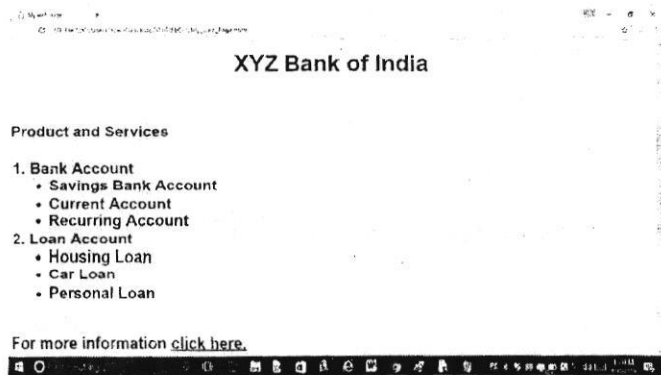


8020

- (iv) Write the input command to plot the functions $y = \sin x$ and $y = \cos x$ on the same coordinate system for $0 \leq x \leq 2\pi$. Show the sine function as a solid curve and the cosine function as a dotted curve.
- (v) Write an HTML code to create a web page as shown below:



Keep the following in mind while writing the code.

- Font face for the text should be Arial.
 - Text color of the main heading should be blue.
 - Rest of the text should be in purple.
 - The hypertext [click here](#) should link to the website of the bank www.zyxbank.com.
- (vi) Draw a circle with a shaded sector using p stricks.

[This question paper contains 4 printed pages]

Your Roll No. :

Sl. No. of Q. Paper : **8020 HC**

Unique Paper Code : 62353325

Name of the Course : **B.A.(Programme) Skill Enhancement Course**

Name of the Paper : Latex and HTML

Semester : III

Time : 2 Hours **Maximum Marks : 50**

Instructions for Candidates :

- (a) Write your Roll No. on the top immediately on receipt of this question paper.
- (b) **All** questions are compulsory.

1. Fill in the blanks : 1×5=5

- (a) A LaTeX file should always start with command.
- (b) The title page is generated by command.
- (c) is a documentclass for making presentation in LaTeX.
- (d) attribute of tag in HTML is used to define the style of bullets.
- (e) The command in LaTeX to produce the fraction $\frac{y}{x}$ is

2. Answer any **ten** parts from the following.

$$2 \times 10 = 20$$

- (i) Give any three class names that can be given in the command `\documentclass`.
- (ii) Give the command to draw a circle using `pstricks` with center (8,6) and radius 5 units.
- (iii) Give any two list making environments in LaTeX
- (iv) Write the output of the command `\sqrt[5]{n}`.
- (v) Write an input command for the following equation in LaTeX; $\sin^2 \phi + \cos^2 \phi = 1$
- (vi) What is the function of `alt` attribute in image tag in HTML ?
- (vii) What is wrong with the following input.

```
<p> Also checkout the
<a href = http:// www. ams.org./>
American Mathematical Society </a></p>
```

(viii) Write a code in LaTeX for typesetting

$$\begin{vmatrix} a & b \\ c & d \end{vmatrix} = ad - bc$$

(ix) Write a code in LaTeX for typesetting the following

$$\begin{aligned} x &= r \cos \theta \sin \phi \\ y &= r \sin \theta \cos \phi \\ z &= r \cos \theta \end{aligned}$$

(x) What are the four basic elements of HTML document ?

(xi) Write the output of the following HTML document :

```
<!DOCTYPE html>
<html>
<body>
<p> University of Delhi </p>
</body>
</html>
```

(xii) What output will the command `\parabola (-2,1)(0,0)` generate ? Explain.

3. Answer any **five** parts from the following :

$$5 \times 5 = 25$$

(i) Write an input code to typeset the following equality in LaTeX :

$$\begin{vmatrix} i & j & k \\ a_1 & a_2 & a_3 \\ b_1 & b_2 & b_3 \end{vmatrix} = i \begin{vmatrix} a_2 & a_3 \\ b_2 & b_3 \end{vmatrix} - j \begin{vmatrix} a_1 & a_3 \\ b_1 & b_3 \end{vmatrix} + k \begin{vmatrix} a_1 & a_2 \\ b_1 & b_2 \end{vmatrix}$$

(ii) Write the input command to draw the graph of the function $y = \sin x$ using `pstricks`.

(iii) Using `beamer` prepare a presentation on Pythagoras theorem.