CODE: 2005OE07 | R20 | SET - 1

MALLA REDDY ENGINEERING COLLEGE FOR WOMEN
(Autonomous Institution – UGC, Govt. of India)

(Affiliated to JNTU, Hyderabad, Approved by AICTE - - ISO 9001:2015 Certified)

Accredited by NBA & NAAC – 'A' Grade

National Ranking by NIRF - Rank band (151-300), MHRD, Govt. of India

B.TECH IV YEAR I SEMESTER REGULAR EXAMINATIONS, NOVEMBER-2023
COMPUER FORENSICS
(COMMON TO ECE,EEE)

[Time: 3 Hours] **[Max. Marks: 70]**

PART – A

(5 x 2 = 10M)

Note: 1. This Part consists of 8 QUESTIONS.
2. Answer any 5 questions. Each question carries 2 Marks .

1.	A	List the types of cyber crime	2M	BTL2
	B	Mention the activities in Initial Response	2M	BTL2
	C	What is forensics duplication?	2M	BTL1
	D	Write the different data collection methods	2M	BTL1
	E	What are the different acquisition tools in forensics?	2M	BTL1
	F	Define network forensics	2M	BTL1
	G	Outline the role of client and server roles in e-mail	2M	BTL2
	H	Mention the Windows Registry Commands	2M	BTL2

PART – B

(5 x 12 = 60M)

Note: 1. This Part consists of 10 QUESTIONS
2. Answer any 1 question from each Section. Each question carries 12Marks.
3. Illustrate your answers with NEAT sketches wherever necessary.

SECTION - I

2.A	Distinguish between worms and viruses in the context of cyber threats.	6M	BTL3
2.B	Explain the concept of cybercrime and its various types. Provide examples of each type and discuss their implications for individuals and society.	6M	BTL2

(OR)

3.A	Discuss the key processes and techniques involved in digital forensics and their role in gathering and preserving digital evidence.	6M	BTL4
3.B	Explain the incident response methodology and its various steps, with a focus on the initial response phase.	6M	BTL3

SECTION - II

4.A	Detail the process of collecting volatile data from a Windows system During the initial response phase of a cyber incident and provide examples.	6M	BTL3
4.B	Discuss the role of forensic duplication in the investigation of cybercrimes.	6M	BTL4

(OR)

5.A	Explain the significance of the initial response phase in incident handling and cybersecurity. Discuss the key activities involved in this phase and how they help in mitigating the impact of security incidents.	6M	BTL3
5.B	Outline the specific requirements and considerations for selecting and using forensic duplication tools in a cybersecurity investigation.	6M	BTL4

SECTION - III

6.A	Describe common data-hiding techniques that individuals may use to conceal evidence on a computer.	6M	BTL4
6.B	Discuss the use of network tools in network forensics investigations. Provide examples of commonly used network tools and their roles in the data collection and analysis process.	6M	BTL3

(OR)

7.A	Explain the process of determining what data to collect and analyze in a computer forensic investigation.	6M	BTL3
7.B	Examine the Honeynet Project and its relevance in network forensics. Describe the objectives and methods of the Honeynet Project and discuss how it contributes to understanding and mitigating cybersecurity threats.	6M	BTL3

SECTION – IV

8.A	Explain the distinction between computer forensic software tools and computer forensic hardware tools. Provide examples of each and discuss their respective roles in digital investigations.	6M	BTL2
8.B	Explain the concept of email servers and their importance in email investigations.	6M	BTL2

(OR)

9.A	Discuss the use of specialized email forensics tools in digital investigations. Provide examples of such tools.	6M	BTL3
9.B	Detail the procedures for acquiring data from cell phones and mobile devices in a forensic investigation.	6M	BTL2

SECTION – V

10.A	Discuss the key differences between common file systems, such as FAT, NTFS, and exFAT, and their significance in forensic analysis.	6M	BTL3
10.B	Explain the use of virtual machines in digital forensics. Discuss how virtualization technology is applied to create forensic work environments, isolate digital evidence, and safely analyze potentially malicious files.	6M	BTL2

(OR)

11.A	Examine Microsoft startup tasks and their relevance in forensic investigations.	6M	BTL2
11.B	Explain the role of the Windows Registry in digital forensics. Discuss the structure and purpose of the Registry, and how it can be valuable in forensic analysis for gathering information about system configuration and user activity.	6M	BTL3

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CODE: 2004PC12 | R20 | SET - 1

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B.TECH IV YEAR I SEMESTER REGULAR EXAMINATIONS, NOVEMBER-2023
COMPUTER NETWORKS
(ELECTRONICS AND COMMUNICATION ENGINEERING)

[Time: 3 Hours] **[Max. Marks: 70]**

PART – A

(5 x 2 = 10M)

Note: 1. This Part consists of 8 QUESTIONS.
2. Answer any 5 questions. Each question carries 2 Marks .

1	A	Define Computer network.	2M	BTL1
	B	Discuss about unguided transmission media	2M	BTL2
	C	List out the available error detection methods.	2M	BTL2
	D	List the farming methods.	2M	BTL2
	E	Define bridge? Write about types of bridges.	2M	BTL1
	F	Define Tunneling	2M	BTL1
	G	Why TCP services are called Stream delivery services?	2M	BTL2
	H	What is a firewall?	2M	BTL1

PART – B

(5 x 12 = 60M)

Note: 1. This Part consists of 10 QUESTIONS
2. Answer any 1 question from each Section. Each question carries 12Marks.
3. Illustrate your answers with NEAT sketches wherever necessary.

SECTION – I

2.A	With a comparison, explain the reasons that TCP/IP internet layer is similar in functionality to the OSI network layer	6M	BTL3
2.B	Give brief explanation about twisted pair cables	6M	BTL2

(OR)

3.A	Define the term Datagram. Compare and contrast virtual circuit and datagram subnets	6M	BTL2
3.B	Differentiate between Frequency Division Multiplexing and Time Division Multiplexing	6M	BTL4

SECTION - II

4.A	State and explain Data link protocols for noiseless and noisy channels	6M	BTL3
4.B	What are the different Channel Allocation techniques? Explain	6M	BTL2

(OR)

5.	What are the various flow control and error control methods? Explain in brief.	12M	BTL2

SECTION - III

6.A	With an example explain Flooding routing Algorithm in detail.	6M	BTL2
6.B	Write short notes on i). ICMP ii). IGMP	6M	BTL2

(OR)

7.A	What is multicasting? Briefly discuss multicasting techniques and protocols.	6M	BTL2
7.B	Explain the following connecting devices i). Passive hubs ii). Active hubs iii). Repeaters	6M	BTL2

SECTION – IV

8.A	Explain about User Datagram Protocol (UDP).	8M	BTL2
8.B	Describe importance of DNS in application layer.	4M	BTL4

(OR)

9.A	What is electronic E-mail? Describe in brief about the two architectures of E-Mail.	6M	BTL4
9.B	Compare Open loop Congestion Control & Closed loop congestion control.	6M	BTL3

SECTION – V

10.A	What are the security services and explain in detail.	4M	BTL2
10.B	Draw IP security Architecture and explain its working	8M	BTL3

(OR)

11.A	Compare IP protocols IPV4 & IPV6	6M	BTL3
11.B	Explain the following concepts i). Bluetooth ii). Zigbee	6M	BTL2

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CODE: 1804PC12 | R18 | SET - 1

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B.TECH IV YEAR I SEMESTER SUPPLY EXAMINATIONS, NOVEMBER-2023
COMPUTER NETWORKS
(ELECTRONICS AND COMMUNICATION ENGINEERING)

[Time: 3 Hours] **[Max. Marks: 70]**

PART – A

(5 x 2 = 10M)

Note: 1. This Part consists of 8 QUESTIONS.
2. Answer any 5 questions. Each question carries 2 Marks .

1	A	Define Computer network.	2M	BTL1
	B	Discuss about unguided transmission media	2M	BTL2
	C	List out the available error detection methods.	2M	BTL2
	D	List the farming methods.	2M	BTL2
	E	Define bridge? Write about types of bridges.	2M	BTL1
	F	Define Tunneling	2M	BTL1
	G	Why TCP services are called Stream delivery services?	2M	BTL2
	H	What is a firewall?	2M	BTL1

PART – B

(5 x 12 = 60M)

Note: 1. This Part consists of 10 QUESTIONS
2. Answer any 1 question from each Section. Each question carries 12Marks.
3. Illustrate your answers with NEAT sketches wherever necessary.

SECTION – I

2.A	With a comparison, explain the reasons that TCP/IP internet layer is similar in functionality to the OSI network layer	6M	BTL3
2.B	Give brief explanation about twisted pair cables	6M	BTL2

(OR)

3.A	Define the term Datagram. Compare and contrast virtual circuit and datagram subnets	6M	BTL2
3.B	Differentiate between Frequency Division Multiplexing and Time Division Multiplexing	6M	BTL4

SECTION - II

4.A	State and explain Data link protocols for noiseless and noisy channels	6M	BTL3
4.B	What are the different Channel Allocation techniques? Explain	6M	BTL2

(OR)

5.	What are the various flow control and error control methods? Explain in brief.	12M	BTL2

SECTION - III

6.A	With an example explain Flooding routing Algorithm in detail.	6M	BTL2
6.B	Write short notes on i). ICMP ii). IGMP	6M	BTL2

(OR)

7.A	What is multicasting? Briefly discuss multicasting techniques and protocols.	6M	BTL2
7.B	Explain the following connecting devices i). Passive hubs ii). Active hubs iii). Repeaters	6M	BTL2

SECTION – IV

8.A	Explain about User Datagram Protocol (UDP).	8M	BTL2
8.B	Describe importance of DNS in application layer.	4M	BTL4

(OR)

9.A	What is electronic E-mail? Describe in brief about the two architectures of E-Mail.	6M	BTL4
9.B	Compare Open loop Congestion Control & Closed loop congestion control.	6M	BTL3

SECTION – V

10.A	What are the security services and explain in detail.	4M	BTL2
10.B	Draw IP security Architecture and explain its working	8M	BTL3

(OR)

11.A	Compare IP protocols IPV4 & IPV6	6M	BTL3
11.B	Explain the following concepts i). Bluetooth ii). Zigbee	6M	BTL2

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