Report on Certification Course on Cyber Security

- ✓ Name of the Course : Cyber Security
- ✓ Name of the Agency : NSLComp
- ✓ Name of the Trainer : Mr. Niranjan Kushwaha
- ✓ Course start date : 22nd March,2023
- ✓ Course completion date : 26th May, 2023
- ✓ Course Duration : 1 Month
- ✓ Course Fee : 1400/-
- ✓ Session Timing : 1 Hours per day
- ✓ Total Strength : 36 Students
- ✓ Targeted Students : BCA/IT semester-I & Semester-III
- ✓ Venue Details : CVS LAB, Vocation Building
- ✓ Course Coordinator : Prof. Jayanti Kumari, Department of CA/IT.

On ***22nd March 2023***, a **Certification Course on "Cyber Security"** was organized by Center for Vocational Studies for the students of Computer Application & Information Technology Sem-I & Sem-III. The duration of certification course was one month, starting from 22nd March'23 to. Mr. Niranjan Kushwaha was the **Resource Person** for the Certification Course. Mr. Niranjan Kushwaha a is a Trainer of NSLcom. Total **36** students (35 (Sem-I) & 01(Sem-III)) attended the certification course.

Objective of the Course:
This course focuses on the models, tools, and techniques for enforcement of security with some emphasis on the use of cryptography. Students will learn security from multiple perspectives.

Course Contents

1. **Network Security**
    a. Networking (Win & Linux)
        i. IP Addressing, Networking protocols, MAC Address, ping, ipconfig, tracert, netstat, File sharing, FTP Server, NMS, Map Network drive, Remote with RDP & SSH etc.
        ii. Working with NMAP
        iii. Different type of Encryption & Decryption technologies
        iv. Dos & DDOS attack.
        v. Call & Message flooding.
        vi. Bruit force attack with crunch utility.
        vii. Next Gent Firewall/UTM Virtual tour
            - Firewall

a. Secure zoning
b. Rule creation
c. Permitting & denying diversified network.

- IPS
- Antispam & AV
- Web & Application filter
- VPN

2. **Web Application Security**
    a. Creation of a Website
        i. Deployment of Site
        ii. Work with SSL & its integrating, understanding its working architecture & latest TLS
        iii. GTmetrix, Radar 24, Submarine cable map, marine traffic.
    b. Web Server Installation & Configuration
        i. IIS, Xampp & Others
    c. Web Server Scanning & vulnerability Fixing
        i. Fixing bugs related with HTTP headers & others
        ii. Applying request filtering method
        iii. Web Server privileges & security related with deployement.
    d. VAPT
        i. ZAP, Nikto, SQLMap, Burp suite & fixing bugs
    e. Phishing attack
        i. Real time cloning & learning the methodology for development of anti-phishing sites.
3. **Data Base Security**
    a. Secure Access of DB within network with firewall.
    b. Understanding concept of DB ports.
    c. DB Authentication Mechanism.
    d. DB Backup scripting.
4. **Server Security**
    a. Working with Live O/S (Kali, Parrot & HBCD)

i. O/S Hijacking & Crash Recover
ii. Password cracking of O/S
iii. Security from O/S Hijacking.
iv. Data Recovery & Backup Mechanism.

b. Endpoint Security
    i. Implementation of Cloud bases endpoint security & working with its policies like:
        - Real time scanning
        - Zero Days attack
        - DLP
        - Virus Total
        - Web Filtering
        - Application Filter
        - Tempered protection etc.

c. Server Hardening
    i. Working with Nessus

Note: Other Utility Tools As per requirement & final completion syllabus will be submitted at the end.

Day to Day Report

Date	Day	Topic to be Covered
22.03.2023	Wednesday	Introduction to Cyber Security, Some Website Tool , Ping Testing
25.03.2023	Saturday	Web Hosting
27.03.2023	Monday	Networking – IP Address , Desktop Remote
29.3.2023	Wednesday	File Sharing
31.3.2023	Friday	N Map , Net Scane , Firewall, cyber security rule
03.04.2023	Monday	OS Hijacking
05.04.2023	Wednesday	TLS, SSL, HTTP,HTTPS, Single domain license, Wild card domain license, Open SSL, Data inscription & data decrypting

06.04.2023	Thursday	Antivirus & end point security
12.04.2023	Wednesday	Some Cmd: 1. Nslookup gmail.com, 2. Tracent Gmail.com, 3. telnet gmail.com
13.04.2023	Thursday	XAMP Software
15.04.2923	Saturday	Website design in visual studio 2022
17.04.2023	Monday	VAPT tools:- ZAP
18.04.2023	Tuesday	Website design in visual studio 2022
24.04.2023	Monday	IIS ans XAMP
26.04.2023	Wednesday	IIS ans XAMP
28.04.2023	Friday	Linux Commands
01.05.2023	Monday	Website Clone
08.05.2023	Monday	Website Clone, Kali Linux
09.05.2023	Tuesday	Website Clone, Kali Linux
12.05.2023	Friday	Nikto, Brupsuite
13.05.2023	Saturday	Weekly Presentation of Students
15.05.2023	Monday	Website vulnerability
17.05.2023	Wednesday	IIs Security Scripts
20.05.2023	Saturday	IIS Security Scripts
22.05.2023	Monday	Firewall & NextGen Firewall
25.05.2023	Thursday	NextGen Firewall
26.05.2023	Friday	NextGen Firewall Rule

Course Outcomes

After the completion of the course, the students will be

- Able to develop basic understanding of security, cryptography, system attacks and defenses against them.

- Analyze and evaluate the cyber security needs of an organization.
- Determine and analyze software vulnerabilities and security solutions to reduce the risk of exploitation.
- Measure the performance and troubleshoot cyber security systems.
- Implement cyber security solutions and use of cyber security, information assurance, and cyber/computer forensics software/tools.
- Comprehend and execute risk management processes, risk treatment methods, and key risk and performance indicators.

PHOTO GALLERY

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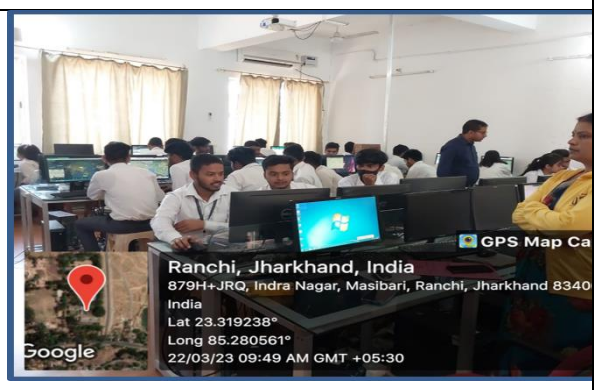
<td> 
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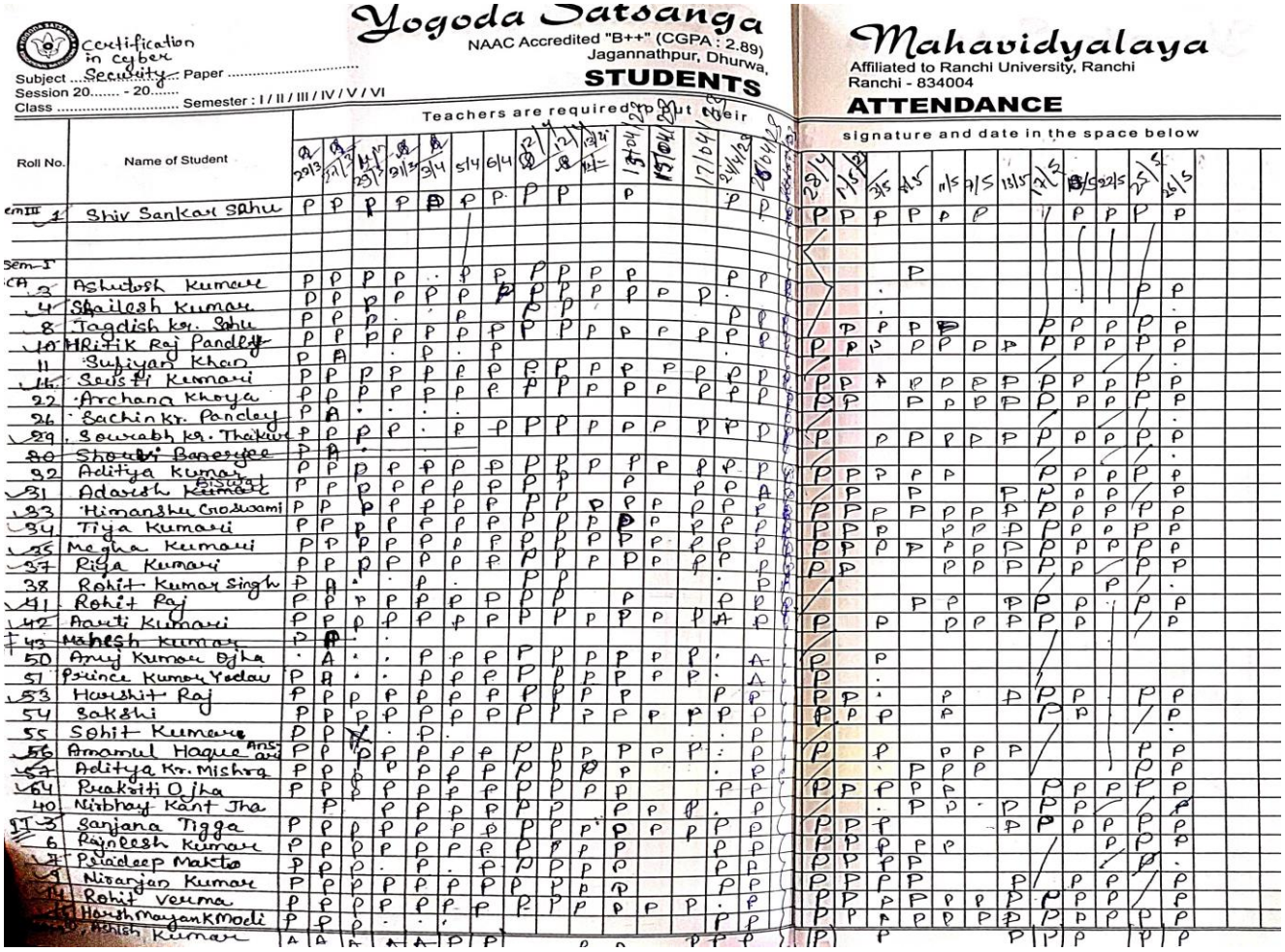
ATTENDANCE RECORD



Yogoda Satsanga Mahavidyalaya

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Jagannathpur, Dhurwa,
Affiliated to Ranchi University, Ranchi
Ranchi - 834004

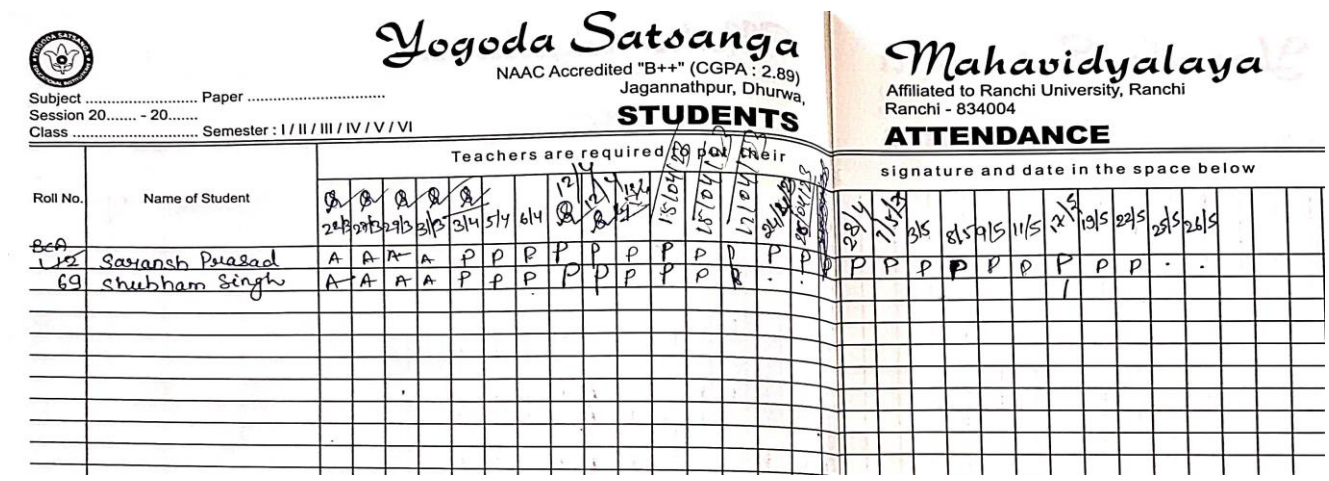
Certification in cyber Security

Subject ..... Paper .....
Session 20..... - 20.....
Class ..... Semester : I / II / III / IV / V / VI

STUDENTS ATTENDANCE

Teachers are required to put their signature and date in the space below

Roll No.	Name of Student	29/3	29/3	29/3	31/3	3/4	5/4	6/4	12/4	12/4	13/4	15/04/23	15/04/23	17/04/23	24/4/23	26/04/23	28/4	1/5/23	3/5	8/5	11/5	7/5	13/5	17/5	19/5	22/5	25/5	26/5
Sem III 1	Shiv Sankar Sahu	P	P	P	P	P	P	P	P	P		P			P	P	P	P	P	P	P	P			P	P	P	P
Sem-I BCA 3	Ashutosh Kumar	P	P	P	P	.	P	P	P	P	P	P			P	P				P								
4	Shailesh Kumar	P	P	P	P	P	P	P	P	P	P	P	P	P	.				.								P	P
8	Jagdish kr. Sahu	P	P	P	.	.	P		P	P					P	P		P	P	P	P			P	P	P	P	P
10	Hritik Raj Pandey	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
11	Sufiyan Khan	P	A		.	P	.	P							.													.
16	Sristi Kumari	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
22	Archana Khoya	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P		P	P	P	P	P	P	P	P	P
26	Sachin Kr. Pandey	P	A	.	.	.	.																					.
29	Sourabh kr. Thakur	P	P	P	P	.	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
30	Shourvi Banerjee	P	A	.																								.
32	Aditya Kumar	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P			P	P	P	P	P
31	Adarsh Biswal Kumar	P	P	P	P	P	P	P	P	P		P		P	P	A		P		P			P	P	P	P		P
33	Himanshu Goswami	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
34	Tiya Kumari	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P		P	P	P	P	P	P	P	P
35	Megha Kumari	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
37	Riya Kumari	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P			P	P	P	P	P		P	P
38	Rohit Kumar Singh	P	A	.	.	P	.		P	P					.	P										P		.
41	Rohit Raj	P	P	P	P	P	P	P	P	P		P			P	P				P	P		P	P	P		P	P
42	Aarti Kumari	P	P	P	P	P	P	P	P	P	P	P	P	P	A	P	P		P		P	P	P	P	P			P
43	Mahesh Kumar	P	P	.																								
50	Anuj Kumar Ojha	.	A	.	.	P	P	P	P	P	P	P	P	P	.	A	P		P									
51	Prince Kumar Yadav	P	A	.	.	P	P	P	P	P	P	P	P	P	.	A	P		.									
53	Harshit Raj	P	P	P	P	P	P	P	P	P	P	P			P	P	P	P	.		P		P	P	P		P	P
54	Sakshi	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P		P			P	P			P
55	Sohit Kumar	P	P	X	.	P	.								.	P												.
56	Amamul Haque Ansari	P	P	P	P	P	P	P	P	P	P	P	P	P	.	P	P		P		P	P	P				P	P
57	Aditya Kr. Mishra	P	P	P	P	P	P	P	P	P	P	P			.	P				P	P	P					P	P
64	Prakriti Ojha	P	P	P	P	P	P	P	P	P	P	P			P	P	P	P	P	P	P			P	P	P	P	P
40	Nirbhay Kant Jha		P		P	P	P	P	P	P		P	P	P	.	P			.	P	P	.	P	P	P			P
II 3	Sanjana Tigga	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P				P	P	P	P	P	P
6	Rajneesh Kumar	P	P	P	P	P	P	P	P	P	P	P			P	P	P	P	P	P	P					P	P	P
7	Pradeep Mahto	P	P	P	.	P	.	P	P	P	P	P			P	P	P	P	P	P							P	.
9	Niranjan Kumar	P	P	P	P	P	P	P	P	P	P	P			P	P	P	P	P	P			P		P	P		P
14	Rohit Verma	P	P	P	P	P	P	P	P	P	P	P	P	P	.	P	P	P	P	P	P	P	P	P	P	P		P
15	Harsh Mayank Modi	P	P	P	.	.									P	P	P	P	P	P	P	P	P	P	P	P	P	P
20	Ashish Kumar	A	A	A	A	A	P	P							P	P	P		P				P	P	P		P	P



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STUDENTS ATTENDANCE

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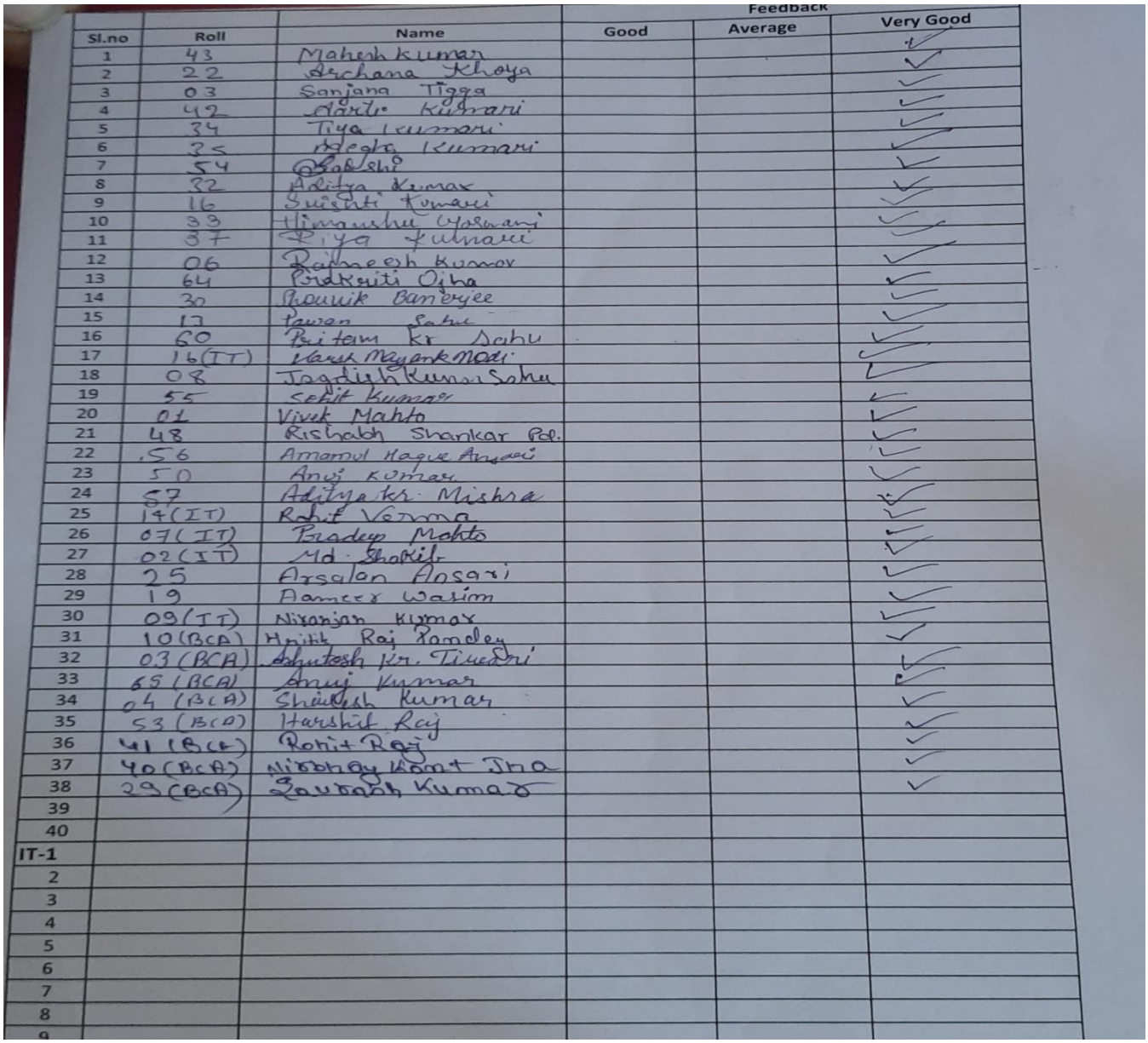
Roll No.	Name of Student	29/3	29/3	29/3	31/3	3/4	5/4	6/4	12/4	12/4	13/4	15/04/23	15/04/23	17/04/23	24/4/23	26/04/23	28/4	1/5/23	3/5	8/5	9/5	11/5	17/5	19/5	22/5	25/5	26/5
BCA 12	Saransh Prasad	A	A	A	A	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	.	.
69	Shubham Singh	A	A	A	A	P	P	P	P	P	P	P	P	P	.	.											

Assessment & Evaluation

- At the end of each unit, the student gave his presentation in PowerPoint that what he or she learned from that unit
- A online quiz on Cyber security was conducted after the completion of course.

FEEDBACK



Sl.no	Roll	Name	Feedback		
			Good	Average	Very Good
1	43	Mahesh kumar			✓
2	22	Archana Khoya			✓
3	03	Sanjana Tigga			✓
4	42	Ankita Kumari			✓
5	34	Tiya Kumari			✓
6	25	Nikeeta Kumari			✓
7	54	Babli			✓
8	32	Aditya Kumar			✓
9	16	Sristi Kumari			✓
10	33	Himanshu Goswami			✓
11	37	Riya Kumari			✓
12	06	Rajneesh Kumar			✓
13	64	Pratiti Ojha			✓
14	30	Sourik Banerjee			✓
15	17	Pawan Sahu			✓
16	60	Britam Kr Sahu			✓
17	16(IT)	Kanu Mayank Modi			✓
18	08	Jagdish Kumar Sahu			✓
19	55	Sobit Kumar			✓
20	01	Vivek Mahto			✓
21	48	Rishabh Shankar Pd.			✓
22	56	Amanul Haque Ansari			✓
23	50	Anuj Kumar			✓
24	57	Aditya kr. Mishra			✓
25	14(IT)	Rohit Verma			✓
26	07(IT)	Pradeep Mahto			✓
27	02(IT)	Md. Shakib			✓
28	25	Arsalan Ansari			✓
29	19	Aamcer Wasim			✓
30	09(IT)	Niranjan Kumar			✓
31	10(BCA)	Hritik Raj Pandey			✓
32	03(BCA)	Ashutosh Kr. Tiwari			✓
33	65(BCA)	Anuj Kumar			✓
34	04(BCA)	Shailesh Kumar			✓
35	53(BCA)	Harshit Raj			✓
36	41(BCA)	Rohit Raj			✓
37	40(BCA)	Nibedan Kant Jha			✓
38	29(BCA)	Gautam Kumar			✓
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Report on Certification Course on Cloud Computing

- ✓ Name of the Course : Cloud Computing
- ✓ Name of the Agency : NSLComp
- ✓ Name of the Trainer : Mr. Sameer Pradhan
- ✓ Course start date : 21st March,2023
- ✓ Course completion date :
- ✓ Course Duration : 1 Month
- ✓ Course Fee : 1400/-
- ✓ Session Timing : 1 Hours per day
- ✓ Total Strength : 30 Students
- ✓ Targeted Students : BCA/IT Semester-III
- ✓ Venue Details : CVS LAB, Vocation Building
- ✓ Course Coordinator : Prof. Jayanti Kumari, Department of CA/IT.

On ***21st March 2023***, a **Certification Course on "Cloud Computing"** was organized by Center for Vocational Studies for the students of Computer Application & Information Technology of Semester-III. The duration of certification course was one month, starting from 21st March'23. Mr. Niranjan Kushwaha was the **Resource Person** for the Certification Course. Mr. Sameer Pradhan a is a Trainer of NSLcomp. Total 30 students (Sem-III) attended the certification course.

COURSE CONTENTS

1. Computer Fundamental
    - ✓ What is network?
    - ✓ What is networking?
    - ✓ Advantages of network & networking?
    - ✓ Main Devices used in networking?
    - ✓ What is Computer network?
    - ✓ Types of computer network?
    - ✓ Types of addressing?
    - ✓ What is MAC Address?
    - ✓ Difference between IP address and MAC address
    - ✓ What is IP Address?
    - ✓ Version of IP Address?
    - ✓ Types of IP address?
    - ✓ What is the difference between public and private IP address?
    - ✓ what Is Subnet Mask?
    - ✓ How to identify Class (Range) of IP address?
    - ✓ What is loopback IP Address?
    - ✓ What is ping and its used?
    - ✓ How to PING any network device?
    - ✓ What is NsLookUp and its used?
    - ✓ What is Client?
    - ✓ How to use NsLookUp?
    - ✓ What is Server?

- ✓ What is Client?
- ✓ What is Peer?
- ✓ What is Point-to-Point and Client- Server model?
- ✓ What is Authentication?
- ✓ What is Encryption?
- ✓ What is Trace route and its used?
- ✓ How to use tracert / trace route?

2. How to sharing folder or any Drive?
3. How to map network drive?
4. How to make pendrive bootable through Ventoy and Rufus software?
5. How to hijack OS through Hiren live iso?
6. How to break or reset password of System user through Hiren live iso and Isee Password Recovery Tool?
7. How to Install and Configure Windows Server and Linux Server Operating System on your System?
8. What is NTP?
   - ✓ How to configure an NTP Server on Ubuntu 20.04 LTS and NTP Client on Windows, Ubuntu, CentOS Operating System?
9. What is Zabbix Server Monitoring Tools? How to configure Zabbix 5.0 Server Monitoring Tools on Ubuntu_20.04.1?
10. Introduction to Cloud Computing
    - ✓ What is Cloud Computing?
    - ✓ Why Cloud Computing?
    - ✓ Advantages and Disadvantages of Cloud Computing Types of Cloud
    - ✓ Types of Cloud Service Models
    - ✓ What is Virtualization in Cloud Computing
    - ✓ Benefits of Virtualization
    - ✓ Types of Virtualizations
    - ✓ What is Hypervisor?
    - ✓ Types of Hypervisors
11. Introduction of VMware Workstation
    - ✓ How to Install and Configure VMware Workstation?
    - ✓ Create a Virtual Machine
    - ✓ Deploying guest operating system into VM
    - ✓ How to Increase and decrease the Hardware Resource like CPU, RAM, and Storage?
    - ✓ How to take the snapshot of VM?
    - ✓ How to take the clone of VM
12. Introduction of VMware ESXi 6.5
    - ✓ How to Install and Configure VMware ESXi 6.5?
    - ✓ Create a Virtual Machine
    - ✓ Deploying guest operating system into VM
    - ✓ Understanding VMware tools
    - ✓ How to Increase and decrease the Hardware Resource like CPU, RAM, and Storage?
    - ✓ How to take the snapshot of VM?
    - ✓ How to take the clone of VM

13.Introduction of Proxmox-ve_7.1-2

- ✓ How to Install and Configure Proxmox-ve_7.1-2?
- ✓ Create a Virtual Machine
- ✓ Deploying guest operating system into VM
- ✓ How to Increase and decrease the Hardware Resource like CPU, RAM, and Storage?
- ✓ How to take the snapshot of VM?
- ✓ How to take the clone of VM

14. Introduction of Citrix Xenserver 7.5

- ✓ How to Install and Configure Citrix Xenserver 7.5?
- ✓ Create a Virtual Machine
- ✓ Deploying guest operating system into VM
- ✓ How to Increase and decrease the Hardware Resource like CPU, RAM, and Storage?
- ✓ How to take the snapshot of VM?
- ✓ How to take the clone of VM

15.Introduction of Microsoft Windows Hyper-V

- ✓ How to Install and Configure Microsoft Windows Hyper-V?
- ✓ Create a Virtual Machine
- ✓ Deploying guest operating system into VM
- ✓ How to Increase and decrease the Hardware Resource like CPU, RAM, and Storage?
- ✓ How to take the snapshot of VM?
- ✓ How to take the clone of VM

16. Introduction of Domain and Active Directory (AD)

- ✓ What is a Domain and Active Directory (AD)
- ✓ How to setup a Domain Controller
- ✓ Joining a PC to the Domain
- ✓ Creating a new User in AD
- ✓ How to reset a user's password If a user account is locked.
- ✓ Disabling and setting expiration dates on a user account
- ✓ Set logon hours on a user account

Note: Other Utility Tools As per requirement & final completion syllabus will be submitted at the end.

DAY TO DAY REPORT

Date	Day	Topic
21-03-2023	Tuesday	Introduction of Course
23-03-2023	Thursday	IP address, computer networking
24-03-2023	Friday	career counselling
25-03-2023	Saturday	online
28-03-2023	Tuesday	file sharing, OS hizaking , Boot operating , Ping testing over network
01-04-2023	Saturday	password reset.
06-04-2023	Thursday	os installation

11-04-2023	Tuesday	os Next Class
12-04-2023	Wednesday	NTP server
13-04-2023	Thursday	website design in visual studio
15-04-2023	Saturday	NTP in centOS and ubantu
17-04-2023	Monday	host base
20-04-2023	Thursday	Vmware software
25-04-2023	Tuesday	Vmware software installation
27-04-2023	Thursday	To create virtual machine
29-04-2023	Saturday	To install NTP server package
06-05-2023	Saturday	To install NTP server package
09-05-2023	Tuesday	To install NTP server package
13-05-2023	Saturday	Proxmox
15-05-2023	Monday	Proxmox
16-05-2023	Tuesday	Proxmox
18-05-2023	Thursday	VMware ESXI

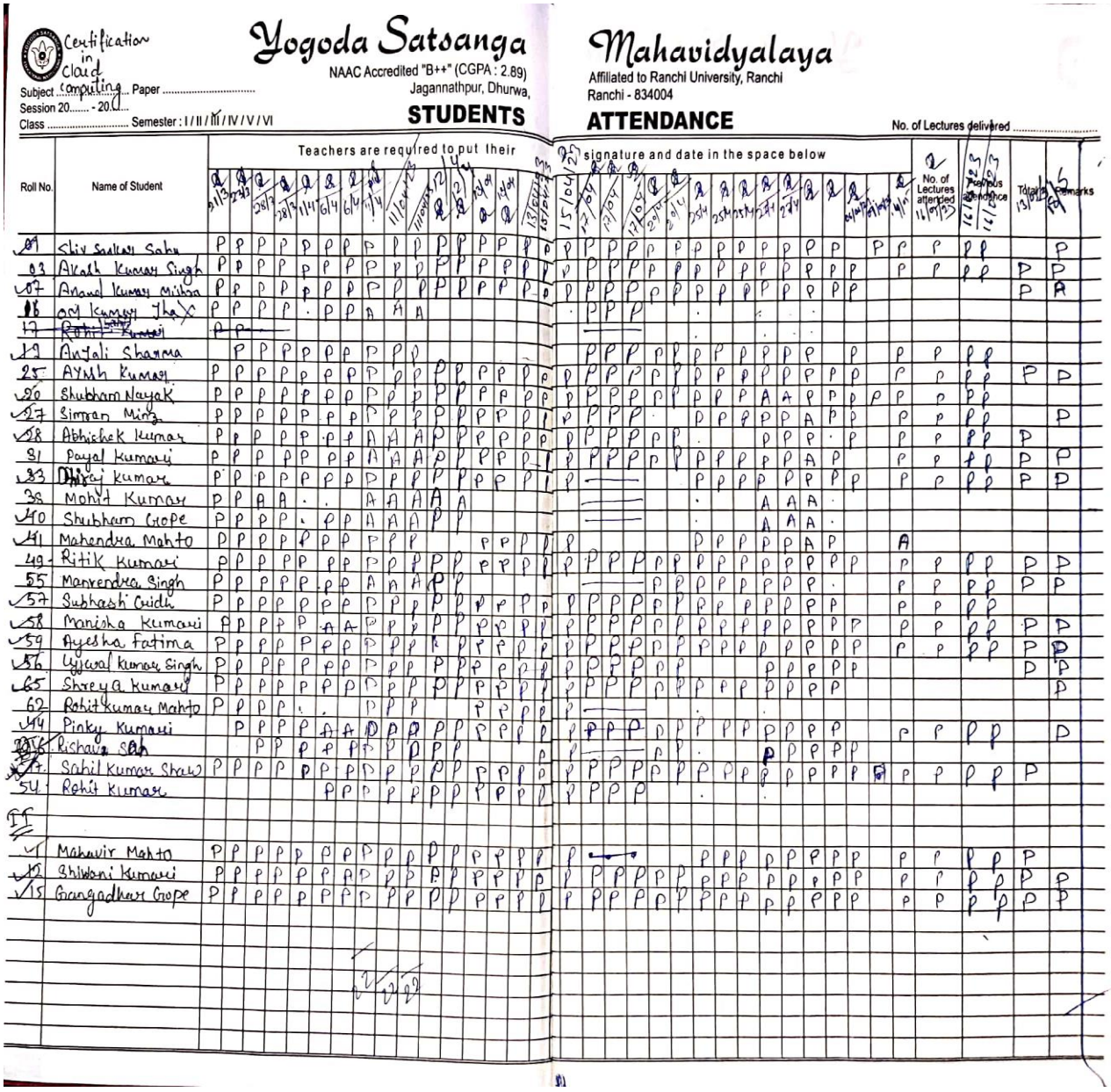
COURSE OUTCOMES

These courses help the students to bridge the gaps between their existing skill sets and the requirement of the industry. The course will certify the students the knowledge and skills required to understand standard cloud methodologies; to implement, maintain, and deliver cloud technologies (e.g., network, storage, and virtualization technologies); and to understand aspects of IT security.

PHOTO GALLERY

Figure: Cloud Computing Certification

ATTENDANCE RECORD



ASSESSMENT & EVALUATION

- At the end of each unit, the student gave his presentation in PowerPoint that what they have learned from that unit.
- After completion of the course student will get their certificate.

FEEDBACK

Attendance Sheet of BCA/IT Sem-3

certification Course on Cloud Computing by NsIComp.

Date:- 18-03-2023 Time:- 12:00 – 1:00

Sl.no	Roll	Name	Feedback		
			Good	Average	Very Good
1	65	Shreeya Kumari		✓	
2	19	Anjali Sharma		✓	
3	27	Simran Minz	✓		✓
4	31	Payal Kumari		✓	
5	59	Ayesha Fatima		✓	
6	IT02	Mahavir Mahto	✓		
7	07	Anand Kumar Mishra	✓		
8	57	Subhash Gidh			✓
9	17	Sahil Kumar Shaw		✓	
10	14	Rishu Raj		✓	
11	02	Rohit Choudhary	✓		
12	24	Shubham Kr Singh			✓
13	25	Ayush Kumar			✓
14	03	AKASH KUMAR SINHA		✓	
15	16	Om Kumar Jha	✓		
16	43	Shivam kumar Ojha		✓	
17	28	Abhishek Kumar			✓
18	01	Shivshankar Sahu	✓		
19	49	Ritik Kumar			✓
20	50	Rohit Kumar Mahto			
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