

Rosary College of Commerce & Arts

Navelim, Salcete-Goa.

Department of Computer Applications

BITS N BYTES

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Principal's Message

In this age of dependence on digital media as a mode of communication, digital citizens are increasingly committing personal information online.

Today we regularly hear of a large number of computer thefts such as hacking into accounts of large organizations, stealing of credit card and other sensitive information etc. The need of the hour is to increase awareness and vigilance of such malpractices; and to equip ourselves with relevant knowledge and tools to safeguard against them.

I am very happy that our students of BCA are bringing up this new issue of Bits N Bytes focused on cyber security. Through this electronic platform our students of Computer Applications can express their views and ideas in this emerging field that could benefit society at large.

I congratulate Asst. Prof Mildred Lemos, our student Ronald Gomes and all who have contributed to Bits N Bytes.

I hope and wish Bits N Bytes will inspire and ignite many minds.

Rev. Dr. Simão R. Diniz
Principal

What is Cyber Security ?

-Asst. Prof Mildred Lemos

Cyber security is the body of technologies, processes and practices designed to protect networks, computers, programs and data from attack, damage or unauthorized access. In a computing context, the term security implies cybersecurity.

In the age of the Internet for Everything, our lives are increasingly dependant on digital services. Networks are used for everything from storing an organization's confidential data, to storing personal, financial and health information. The networked connections of people, processes, data, and things create a greater need for a robust security infrastructure.

Network outages, data compromised by hackers, computer viruses and other incidents affect our lives in ways that range from inconvenient to life-threatening. As the number of mobile users, digital applications and data networks increase, so do the opportunities for exploitation

Enabled by the sharing culture on social media – and with ever more sophisticated malicious software at their disposal cybercriminals have become far more adept at crafting attacks and targeting individuals and organisations. Phishing emails purporting to be from friends, often reflecting our interests – perhaps gleaned from social media sites – or from trusted organisations such as your bank or encourage us to click on infected links or attachments containing malware.

The need of the hour is to educate ourselves and be aware of the malicious programs created and used by hackers to protect our data and ourselves.

Cyber security: Steps for prevention of Cyber Crime

- Asst. Prof. Ramakrishna Reddy

Prevention is always better than cure. It is always better to take certain precaution while using internet. We should always follow 5 main key points: Precaution, Prevention, Protection, Preservation and Perseverance for online security.

Steps to prevent Cyber Crime:

- Do not give out personal information over the phone or in an email unless completely sure. If contacted over the phone by someone claiming to be a retailer or collection

agency, do not give out your personal information. Ask them to provide you their name and a call-back number. Just because they may have some of your information does not mean they are legitimate!

- Set secure passwords and don't share them with anyone. Avoid using common words, phrases, or personal information and update your password regularly.
- Never enter your credit card number to any site that is not secured, to prevent its misuse.
- Never open the attachments. Typically, retailers will not send emails with attachments. If there is any doubt, contact the retailer directly and ask whether the email with the attachment was sent from them.
- Avoid sending any photograph online particularly to strangers and chat friends as there have been incidents of misuse of the photographs.
- Always use the latest and updated Antivirus software to guard against virus attacks. The updated version of anti-virus software is necessary as it helps in detecting even the latest virus.
- To prevent loss of data due to virus attacks, always keep back up of your data.
- A firewall if not configured properly can act like an open door for any intruder. Hence it is vitally important to set the rules to allow traffic through the firewall that is very important.
- Be suspicious of unknown links or requests sent through email or text message. Do not click on unknown links or answer strange questions sent to your email, regardless of who the sender appears to be.
- Carefully read the permissions before installing apps. This is one of the most prominent ways in which malicious apps can gain access to your personal information. These types of issues have been especially present in the Google Play store. A lot of apps ask for a lengthy list of permissions, and that doesn't mean they're all ill-intentioned. But it's important to be aware of the types of information your apps are accessing, which can include your contacts, location, and even your phone's camera.

Capacity of human mind is profound. It is not possible to eliminate cyber crime from the cyber space, but it is quite possible to check them. History is witness that no legislation has succeeded in totally eliminating crime from the globe. The only possible step is to make people aware of their rights and duties and to guard ourselves so that crime has no effect on us.

Security Tools

--- Ronald Gomes (TYBCA B)

Monitor tools

Zenoss Core NTA Monitor to monitor your environment you can use these monitor tools to find out what is happening in your environment.

You can use this packet analyzers to sniff packets that cross your network. You can analyze network problems, detect network intrusion attempts and more.

Kali Linux

From the creators of BackTrack comes Kali Linux, the most advanced and versatile penetration testing distribution ever created. BackTrack has grown far beyond its humble roots as a live CD and has now become a full-fledged operating system.

Firewall analyzer

Security is effective when you know what is going on in your environment. The most of us protect ourselves with Firewalls, IDS, IPS and multiple monitor tools. Firemon, Barracudanetworks,

Burp Suite

Burp Suite is an integrated platform for performing security testing of web applications. Its various tools work seamlessly together to support the entire testing process, from initial mapping and analysis of an application's attack surface, through to finding and exploiting security vulnerabilities.

Computer Club Winners

Web Designing Competition :

1st Place -- Colaco Clifern (TYBCA A)
Estibeirow Stevwart (TYBCA A)

2nd Place -- De Abreu Shyan (TYBCA A)
Goes Rosch (TYBCA B)

Inter class Technical Word Hunt Competition :

1st Place -- Gavil Dsouza & Milbour Coutinho (FYBCA A)

2nd Place -- Stanwick Goes & Rohan Fernandes (FYBCA A)

3rd Place -- Avilson Simoes & Steven Quadros (FYBCA B)

E-Sketch competition :

1st Place -- Estibeirow Stevwart (TYBCA A)

2nd Place -- De Abreu Shyan (TYBCA A)

3rd Place -- D'Sa Elroy (FYBA B) & Gomes Annet (TYBCA B)

'Feel It Speak It' :

1st Place -- Tania Fernandes (SYBCA A)

2nd Place -- Jordy Mascarenhas (TYBCA B) & Vailankan Pereira (FYBCA B)

3rd Place -- Griselda Mendes (SYBCA B)

NOESIS 2014

The 5th edition of Noesis, the annual National Level Information festival organized by the Department of Computer Applications, was held from 6th – 8th December 2014 in the college campus. It opened with splendid grandeur at the hands of our chief guest Mr. Gabriel Menezes.

18 teams from schools, colleges and universities in Goa, Bengaluru and Mangalore participated in the 3 day event.

A total of 75 technical events were held. To broaden the students perspective in the IT arena, Noesis consisted of sessions called Gyan Darshan delivered by professional experts.

After 3 days of healthy competition and festivity the curtains came down on the 8th of December 2014. Mr. Mario Fernandes was the chief guest for the valedictory function. Aditya Rane from Chowgule college was crowned 'Noesis 2014 Geek'. 'IRIX' the team from Chowgule college were awarded the overall championship.

Noesis 2014 once again set high standards providing quality opportunities for students to network and grow through healthy competition.

Wipro Campus Recruitment Program

Wipro Ltd. headquartered in Bangalore, Karnataka, conducted a recruitment program for the undergraduate students on 12th January, 2015. Students targeted were those pursuing BCA, BSC (CS), MSc and MCA students. The recruitment program is called **Wipro Academy of Software Excellence (WASE)** and is a work cum learn program having tie up with BITS, Pilani.

Students from various colleges in Goa such as Chowgule College, Rosary College, Damodar College, and Government College, Quepem participated in the WASE program. The total number of participants was 58.

The program started at 10:30am with the Fresher's Recruitment Cell from Wipro giving a presentation on the selection procedure and the various courses which they offer. This was followed by Online Registration where students had to register themselves for the program and an online aptitude test. Registered students had to undergo three modules of selection namely:

- 1) Online Aptitude Test & Logical Reasoning
- 2) Essay Writing (Communication Skills)
- 3) HR interview round

Students who were successful in all the above-mentioned rounds were selected for their WASE program.

The following students from Rosary College were selected for the WASE program :

- 1) Mr. Deepkumar Raithatha (TYBCA-A)
- 2) Ms. Karen Vaz (TYBCA-B)