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Subject - Info. & Network Security
Practical (PBC-601)

1 - MCQ Solutions :

(1) PGP uses -

Ans: Asymmetric key encryption with sender's public key.

(2) Keyloggers are a form of — ?

Ans: Spyware

(3) A digital signature is -

Ans: An authentication of an electronic record.

(4) "NETIQUETTES" deals with -

Ans: Cyber Security.

(5) Encryption can be done -

Ans: Only on ASCII coded data

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(6) - — does not come under the copyright law infringement

Ans: All

(7) - MD5 is a — ?

Ans: Hash Value.

(8) - In Affine Cipher -

Ans: The identity of the character is changed while its position remains unchanged.

(9) - The reason behind appending 'x' in playfair cipher is -

Ans: To make even no. of letters.

(10) - Module m taken as 26 in substitution cipher because of —

Ans: Total length of word.

Ans:

Name - Varsha Gihildiyal
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Sub-Code - PBC Theory Questions:
(601)

Date.....
Page.....

Q.1: Solⁿ: Three security aspects of the google account.

Step 1: Go to security checkup to get personalized security recommendations for your google account, including:

1. Add or Update Account Recovery options

Your recovery phone number and email address are powerful security tools. This contact info can be used to help.

Step 2: Update your software if your browser, operating system, or apps are out-of-date, the software might not be safe from hackers.

- Update your browser make sure you are using the latest version of your browser.
- Update Android devices.
- Update chrome books.

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3. Step 3: Use unique strong password.
It's risky to use the same password on multiple sites.
- Make sure to create a strong unique password for each account.

Clarke

Q4: Write a program to implement OTP (One time password)

Source Code:-

```
#include <stdio.h>
#include <ctype.h>
#include <string.h>
int main()
{
```

```
    char plantxt[100], otp[100];
    printf("Enter plain text\n");
    fflush(stdin);
    fgets(otp, sizeof(otp), stdin);
    for (int i = 0;
        ! <stdin>(plantxt); i++)
    {
```

```
        if (isupper(plantxt[i]))
```

```
            otp[i] = toupper(otp[i]);
            if (plantxt[i] + (otp[i] - 'A') > 'Z')
                plantxt[i] = plantxt[i] + (otp[i] - 'A') - 26;
        }
```

Q4054

```

if (plaintext[i] + (otp[i] - 'A') <= 'Z') {
    plaintext[i] = plaintext[i] + (otp[i] - 'A');
}
}
else if (islower(plaintext[i]))
{
    otp[i] = tolower(otp[i]);
    if (plaintext[i] + (otp[i] - 'a') > 'z') {
        plaintext[i] = plaintext[i] + (otp[i] - 'a')
        - 26;
    }
    if (plaintext[i] + (otp[i] - 'a') <= 'z')
    {
        plaintext[i] = plaintext[i] + (otp[i] - 'a');
    }
}
else {
    plaintext[i] = plaintext[i];
}
printf("Cyphertext is: %s\n", plaintext);
}

```

Ques

Q.5: Source Code:

```
#include <stdio.h>
#include <string.h>
int main()
{
    char message, "ATTACK FROM NORTH";
    ch; message;
    int i, key;
    printf("Enter key:");
    scanf("%d", &key);
    for (i=0, message[i]!='\0'; i++)
    {
        ch = message[i];
        if (ch >= 'a' && ch <= 'z')
        {
            ch = ch + key;
            if (ch > 'z')
            {
                ch = ch - 'z' + 'a' - 1;
            }
            message[i] = ch;
        }
    }
```

Narsh

```
else if (ch >= 'A' && ch <= 'Z')
```

```
{
```

```
    ch = ch + key;
```

```
    if (ch > 'Z')
```

```
{
```

```
        ch = ch - 'Z' + 'A' - 1;
```

```
}
```

```
    message[i] = ch;
```

```
}
```

```
?
```

```
printf("Encrypted message is %s\n",
```

```
message);
```

```
for (i = 0, message[i] = '\0'; i++)
```

```
{
```

```
    ch = message[i];
```

```
    if (ch >= 'a' && ch <= 'z')
```

```
{
```

```
        ch = ch - key;
```

```
        if (ch < 'a')
```

```
{
```

```
            ch = ch - 'z' - 'a' + 1;
```

```
}
```

```
    message[i] = ch;
```

Varsha

}

else if (ch > 'Z' && ch <= 'z')

{

ch = ch - key;

if (ch < 'A')

{

ch = ch + 'Z' - 'A' + 1;

}

message[i] = ch;

}

}

printf("Decrypted message is %s",
message);

return 0;

}

Ans