

Course Coordinator Report

Course Name: Introduction to Network Security

A free Add-On Course for UG students in the Department of Computer Science, Shri Shivaji Education Society Amravati's Science College, Congress Nagar, Nagpur, was held from 1 Aug 2023 to 7 Oct 2023. The course title was "Introduction to Network Security". This comprehensive beginner to expert course was perfect for anyone who wanted to learn network security or enhance their existing skills. Network security is critical in today's digital world, protecting data and ensuring the integrity of information systems. This course provided the foundation for understanding and implementing robust network security measures.

In this course, students learned everything about network security, including setting up secure networks, understanding network architecture, and building defenses against various types of cyber threats. It was packed full of challenges and exercises to get students understanding and applying network security principles quickly. The course provided all the necessary tools and knowledge for students to start with network security implementation. This course was ideal for students interested in the field of cyber security, providing a solid foundation for protecting digital assets and ensuring secure communication across networks.

At the end of this course, students had the skills and knowledge to implement their own network security measures and were on the path to acquiring more advanced cyber security skills. The course duration was 10 weeks (30 hours). Two theory classes were conducted on Friday and Saturday, and one practical session was held every week. The marking system consisted of 60 marks for the theory paper and 40 marks for practical execution. The theory examination consisted of an MCQ paper with 30 questions, each with four multiple choices. The practical examination was also conducted for 40 marks. All 50 students were present in both the theory and practical examinations. The results were prepared, and certificates were distributed to the students.



Ms. Puja M. Dadhe

Course Coordinator

Assistant Professor
Department of Computer Science
S.S.E.S. Am's Science College
Congress Nagar, Nagpur



To,
The Principal
SSES Amt's Science College,
Congress Nagar, Nagpur-12

Subject: For permission to conduct the add on courses in Computer Science department during the session 2023-2024

Respected Sir,

This is to request you that, the teachers of Computer Science department have prepared the syllabus and modules of the 30 hours certificate courses for the session 2023-2024.


The details of the course module, syllabus and time table is submitted here with.

Hence please permit to run the add on courses and oblige me

Thanking you

Yours sincerely

6/07/2023
Nagpur


Professor S. J. Jadhav
Principal
SSES Amt's Science College
Congress Nagar, Nagpur-12

Permitted
MShera

SHRI SHIVAJI EDUCATION SOCIETY AMRAVATI'S SCIENCE COLLEGE, CONGRESS NAGAR,
NAGPUR.
DEPARTMENT OF COMPUTER SCIENCE

NOTICE

Date: 19-July-2023

We are pleased to announce that the Department of Computer Science is offering a Certificate Course on **Network Security** for all BCA Students free of cost starting from first week of September.

Course Highlights:

- Understanding Network Security Fundamentals
- Cryptography and Encryption Techniques
- Firewalls and Intrusion Detection Systems (IDS)
- Secure Network Design and Configuration
- Incident Response and Security Audits

Course Duration: 10 Weeks (30 Hours)

Eligibility: Open to all students of BCA, Shri Shivaji Education Society Amravati's Science College

Registration: Interested students can register at the Department of Computer Science office on or before **28-July-2023**.

Contact Information:

For further details, please contact:

Ms. Puja M. Dadhe
Course Coordinator
Phone: 7276266004



Assistant Professor
Department of Computer Science
S.S.E.S. Amt's Science College
Congress Nagar, Nagpur

CERTIFICATE COURSE IN NETWORK SECURITY



Free Certificate Course for College Students (BCA)

Session: 2023-24

Duration - 30 Hours (10 Weeks)

Process of Registration- First Come First Served (Limited Seats)

Course Objectives:

- Understand Key Concepts
 - Identify Cyber Threats
 - Implement Security Measures
 - Perform Risk Management
 - Conduct Network Security Audits
 - Stay Updated on Emerging Threats
 - Address Legal and Ethical Issues
- and many more

This course provides a comprehensive introduction to the principles and practices of network security. Students will explore key concepts such as cryptography, authentication, access control, and intrusion detection. The curriculum covers various types of cyber threats, including malware, phishing, and denial-of-service attacks, and emphasizes strategies for defense and mitigation. Practical components include hands-on labs with firewall configuration, secure network design, and the use of security tools like Wire shark and Snort. Additionally, the course delves into security policies, risk management, and the legal and ethical implications of cyber security. By the end of the course, students will have the skills to protect networked systems and ensure data integrity and confidentiality.



Department of Computer Science
SSES Am't's Science College, Congress
Nagar, Nagpur

Assistant Professor
Department of Computer Science
S.S.E.S. Am't's Science College
Congress Nagar, Nagpur

SSES Amravati's Science College, Congress Nagar, Nagpur-12

DEPARTMENT OF COMPUTER SCIENCE

COURSE MODULE AND SYLLABUS

Session 2023-2024

Course Title: Certificate Course in Network Security

Course Coordinator: Ms. Puja M. Dadhe

Course description: *This course provides a comprehensive introduction to the principles and practices of network security. Students will explore key concepts such as cryptography, authentication, access control, and intrusion detection. The curriculum covers various types of cyber threats, including malware, phishing, and denial-of-service attacks, and emphasizes strategies for defense and mitigation. Practical components include hands-on labs with firewall configuration, secure network design, and the use of security tools like Wire shark and Snort. Additionally, the course delves into security policies, risk management, and the legal and ethical implications of cyber security. By the end of the course, students will have the skills to protect networked systems and ensure data integrity and confidentiality.*

Course Objectives:

1. **Understand Key Concepts:** Gain a solid foundation in essential network security concepts, including cryptography, authentication, and access control mechanisms.
2. **Identify Cyber Threats:** Learn to recognize various types of cyber threats such as malware, phishing, and denial-of-service attacks, and understand their potential impacts on networked systems.
3. **Implement Security Measures:** Develop practical skills in configuring firewalls, designing secure networks, and utilizing security tools like Wireshark and Snort to detect and mitigate security breaches.
4. **Develop Security Policies:** Understand the process of creating and enforcing security policies that protect organizational data and resources.
5. **Perform Risk Management:** Learn techniques for assessing security risks and implementing appropriate countermeasures to minimize vulnerabilities.
6. **Address Legal and Ethical Issues:** Explore the legal and ethical aspects of cyber security, including compliance with relevant laws and regulations, and the ethical considerations involved in network security practices.

Instructional Strategies: Theory class, Practical, Video clips.

Evaluation Strategies: Oral discussions and Final MCQ examination.

Course outline: Course Outlines: (Relevance)

Course Outline: Network Security

1. Introduction to Network Security



2. **Cryptography and Encryption**
3. **Authentication and Access Control**
4. **Cyber Threats and Attack Vectors**
5. **Network Defense Mechanisms**
6. **Security Policies and Risk Management**
7. **Legal and Ethical Issues in Cybersecurity**
8. **Emerging Trends and Future Directions**


Course Outcomes (COs):

1. **Comprehend Fundamental Principles:** Demonstrate a thorough understanding of core network security concepts, including cryptography, authentication methods, and access control mechanisms.
2. **Detect and Assess Threats:** Identify and evaluate various cyber threats, such as malware, phishing, and denial-of-service attacks, assessing their potential impact on network systems.
3. **Implement Effective Security Measures:** Apply practical knowledge to configure firewalls, design secure network architectures, and utilize security tools like Wireshark and Snort to proactively detect and mitigate security breaches.
4. **Develop Robust Security Protocols:** Create and enforce robust security policies to safeguard organizational data and resources, ensuring compliance with relevant regulatory standards.
5. **Manage Risk Effectively:** Conduct comprehensive risk assessments, formulate risk management strategies, and implement measures to mitigate vulnerabilities and protect against potential threats.
6. **Execute Security Audits:** Perform systematic network security audits to identify weaknesses, vulnerabilities, and areas for improvement, enhancing overall security posture.
7. **Navigate Legal and Ethical Complexities:** Understand and navigate the legal and ethical dimensions of cybersecurity, adhering to ethical standards and compliance requirements while addressing legal implications.

Duration of course: Ten weeks (30 Hours)

The Structure of Syllabus and System of evaluation -

Course	Theory Papers and Practical	Total Marks	
		Theory	Practical
Certificate Course in Network Security	Theory paper- Network Security * Theory examination will be of MCQ pattern having 30 questions each with equal marks.	60	40
	* Practical examination will be based on folder and performance evaluation in the laboratory	100	


Assistant Professor
 Department of Computer Science
 S.S.E.S. Am's Science College
 Congress Nagar, Nagpur

SYLLABUS

Certificate course (10 weeks)

Theory

Unit 1: Foundations of Network Security

Introduction to Network Security: Overview of cybersecurity landscape, historical perspectives, and key terminology. Cryptography and Encryption: Principles of cryptography, encryption algorithms, digital signatures, and cryptographic protocols. Authentication Mechanisms: Methods for verifying user identities, including passwords, biometrics, and multi-factor authentication. Access Control Models: Role-based access control, discretionary access control, and mandatory access control mechanisms.

Unit 2: Cyber Threats and Defense Mechanisms

Understanding Cyber Threats: Analysis of common cyber threats such as malware, phishing, and denial-of-service attacks, including their characteristics and impacts. Network Defense Strategies: Implementation of defense mechanisms including firewalls, intrusion detection/prevention systems (IDS/IPS), and secure network architectures. Security Tools and Technologies: Practical use of security tools such as Wireshark, Snort, and Nmap for monitoring and analyzing network traffic. Secure Network Design Principles: Design considerations for building secure networks, including segmentation, least privilege, and network hardening techniques.

Unit 3: Governance and Risk Management

Security Policies and Compliance: Development and implementation of security policies, adherence to regulatory standards such as GDPR, HIPAA, and PCI DSS. Risk Assessment and Management: Techniques for identifying, assessing, and prioritizing security risks, and strategies for risk mitigation and transfer. Legal and Ethical Aspects of Cybersecurity: Exploration of legal frameworks, ethical considerations, and privacy issues in cybersecurity practices..

Practicals

Practical List for Network Security Course

1. Firewall Configuration and Testing

- Task: Configure firewall rules on a virtualized network environment using tools like pfSense or iptables.
- Objective: Implement rules to allow or deny specific types of traffic and test the effectiveness of the firewall configuration.

2. Intrusion Detection System (IDS) Setup and Monitoring

- Task: Deploy an open-source IDS solution (e.g., Snort, Suricata) on a network and configure it to monitor network traffic.
- Objective: Analyze IDS alerts to identify potential security threats and understand the role of IDS in network security.

3. Encryption and Decryption Exercise



- Task: Implement encryption and decryption algorithms using programming languages like Python or Java.
- Objective: Encrypt and decrypt messages, generate digital signatures, and verify message integrity using cryptographic libraries.

4. Phishing Simulation and Awareness Training

- Task: Design and execute a simulated phishing campaign using tools like GoPhish or SET.
- Objective: Create phishing emails, monitor user responses, and analyze the effectiveness of the phishing campaign to raise awareness of phishing risks.

5. Network Traffic Analysis with Wireshark

- Task: Capture network packets using Wireshark and analyze them to identify potential security threats.
- Objective: Examine packet headers, extract data payloads, and detect anomalies such as port scanning or suspicious traffic patterns.

6. Incident Response Scenario

- Task: Participate in a simulated security incident scenario, such as a ransomware attack or data breach.
- Objective: Detect the incident, contain the impact, investigate the root cause, and implement remediation measures following established incident response procedures.

Week-wise teaching plan:

Week	Hrs.	Syllabus
Week 1	1	Introduction to Network Security: Overview of cybersecurity landscape.
	1	historical perspectives, and key terminology
	1	Cryptography and Encryption: Principles of cryptography
Week 2	1	encryption algorithms, digital signatures, and cryptographic protocols.
	2	Authentication Mechanisms: Methods for verifying user identities, including passwords, biometrics, and multi-factor authentication
Week 3	1	Access Control Models: Role-based access control
	2	discretionary access control, and mandatory access control mechanisms.
Week 4	1	Understanding Cyber Threats: Analysis of common cyber threats such as malware, phishing
	1	Network Defense Strategies: Implementation of defense mechanisms including firewalls,
Week 5	2	Security Tools and Technologies: Practical use of security tools
	1	Secure Network Design Principles: Design considerations for building
Week 6	2	Security Policies and Compliance: Development and implementation of security policies
	1	Risk Assessment and Management: Techniques
Week 7	2	assessing, and prioritizing security risks, and strategies for risk mitigation and transfer.
	1	Legal and Ethical Aspects of Cybersecurity
Week 8	2	Exploration of legal frameworks, ethical considerations
	1	privacy issues in cybersecurity practices
Week 9	2	secure networks, including segmentation, least privilege.
	1	network hardening techniques.
Week 10	1	intrusion detection/prevention systems (IDS/IPS), and secure network architectures
	2	denial-of-service attacks, including their characteristics and impacts.

SSES AMT'S SCIENCE COLLEGE, CONGRESS NAGAR, NAGPUR-12

Certificate Course in Network Security
SESSION 2023-2024

Time Table

Day	Theory
Friday	PMD (B9) Theory 4:30 PM – 5:30 PM
Saturday	PMD(BCA LAB) practical, 4:30 PM – 5:30 PM
	PMD (B9) Theory, 5:30 PM – 6:30 PM



Associate Professor
Department of Computer Science
S.S.E.S. Am's Science College,
Congress Nagar, Nagpur

ADD ON COURSE

Course Name :- Network
Security

Student Name	Sign
1) Adul K. Singh	A. Singh
2) Chahat F. Thakur	C. Thakur
3) Devesh G. Sahare	D. Sahare
4) Ayush P. Dubay	AD
5) Devashri G. Garade	D. Garade
6) Chetan M. Zade	C. Zade
7) Bhavesh P. Mamkar	B. Mamkar
8) Aayush R. Tarekar	A. Tarekar
9) Aditi N. Vairale	A. Vairale
10) Anjali R. Jogi	A. Jogi
11) Aniket S. Jakkannwar	A. Jakkannwar
12) Ankush S. Kanjiya	A. Kanjiya
13) Anushka S. Shende	A. Shende
14) Ayur K. Mendhe	A. Mendhe
15) Aditya P. Jodh	A. Jodh
16) Arman S. Mamkar	A. Mamkar
17) Armit D. Lamse	A. Lamse
18) Anya K. Raot	A. Raot
19) Ayur K. M. Divyanshu S. Pohale	A. Pohale
20) Apeksha J. Manwar	A. Manwar
21) Diya P. Thakre	D. Thakre
22) Ekmath V. Kapse	E. Kapse
23) Jagruti K. Warkade	J. Warkade

24)	Himanshu R. Ade	Hade,
25)	Janhavi N. Duke	Duke
26)	Kartik S. Ingale.	K Ingale.
27)	Juhi R. Talhar	J Talhar
28)	Isha Y. Singh	I Singh
29)	Hrutuja S. Dhoble.	H. Dhoble.
30)	Janhvi P. Bedpilwar	Janhvi,
31)	Himanshu R. Somalwar	H. Somalwar
32)	Harshika A. Gupat	H. Gupat
33)	Jatim Gokaldas Hawale.	J. Hawale.
34)	Kalyani Madhukar Nakhate	K Nakhate
35)	Kanakshri P. Tembhokari	K.T.
36)	Harshal Shivdas Nasmik	H. Nasmik
37)	Harshida M. Suthan	H. Suthan
38)	Hemang T. Dhruvatre	H. Dhruvatre
39)	Jaydeep P. Shaha	Jaydeep
40)	Kajal D. Patil	K. Patil.
41)	Kesak S. Kamdi	K. Kamdi
42)	Khushali S. Bhagat	K. Bhagat
43)	Kintee R. Yede	K. Yede
44)	Krish G. Hargude.	Krish
45)	Milind S. Bhosle	Bhosle
46)	Krishna J. Yelme	K. Yelme.
47)	Pooja D. Bhambhole,	P. Bhambhole.
48)	Neha K. Mate	N. Mate
49)	Mayuri R. Akkewar	M.A.
50)	Lokesh V. Werasulkar	L. Werasulkar
51)	Om Kumar S. Vibhandik.	O. K. S.
51)	Nishita A. Pandey	N. Pandey



Assistant Professor
Department of Computer Science
S.S.E.S. Am's Science College
Congress Nagar, Nagpur

Shri Shivaji Education Society Amravati's
Science College, Congress Nagar, Nagpur.

Certified Course in Introduction to Network Security
2023-2024
July 2023
List of Registered Students

Sr. No.	Name of Student
1	AACHAL RAJNAND ARVERKAR
2	AAYUSH RAJENDRA TAREKAR
3	ABHISHEK SANJAY THOKAL
4	ADITYA KAILAS MANE
5	AISHWARYA NAMDEV LATKAR
6	AKANKSHA AJAYKUMAR SHENDE
7	ALKESH ARUN MAHAMUNE
8	ANSH MOHAN PIMPLE
9	ANSHU GUNWANT YEKUDE
10	ANUJA VILAS ZADE
11	ANUPAM RAKESH PANDEY
12	ANURAG GANESH MASRAM
13	ANURAG RAJESH WASNIK
14	DEVASHISH SANTOSHKUMAR TEMBHARE
15	EKNATH VIJAY KAPSE
16	GAURAV LAXMICHAND RAHANGDALE
17	HARSH ASHISH KSHIRSAGAR
18	HARSH HARISH GAIKWAD
19	HARSHAL RAJU DAF
20	KHUSHEE UDELAL PARDHI
21	KHUSHI ASHOK GHATE
22	KHUSHI MANOJ BHAGAT

23	KOMAL KAILASH PATIYE
24	KRUNAL AJAY KUHITE
25	LEENA MURLIDHAR YENKAR
26	MAHIMA RAJENDRA BHASMOTE
27	MAI RAMDAS BANSOD
28	NIDHI KOMAL CHANDEL
29	NIKITA SATISH WARATKAR
30	NILESH HIRJI SHAHARE
31	NISARGA SANJAY HADKE
32	NITESH NEHARULAL PATRE
33	OM PANKAJ THORAT
34	PAWAN HOMRAJ SATPUTE
35	PAWANKUMAR RAMKISHOR GOKHE
36	SARANG NARENDRA BURDE
37	SARVESH RAMESH SAHARE
38	SAURABH GANESH GAIKWAD
39	SAYYAM SHYAMKUMAR CHICHKHEDE
40	SHARDUL SUDHIR GARADE
41	SHIVAM RAMESH NACHANKAR
42	SHRAVANI VINOD DESHMUKH
43	SHREYA LAHU WAGH
44	SHRUSTI RAJESH RAMTEKE
45	SHWETA BALKRUSHNA BADKHAL
46	SIDDHESH SUBHASH GUHE
47	SNEHA SANDIP WASNIK
48	SNEHAL RAVINDRA RAJGE
49	YASH NARESH SONBARSE
50	YASH PRAVIN KHARABE



Assistant Professor
Department of Computer Science
S.S.E.S. Am's Scheme College
Congress Nagar, Nagpur

S.N.	Name of Students	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
		4-08	5-08	5-08	11-08	12-08	12-08	18-08	19-08	19-08	25-08	26-08	26-08	01-09	02-09	02-09	08-09	08-09	09-09	09-09	15-09	16-09	16-09	22-09	23-09	29-09	30-09	30-09	6-10	6-10	7-10
1	AACHAL RAJNAND ARVERKAR	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	P	P	P
2	AAYUSH RAJENDRA TAREKAR	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	P	P	P
3	ABHISHEK SANJAY THOKAL	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	P	P	P
4	ADITYA KAILAS MANE	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	P	P	P
5	AISHWARYA NAMDEV LATKAR	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	P	P	P
6	AKANKSHA AJAYKUMAR SHENDE	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	P	P	P
7	ALKESH ARUN MAHAMUNE	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	P	P	P
8	ANSH MOHAN PIMPLE	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	P	P	P
9	ANSHU GUNWANT YEKUDE	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	P	P	P
10	ANUJA VILAS ZADE	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	P	P	P
11	ANUPAM RAKESH 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	P	P	P
12	ANURAG GANESH MASRAM	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	P	P	P
13	ANURAG RAJESH WASNIK	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	P	P	P
14	DEVASHISH SANTOSHKUMAR TEMBHARE	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	P	P	P
15	EKNATH VIJAY KAPSE	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	P	P	P
16	GAURAV LAXMICHAND RAHANGDALE	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	P	P	P
17	HARSH ASHISH KSHIRSAGAR	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	P	P	P
18	HARSH HARISH GAIKWAD	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	P	P	P
19	HARSHAL RAJU DAF	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	P	P	P
20	KHUSHEE UDELAL PARDHI	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	P	P	P
21	KHUSHI ASHOK GHATE	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	P	P	P
22	KHUSHI MANOJ BHAGAT	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	P	P	P
23	KOMAL KAILASH PATIYE	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	P	P	P
24	KRUNAL AJAY KUHITE	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	P	P	P
25	LEENA MURLIDHAR YENKAR	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	P	P	P
26	MAHIMA RAJENDRA BHASMOTE	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	P	P	P
27	MAI RAMDAS BANSOD	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	P	P	P
28	NIDHI KOMAL CHANDEL	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	P	P	P
29	NIKITA SATISH WARATKAR	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	P	P	P
30	NILESH HIRJI SHAHARE	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	P	P	P
31	NISARGA SANJAY HADKE	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	P	P	P
32	NITESH NEHARULAL PATRE	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	P	P	P
33	OM PANKAJ THORAT	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	P	P	P

SHRI SHIVAJI EDUCATION SOCIETY AMRAVATI'S SCIENCE COLLEGE, CONGRESS NAGAR,
NAGPUR

Certified Course on Network Security

Announcement of Theory and Practical Examination Dates for Network Security Certificate Course

NOTICE

Date: 09-Oct-2023

This is to inform all students enrolled in the Certificate Course on Python Programming that the dates for the Theory and Practical Examinations have been scheduled as follows:

Theory Examination:

- Date: 18-10-2023
- Time: 04:00 pm
- Venue: Room No B9

Practical Examination:

- Date: 19-10-2023
- Time: 04:00 pm
- Venue: BCA Lab, 3rd Floor

All students are required to be present at the examination venue at least 15 minutes before the scheduled time. Please ensure you bring your college ID card and any other necessary materials.

For any further queries, please contact the Department of Computer Science office.

Ms. Puja M. Dadhe
Course Co-ordinator

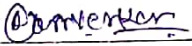
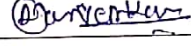
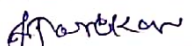
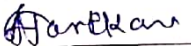


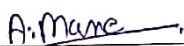
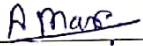
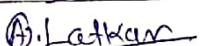
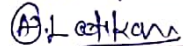
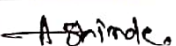

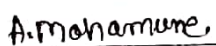
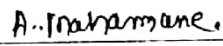
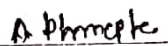
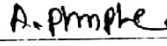
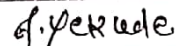
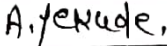
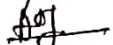

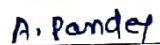

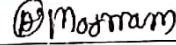
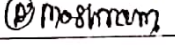
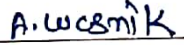
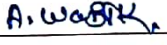
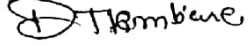
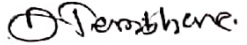

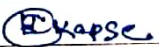
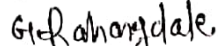
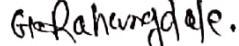
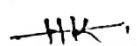
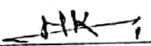
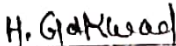
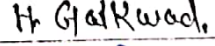
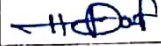

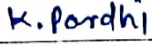
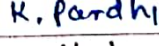
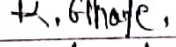
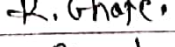
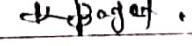





Assistant Professor
Department of Computer Science
S.S.E.S. Am'ta Science College
Congress Nagar, Nagpur



Shri Shivaji Education Society Amravati's
Science College, Congress Nagar, Nagpur.

Certified Course in Introduction to Network Security
Test Examination 2023-24
Attendance Sheet

Sr. No.	Roll no.	Name Of Student	Signature (Theory) Date: 18-10-2023	Signature(Practical) Date: 19-10-2023
1	1001	AACHAL RAJNAND ARVERKAR		
2	1002	AAYUSH RAJENDRA TAREKAR		
3	1003	ABHISHEK SANJAY THOKAL		
4	1004	ADITYA KAILAS MANE		
5	1005	AISHIWARYA NAMDEV LATKAR		
6	1006	AKANKSHA AJAYKUMAR SHENDE		
7	1007	ALKESH ARUN MAHAMUNE		
8	1008	ANSH MOHAN PIMPLE		
9	1009	ANSHU GUNWANT YEKUDE		
10	1010	ANUJA VILAS ZADE		
11	1011	ANUPAM RAKESH PANDEY		
12	1012	ANURAG GANESH MASRAM		
13	1013	ANURAG RAJESH WASNIK		
14	1014	DEVASHISH SANTOSHIKUMAR TEMBHARE		
15	1015	EKNATH VIJAY KAPSE		
16	1016	GAURAV LAXMICHAND RAHANGDALE		
17	1017	HARSH ASHISH KSHIRSAGAR		
18	1018	HARSH HARISH GAIKWAD		
19	1019	HARSHAL RAJU DAF		
20	1020	KHUSHI E UDELAL PARDHI		
21	1021	KHUSHI ASHOK GHATE		
22	1022	KHUSHI MANOJ BHAGAT		
23	1023	KOMAL KAILASH PATIYE		

24	1024	KRUNAL AJAY KUHITE	K. K. White	K. K. Kuhite
25	1025	LEENA MURLIDHAR YENKAR	L. Yenkar	L. Yenkar,
26	1026	MAHIMA RAJENDRA BIHASMOTE	M. Bhasmate,	M. Bhasmate,
27	1027	MAI RAMDAS BANSOD	M. Bansod	M. Bansod.
28	1028	NIDHI KOMAL CHANDEL	(N) Chandeh	(N) Chandeh
29	1029	NIKITA SATISH WARATKAR	(N) Waratkar	(N) Waratkar,
30	1030	NILESH HIRJI SHAHARE	N. Shahare,	N. Shahare,
31	1031	NISARGA SANJAY HADKE	N. Hadke,	N. Hadke,
32	1032	NITESH NEHARULAL PATRE	N. Patre	N. Patre,
33	1033	OM PANKAJ THORAT	OM	OM
34	1034	PAWAN HOMRAJ SATPUTE	(P) S. of pate.	(P) S. of pate,
35	1035	PAWANKUMAR RAMKISHOR GOKHE	P. Gokhe	P. Gokhe,
36	1036	SARANG NARENDRA BURDE	S. Burde.	S. Burde.
37	1037	SARVESH RAMESH SAHARE	S. Sahare	S. Sahare.
38	1038	SAURABH GANESH GAIKWAD	S. Gaikwad	S. Gaikwad,
39	1039	SAYYAM SHYAMKUMAR CHICHKHEDE	S. Chichkhele,	S. Chichkhele
40	1040	SHARDUL SUDHIR GARADE	S. Gande.	S. Gande.
41	1041	SHIVAM RAMESH NACHANKAR	S. N	S. N
42	1042	SHRAVANI VINOD DESHMUKH	S. Deshmukh	S. Deshmukh,
43	1043	SHREYA LAHU WAGH	S. W	S. W
44	1044	SHRUSTI RAJESH RAMTEKE	S. Ramteke.	S. Ramteke.
45	1045	SIWETA BALKRUSHNA BADKHAL	S. Badkhal	S. Badkhal
46	1046	SIDDHESH SUBHASH GUHE	S. Guhe.	S. Guhe,
47	1047	SNEHA SANDIP WASNIK	S. Wasnik	S. Wasnik,
48	1048	SNEHAL RAVINDRA RAJGE	S. Rajge,	S. Rajge,
49	1049	YASH NARESH SONBARSE	Y. Sonbarse.	Y. Sonbarse,
50	1050	YASH PRAVIN KHARABE	Y. Kharabe.	Y. Kharabe.



Assistant Professor
Department of Computer Science
S.S.E.S. Am's Science College
Congress Nagar, Nagpur



DEPARTMENT OF COMPUTER SCIENCE

Final Examination

Session 2023-2024

Certificate Course in Network Security

Maximum Marks: 60

Students Name: _____

Roll No: _____ Date: _____ Time: 1 HOUR

Name and Signature of Invigilator: _____

Note: 1. All Questions are compulsory and carry equal marks.
2. Tick the Correct option only.

1. Which of the following is not a common cyber threat?
 - A) Malware
 - B) Firewall
 - C) Phishing
 - D) Denial-of-Service (DoS) attacks
2. Which encryption algorithm is commonly used for secure web communication?
 - A) MD5
 - B) AES
 - C) DES
 - D) SHA-1
3. What is the primary purpose of an Intrusion Detection System (IDS)?
 - A) To prevent all cyber attacks
 - B) To monitor and detect unauthorized access or malicious activities
 - C) To encrypt network traffic
 - D) To authenticate users
4. Which access control model grants permissions based on the user's role within an organization?
 - A) Role-based access control (RBAC)
 - B) Discretionary access control (DAC)
 - C) Mandatory access control (MAC)
 - D) Least privilege access control (LPAC)
5. What is the process of converting plaintext into unreadable ciphertext called?
 - A) Encryption
 - B) Decryption
 - C) Hashing
 - D) Authentication
6. Which security mechanism verifies the identity of a user or system before granting access?
 - A) Encryption
 - B) Authentication
 - C) Authorization
 - D) Auditing

7. Which network security tool is used for packet sniffing and network analysis?
 - A) Snort
 - B) Nessus
 - C) Wireshark
 - D) Metasploit
8. What is the purpose of a firewall in network security?
 - A) To detect and prevent unauthorized access to a network
 - B) To encrypt network traffic
 - C) To monitor network traffic for malicious activities
 - D) To authenticate users
9. Which type of cyber attack floods a network or server with excessive traffic to disrupt normal operations?
 - A) Phishing
 - B) Malware
 - C) Denial-of-Service (DoS)
 - D) Man-in-the-Middle (MitM)
10. What is the role of encryption in network security?
 - A) To authenticate users
 - B) To monitor network traffic
 - C) To protect data confidentiality and integrity
 - D) To prevent denial-of-service attacks
11. Which cryptographic technique uses a pair of keys (public and private) for encryption and decryption?
 - A) Symmetric encryption
 - B) Asymmetric encryption
 - C) Hashing
 - D) Digital signatures
12. Which protocol is commonly used for secure communication over the Internet?
 - A) FTP
 - B) HTTP
 - C) HTTPS
 - D) SMTP
13. Which access control model restricts access to resources based on the user's security clearance and the classification of the resource?
 - A) Role-based access control (RBAC)
 - B) Discretionary access control (DAC)
 - C) Mandatory access control (MAC)
 - D) Least privilege access control (LPAC)
14. What is the primary goal of a phishing attack?
 - A) To infect systems with malware
 - B) To steal sensitive information by impersonating a legitimate entity
 - C) To disrupt network operations
 - D) To gain unauthorized access to a network
15. Which network security mechanism is used to identify and block malicious software?
 - A) Firewall
 - B) Intrusion Detection System (IDS)
 - C) Antivirus software
 - D) Virtual Private Network (VPN)
16. What is the purpose of risk management in network security?
 - A) To eliminate all security risks

- B) To identify and mitigate security risks to an acceptable level
 - C) To encrypt all network traffic
 - D) To authenticate users
17. Which encryption algorithm is commonly used for secure email communication?
- A) AES
 - B) DES
 - C) RSA
 - D) MD5
18. Which type of attack involves intercepting communication between two parties without their knowledge?
- A) Phishing
 - B) Spoofing
 - C) Man-in-the-Middle (MitM)
 - D) Denial-of-Service (DoS)
19. Which security mechanism verifies the integrity and origin of a message?
- A) Encryption
 - B) Decryption
 - C) Hashing
 - D) Digital signatures
20. What is the purpose of a security policy in an organization?
- A) To prevent all security incidents
 - B) To define rules and guidelines for protecting information assets
 - C) To encrypt all network traffic
 - D) To authenticate users
21. Which type of access control model allows users to control access to their own resources?
- A) Role-based access control (RBAC)
 - B) Discretionary access control (DAC)
 - C) Mandatory access control (MAC)
 - D) Least privilege access control (LPAC)
22. Which protocol is commonly used for secure file transfer over a network?
- A) FTP
 - B) SFTP
 - C) TFTP
 - D) FTPS
23. Which security mechanism is used to prevent unauthorized access to a network or system?
- A) Encryption
 - B) Authentication
 - C) Authorization
 - D) Auditing
24. What is the primary goal of a denial-of-service (DoS) attack?
- A) To steal sensitive information
 - B) To infect systems with malware
 - C) To disrupt network operations
 - D) To gain unauthorized access to a network
25. Which cryptographic hash function is commonly used for data integrity verification?
- A) MD5
 - B) SHA-1
 - C) AES
 - D) DES

26. Which type of cyber attack involves tricking users into providing sensitive information such as passwords or credit card numbers?
- A) Phishing
 - B) Spoofing
 - C) Man-in-the-Middle (MitM)
 - D) Denial-of-Service (DoS)
27. What is the primary purpose of an intrusion detection system (IDS)?
- A) To prevent all cyber attacks
 - B) To monitor and detect unauthorized access or malicious activities
 - C) To encrypt network traffic
 - D) To authenticate users
28. Which encryption algorithm is commonly used for securing wireless networks?
- A) AES
 - B) RSA
 - C) DES
 - D) MD5
29. Which access control model enforces access control policies based on the sensitivity of the information being accessed and the clearance level of the user?
- A) Role-based access control (RBAC)
 - B) Discretionary access control (DAC)
 - C) Mandatory access control (MAC)
 - D) Least privilege access control (LPAC)
30. Which of the following is NOT a commonly used encryption algorithm for securing network communication
- A) AES
 - B) RSA
 - C) SHA-256
 - D) MD5

SSES Amravati's Science College, Congress Nagar, Nagpur-12
DEPARTMENT OF COMPUTER SCIENCE
Session 2019-2020
Certificate Course
Examination


Course Name: Network Security

Time: 60 Minutes]

[Max. Marks: 40

Practical Exam Slip

1. **Firewall Configuration and Testing**
 - Task: Configure firewall rules on a virtualized network environment using tools like pfSense or iptables.
 - Objective: Implement rules to allow or deny specific types of traffic and test the effectiveness of the firewall configuration.
2. **Intrusion Detection System (IDS) Setup and Monitoring**
 - Task: Deploy an open-source IDS solution (e.g., Snort, Suricata) on a network and configure it to monitor network traffic.
 - Objective: Analyze IDS alerts to identify potential security threats and understand the role of IDS in network security.
3. **Encryption and Decryption Exercise**
 - Task: Implement encryption and decryption algorithms using programming languages like Python or Java.
 - Objective: Encrypt and decrypt messages, generate digital signatures, and verify message integrity using cryptographic libraries.
4. **Phishing Simulation and Awareness Training**
 - Task: Design and execute a simulated phishing campaign using tools like GoPhish or SET.
 - Objective: Create phishing emails, monitor user responses, and analyze the effectiveness of the phishing campaign to raise awareness of phishing risks.
5. **Network Traffic Analysis with Wireshark**
 - Task: Capture network packets using Wireshark and analyze them to identify potential security threats.
 - Objective: Examine packet headers, extract data payloads, and detect anomalies such as port scanning or suspicious traffic patterns.
6. **Incident Response Scenario**
 - Task: Participate in a simulated security incident scenario, such as a ransomware attack or data breach.
 - Objective: Detect the incident, contain the impact, investigate the root cause, and implement remediation measures following established incident response procedures.


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S.S.E.S. Amra Science College
Congress Nagar, Nagpur



Shri Shivaji Education Society Amravati's
Science College, Congress Nagar, Nagpur.

Certified Course in Network Security
2023-2024

Final Result

Date: 25-10-2023

Sr. No.	Roll no.	Name Of Student	Theory (out of 60)	Practical (out of 40)	Total 100	Grade
1	1001	AACHAL RAJNAND ARVERKAR	50	35	85	A
2	1002	AAYUSH RAJENDRA TAREKAR	50	37	87	A
3	1003	ABHISHEK SANJAY THOKAL	38	37	75	B+
4	1004	ADITYA KAILAS MANE	44	34	78	B+
5	1005	AISHWARYA NAMDEV LATKAR	42	31	78	B+
6	1006	AKANKSHA AJAYKUMAR SHENDE	41	33	74	B+
7	1007	ALKESH ARUN MAHAMUNE	52	35	87	A
8	1008	ANSH MOHAN PIMPLE	46	35	81	A
9	1009	ANSHU GUNWANT YEKUDE	42	32	74	B+
10	1010	ANUJA VILAS ZADE	45	33	78	B+
11	1011	ANUPAM RAKESH PANDEY	40	33	73	B+
12	1012	ANURAG GANESH MASRAM	46	39	85	A
13	1013	ANURAG RAJESH WASNIK	52	35	87	A
14	1014	DEVASHISH SANTOSHKUMAR TEMBHARE	38	31	69	B
15	1015	EKNATH VIJAY KAPSE	48	31	79	B+
16	1016	GAURAV LAXMICHAND RAHANGDALE	42	36	78	B+
17	1017	HARSH ASHISH KSHIRSAGAR	42	37	79	B+
18	1018	HARSH HARISH GAIKWAD	50	38	88	A

19	1019	HARSHAL RAJU DAF	50	35	85	A
20	1020	KHUSHEE UDELAL PARDHI	45	35	80	A
21	1021	KHUSHI ASHOK GHATE	45	34	79	B+
22	1022	KHUSHI MANOJ BHAGAT	45	31	76	B+
23	1023	KOMAL KAILASH PATIYE	46	30	76	B+
24	1024	KRUNAL AJAY KUHITE	50	38	88	A
25	1025	LEENA MURLIDHAR YENKAR	51	37	88	A
26	1026	MAHIMA RAJENDRA BHASMOTE	44	40	84	A
27	1027	MAI RAMDAS BANSOD	44	40	84	A
28	1028	NIDHI KOMAL CHANDEL	39	33	72	B+
29	1029	NIKITA SATISH WARATKAR	38	37	75	B+
30	1030	NILESH HIRJI SHAHARE	52	34	86	A
31	1031	NISARGA SANJAY HADKE	52	33	85	A
32	1032	NITESH NEHARULAL PATRE	42	35	77	B+
33	1033	OM PANKAJ THORAT	41	30	71	B+
34	1034	PAWAN HOMRAJ SATPUTE	45	38	83	A
35	1035	PAWANKUMAR RAMKISHOR GOKHE	43	39	82	A
36	1036	SARANG NARENDRA BURDE	39	37	76	B+
37	1037	SARVESH RAMESH SAHARE	39	40	79	B+
38	1038	SAURABH GANESH GAIKWAD	52	38	90	A+
39	1039	SAYYAM SHYAMKUMAR CHICKHEDE	51	34	85	A
40	1040	SHARDUL SUDHIR GARADE	39	37	76	B+
41	1041	SHIVAM RAMESH NACHANKAR	44	36	80	A
42	1042	SHRAVANI VINOD DESHMUKH	42	39	81	A

43	1043	SHREYA LAHU WAGH	42	30	72	B+
44	1044	SHRUSTI RAJESH RAMTEKE	51	40	91	A+
45	1045	SHWETA BALKRUSHNA BADKHAL	42	36	78	B+
46	1046	SIDDHESH SUBHASH GUHE	39	30	69	B
47	1047	SNEHA SANDIP WASNIK	52	36	88	A
48	1048	SNEHAL RAVINDRA RAJGE	40	39	79	B+
49	1049	YASH NARESH SONBARSE	49	39	88	A
50	1050	YASH PRAVIN KHARABE	50	35	85	A

Sample OMR Sheet



Shri Shivaji Education Society, Amravati's
SCIENCE COLLEGE
 Congress Nagar, Nagpur-12 (M.S.), India



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 Recognized Centre for Higher Learning and Research
 Mentor College under 'PARAMARSH Scheme', UGC, New Delhi

Add-on Course				
Course Exam Name: Certificate Course in Network Security				
Name of Student:			INSTRUCTIONS FOR FILLING THE SHEET 1. This sheet should not be folded or crushed. 2. Use only blue/ black ball point pen to fill the circles. 3. Use of pencil is strictly prohibited. 4. Circles should be darkened completely and properly. 5. Cutting and erasing on this sheet is not allowed. 6. Do not use any stray marks on the sheet. 7. Do not use marker or white fluid to hide the mark. WRONG METHODS CORRECT METHOD 	
Roll No.:	<input style="width: 20px; height: 20px;" type="text"/> <input style="width: 20px; height: 20px;" type="text"/> <input style="width: 20px; height: 20px;" type="text"/>	Session: 2023-24		
Test Date: 07/03/24		Max. Marks: 60		
Invigilator Signature		Obtained Marks:		<input style="width: 40px; height: 20px;" type="text"/>

A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D					
1	○	○	○	○	11	○	○	○	○	21	○	○	○	○	31	○	○	○	○	41	○	○	○	○
2	○	○	○	○	12	○	○	○	○	22	○	○	○	○	32	○	○	○	○	42	○	○	○	○
3	○	○	○	○	13	○	○	○	○	23	○	○	○	○	33	○	○	○	○	43	○	○	○	○
4	○	○	○	○	14	○	○	○	○	24	○	○	○	○	34	○	○	○	○	44	○	○	○	○
5	○	○	○	○	15	○	○	○	○	25	○	○	○	○	35	○	○	○	○	45	○	○	○	○
6	○	○	○	○	16	○	○	○	○	26	○	○	○	○	36	○	○	○	○	46	○	○	○	○
7	○	○	○	○	17	○	○	○	○	27	○	○	○	○	37	○	○	○	○	47	○	○	○	○
8	○	○	○	○	18	○	○	○	○	28	○	○	○	○	38	○	○	○	○	48	○	○	○	○
9	○	○	○	○	19	○	○	○	○	29	○	○	○	○	39	○	○	○	○	49	○	○	○	○
10	○	○	○	○	20	○	○	○	○	30	○	○	○	○	40	○	○	○	○	50	○	○	○	○



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<u>Add-on Course</u>							
Course Exam Name: Certificate Course in Network Security							
Name of Student:		INSTRUCTIONS FOR FILLING THE SHEET 1. This sheet should not be folded or crushed. 2. Use only blue/ black ball point pen to fill the circles. 3. Use of pencil is strictly prohibited. 4. Circles should be darkened completely and properly. 5. Cutting and erasing on this sheet is not allowed. 6. Do not use any stray marks on the sheet. 7. Do not use marker or white fluid to hide the mark.					
Roll No.:	<input style="width: 20px; height: 20px;" type="text"/> <input style="width: 20px; height: 20px;" type="text"/> <input style="width: 20px; height: 20px;" type="text"/>	Session: 2023-24					
Test Date:	Max. Marks: 60						
Invigilator Signature	Obtained Marks:	<table style="width: 100%; border: none;"> <tr> <td style="border: none;">WRONG METHODS</td> <td style="border: none;">CORRECT METHOD</td> </tr> <tr> <td style="border: none;"> </td> <td style="border: none;"> </td> </tr> </table>		WRONG METHODS	CORRECT METHOD		
WRONG METHODS	CORRECT METHOD						

1 A B C D ○ ● ○ ○ ○	11 A B C D ○ ● ○ ○ ○	21 A B C D ○ ● ○ ○ ○	31 A B C D ○ ○ ○ ○ ○	41 A B C D ○ ○ ○ ○ ○
2 ○ ● ○ ○ ○	12 ○ ○ ● ○ ○	22 ○ ● ○ ○ ○	32 ○ ○ ○ ○ ○	42 ○ ○ ○ ○ ○
3 ○ ● ○ ○ ○	13 ○ ○ ● ○ ○	23 ○ ○ ● ○ ○	33 ○ ○ ○ ○ ○	43 ○ ○ ○ ○ ○
4 ● ○ ○ ○ ○	14 ○ ● ○ ○ ○	24 ○ ○ ● ○ ○	34 ○ ○ ○ ○ ○	44 ○ ○ ○ ○ ○
5 ● ○ ○ ○ ○	15 ○ ○ ● ○ ○	25 ● ○ ○ ○ ○	35 ○ ○ ○ ○ ○	45 ○ ○ ○ ○ ○
6 ○ ● ○ ○ ○	16 ○ ● ○ ○ ○	26 ○ ● ○ ○ ○	36 ○ ○ ○ ○ ○	46 ○ ○ ○ ○ ○
7 ○ ○ ● ○ ○	17 ○ ○ ● ○ ○	27 ○ ● ○ ○ ○	37 ○ ○ ○ ○ ○	47 ○ ○ ○ ○ ○
8 ● ○ ○ ○ ○	18 ○ ○ ● ○ ○	28 ● ○ ○ ○ ○	38 ○ ○ ○ ○ ○	48 ○ ○ ○ ○ ○
9 ○ ○ ● ○ ○	19 ○ ○ ○ ● ○	29 ○ ○ ● ○ ○	39 ○ ○ ○ ○ ○	49 ○ ○ ○ ○ ○
10 ○ ○ ● ○ ○	20 ○ ● ○ ○ ○	30 ○ ○ ● ○ ○	40 ○ ○ ○ ○ ○	50 ○ ○ ○ ○ ○



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Add-on Course

Course Exam Name: Certificate Course in Network Security

Name of Student:

...ADYAL RANAND ARVERKAR.....

Roll No.:

1 0 0 1

Session: 2023-24

Test Date: 18/10/2023

Max. Marks: 60

Invigilator Signature

Obtained Marks:

50

INSTRUCTIONS FOR FILLING THE SHEET

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5. Cutting and erasing on this sheet is not allowed.
6. Do not use any stray marks on the sheet.
7. Do not use marker or white fluid to hide the mark.

WRONG METHODS



CORRECT METHOD



A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D					
1	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	11	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	21	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	31	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	41	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	12	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	22	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	32	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	42	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	13	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	23	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	33	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	43	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
4	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	14	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	24	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	34	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	44	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
5	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	15	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	25	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	35	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	45	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
6	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	16	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	26	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	36	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	46	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
7	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	17	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	27	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	37	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	47	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
8	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	18	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	28	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	38	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	48	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
9	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	19	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	29	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	39	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	49	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
10	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	20	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	30	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	40	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	50	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		

Shri Shivaji Education Society Amravati's
**SCIENCE COLLEGE, CONGRESS NAGAR,
NAGPUR**



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A College with Potential for Excellence

CERTIFICATE

Mr./Ku. Aachal R. Arverkar is awarded with certificate on successful completion of the course entitled, Certificate course in "Network Security".

Session 2023-24 under Add-on course conducted for 30 hours from 01/08/2023 to 07/10/2023 by Department of Computer Science, SSESAs, Science College, congress Nagar, Nagpur 440012.

He/She has passed the Examination with 'A' Grade.

Ms. P. M. Dadhe
Course Coordinator

Prof. M. P. Dhore
Principal, Science College



Action Taken:

A free Add-On Course for UG students in the Department of Computer Science, Shri Shivaji Education Society Amravati's Science College, Congress Nagar, Nagpur was held from 1 Aug 2023 to 7 October 2023. The course title was "Introduction to Network Security". 50 students appeared and passed in both theory and practical examination. The result was prepared and certificates were distributed to the students.



Assistant Professor
Department of Computer Science
S.S.E.S. Amr's Science College
Congress Nagar, Nagpur



IQAC Coordinator
Science College,
Congress Nagar Nagpur

**Shri Shivaji Education Society Amravati's Science College,
Congress Nagar, Nagpur**

Add on Course in Introduction to Network Security Feedback Form

Name of Student.....

Please rate the following aspects of the program on a scale from 1 to 5, with

1. Best	2. Excellent	3. Good	4. Satisfactory	5. Fair
---------	--------------	---------	-----------------	---------

Q.1 How would you rate the organization and structure of the course?

1 2 3 4 5

Q.2 How do you rate the quality of the delivery of the units by the Teacher?

1 2 3 4 5

Q.3 How useful were the hands-on assignments and projects in enhancing your practical understanding of Network Security?

1 2 3 4 5

Q.4 How well-organized was the course structure, including the sequencing of topics and the pacing of the material?

1 2 3 4 5

Q.5 Overall, how would you rate your learning experience in this Course?

1 2 3 4 5

Q.6 Any Suggestions:

Feedback Analysis

1. Number of Students Registered for the Course :50
2. Number of Students submitted the Feedback :46
3. Question wise analysis of the Feedback:

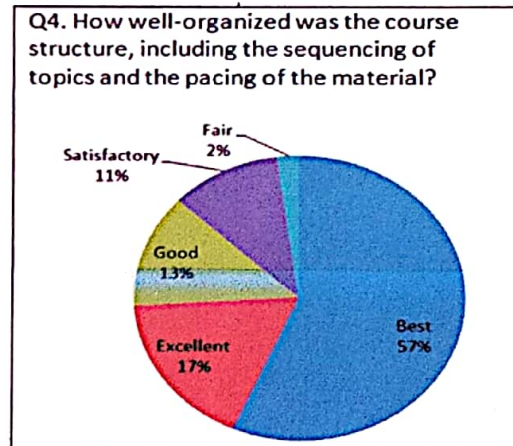
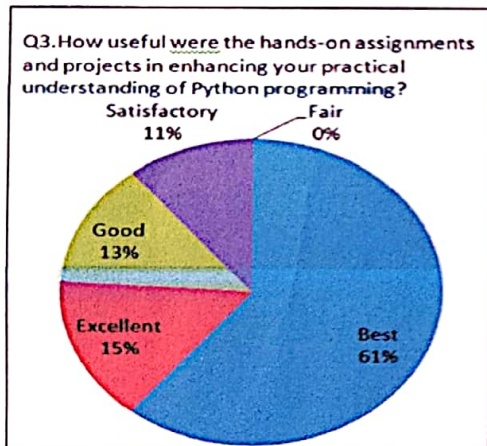
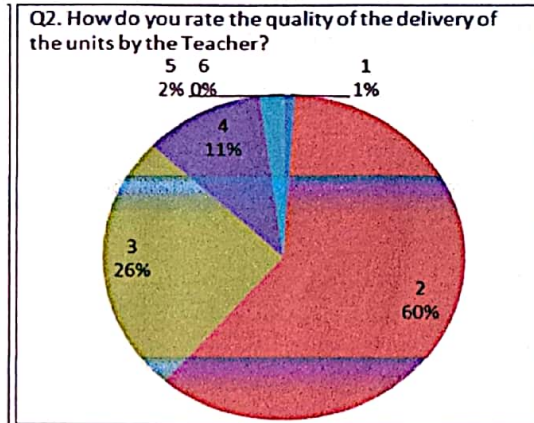
Sr. No	Question	Responses in Percentage (%)				
		Best	Excellent	Good	Satisfactory	Fair
1)	How would you rate the organization and structure of the course?	65.21	10.86	13.04	10.86	0
2)	How do you rate the quality of the delivery of the units by the Teacher?	60.86	26.08	10.86	2.17	0
3)	How useful were the hands-on assignments and projects in enhancing your practical understanding of Network Security?	60.86	15.2	13.04	10.86	0
4)	How well-organized was the course structure, including the sequencing of topics and the pacing of the material?	56.52	17.39	13.04	10.86	2.17
5)	Overall, how would you rate your learning experience in this course?	54.34	22.73	15.21	8.69	0
6)	Any Suggestions	No Suggestions: 42% Remaining Comments: Good Course, Nice Course, Change the timing of Classes				

Remark: Students commented that the course will be useful in professional life.

Department will keep on improving the quality of the course.

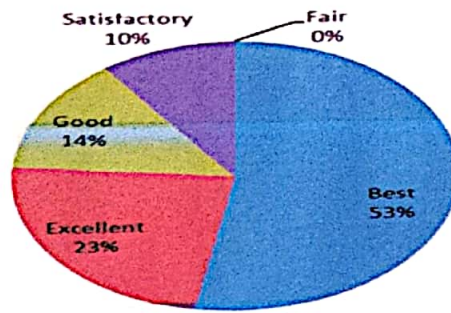
Certificate course: Introduction to Network Security (2023-2024)

Feedback Analysis



Assistant Professor
Department of Computer Science
S.S.E.S. Am's Science College
Congress Nagar, Nagpur

Q5. Overall, how would you rate your learning experience in this course?



PNO

IQAC Coordinator
Science College,
Congress Nagar Nagpur