM SOFTWARE
      d. WINDOWS
      e. UNIX
      f. LINUX
   iv. APPLICATION SOFTWARE
      - MS- WORD
      - MS-EXCEL
      - MS- POWERPOINT

ANTIVIRUS FOR PROTECTION

28. Write the HTML code to generate a web page in the format and style shown below: 5

*   FESTIVAL OF MANIPUR   *
      o   YAOSHANG
      o   CHEIRAOBA
      o   DURGA PUJA
      o   NINGOL CHAKOUBA

FOR MORE FESTIVAL CLICK HERE

Special Notes:

a) Title of the page should be "FESTIVAL"

b) Background colour should be "YELLOW"

c) The colour of the main heading should be "GREEN"

d) The unvisited and visited link colour should be "VIOLET" and "RED"

e) The face and size of the bottom message should be "ARIAL' and "4".

f) Pages linked with

  YAOSHANG as YAO.HTML

CHEIRAOBA as CHEI.HTML

DURGA PUJA as DURGA.HTML

NINGOL CHAKOUBA as NINGOL.HTML

CLICK HERE as FESTIVAL.HTML