C1: UNIT 5: COMPUTER ESSENTIALS:

UNDERSTAND	1. Batch processing was mainly used in this generation.
	
	a) 1st
	
	b) 2nd
	
	c) 3rd
	
	d) 4th
	
	Answer: a
	
	2. Which cryptographic attack involves trying all possible keys until the correct one is found?
	
	  a. Brute-force attack
	
	  b. Man-in-the-middle attack
	
	  c. Denial-of-service attack
	
	  d. Spoofing attack
	
	  *Answer: * a
	
	3. ULSI stands for?
	
	a) Ultra Large-Scale Integration
	
	b) Under Lower Scale Integration
	
	c) Ultra Lower Scale Integration
	
	d) Under Large Scale Integration
	
	Answer: a
	
	4. A technique that marked the beginning of computer communications.
	
	a) Batch Environment
	
	b) Message passing
	
	c) User Environment
	
	d) Time Sharing
	
	Answer: d
	
	5. A type of technique in which dumb terminals are connected to a central computer system.
	
	a) Time Sharing
	
	b) Message passing
	
	c) Batch environment

d) User environment

Answer: a

6. TCP stands for?

a) Transmission control program

b) Transmission control protocol

c) Transfer control program

d) Transfer control protocol

Answer: b

7. The "Victorian internet" is actually?

a) Telegraph

b) Batch Environment

c) Unit Environment

d) System Environment

Answer: a

8. What is the purpose of a digital signature in cryptography?

  a. Data encryption

  b. Authentication

  c. Key generation

  d. Network scanning

  ***Answer: * b**

9. What covers a larger geographical area than MAN?

A.WAN

B.LAN

C.Both A and B

 D. None of the above

 Answer: WAN

10. Which type of network consists of both LANs and MANs?

A.Wide Area Network

B.Local Area Network

C.Both A and B

D.None of the above

Answer: Wide Area Network

11. The entire hostname has a maximum of _____

a) 255 characters

b) 127 characters

c) 63 characters

d) 31 characters

Answer: 255 characters

12. A DNS client is called _____

a) DNS updater

b) DNS resolver

c) DNS handler

d) none of the mentioned

Answer: DNS resolver

13. Which type of encryption uses the same key for both encryption and decryption?

  a. Asymmetric encryption

  b. Symmetric encryption

  c. Public-key encryption

  d. Private-key encryption

  Answer: b

14. *Which type of encryption involves two distinct, mathematically related keys?*

  a) Symmetric key

  b) Asymmetric key

  c) Public key

  d) Private key

  Answer: b

15. *In asymmetric key cryptography, which key is kept secret by the owner?*

  a) Public key

  b) Private key

  c) Shared key

d) Session key

Answer: b

16. The text that gets transformed using algorithm cipher is called?

A. Complex text

B. Transformed text

C. Plain text

D. Scalar text

Ans : C

17. Security features that control that can access resources in the OS.

A. Authentication

B. Identification

C. Validation

D. Access control

Ans : D

18. *What is a primary challenge of symmetric key cryptography in secure communication? *

  a) Limited security strength

  b) Key distribution

  c) Slow encryption speed

  d) Complexity of algorithms

  Answer: b

19. *Which algorithm is commonly associated with asymmetric key cryptography? *

  a) AES

  b) DES

  c) RSA

  d) Blowfish

  Answer: c

20. *What does a ransomware malware typically do? *

  A) Steals sensitive information

  B) Encrypts files and demands payment

	C) Spreads rapidly through networks
	D) Creates fake antivirus alerts
	Answer: B
APPLY	1. Network security consists of:
	A. Protection
	B. Detection
	C. Reaction
	D. All of the above
	View Answer
	Ans : D
	2. Which of the following we should configure your systems and networks as correctly as possible?
	A. Protection
	B. Detection
	C. Reaction
	D. None of the above
	Ans : A
	3. Interaction between the client and server starts via the _____ message.
	A. client_hi
	B. client_hello
	C. server_hello
	D. server_hi
	View Answer
	Ans : B
	4. *Which action is NOT typically associated with adware?*
	A) Displaying unwanted advertisements
	B) Redirecting browser searches
	C) Collecting sensitive information
	D) Slowing down computer performance
	Answer: C

5. In this generation Time sharing, Real time, Networks, Distributed Operating System was used.

a) 1st

b) 2nd

c) 5th

d) 4th

Answer: d

6. HLL stands for?

a) High Level Language

b) High Layman's Language

c) High Level Lesson

d) High Layman's Lesson

Answer: a

7. The period of _____ generation was 1952-1964.

a) 1st

b) 2nd

c) 5th

d) 4th

Answer: b

8. Packet switching was invented in?

a) 1960s

b) 1980s

c) 2000s

d) 1990s

Answer: a.

9. The probability of failure-free operation of a software application in a specified environment for a specified time.

a) Software Reliability

b) Software Quality

c) Software availability

d) Software Safety

Answer: a.

10. DARPA stands for?

a) Data Advanced Research Projects Agency

b) Defense Advanced Research Product Agency

c) Data based Advanced Research Product Agency

d) Defense Advanced Research Projects Agency

Answer: d

11. Arrange the Following Types of Networks according to their size, from largest to smallest?

A.LAN, WAN, MAN

B.WAN, LAN, MAN

C.MAN, LAN, WAN

D.WAN, MAN, LAN

Answer: WAN, MAN, LAN

12. *What is the purpose of a firewall in the context of cybersecurity?*

   A) To detect and remove malware

   B) To block unauthorized access to a network

   C) To encrypt files and folders

   D) To optimize internet speed

   Answer: B

13. What does the acronym MAN stand for?

A.Magnetic Access Network

B.Metropolitan Area Network

C.Multi-Area Network

D.Multi-Access net

Answer: Metropolitan Area Network

14. In your school there is a library, and you can use the internet to do research, this library will most likely be a _____ network.

A.MAN

B.LAN

C.WAN

D.All of the above

Answer:WAN

15. Which network topologies has the highest transmission speed?

A.LAN

B.WAN

C.MAN

D.All of the above

 Answer: LAN

 16. IPv6 addresses have a size of:

A.64 bits

B.128 bits

C.256 bits

D.512 bits

Answer:128 bits

17. The domain name system is maintained by _____

a) distributed database system

b) a single server

c) a single computer

d) none of the mentioned

Answer: distributed database system

18. *Which programming language is commonly used to create malware due to its flexibility and wide usage? *

  A) Python

  B) Java

  C) Assembly

  D) COBOL

  Answer: A

19. *In public-key cryptography, what is the purpose of the public key?*

  a) Encryption

  b) Decryption

  c) Digital signatures

  d) Key exchange

	Answer: a
	20. *Which key type is used for verifying digital signatures in asymmetric cryptography? *
	a) public key
	b) Private key
	c) Symmetric key
	d) Session key
	Answer: a

ANALYZE	1.First Computer:
	
	 Answer: ENIAC
	
	2. Inventor of WWW:
	
	Answer: Berners-Lee
	
	3. What is the primary processing unit in a computer?
	
	  - **Answer: CPU**
	
	4. Which component stores temporary data for quick access?
	
	  - **Answer: RAM**
	
	5. *Question:* What term is used to describe the first generation of computers?
	
	  - *Answer:* **Vacuum tubes.**
	
	6. *Question:* Which component replaced vacuum tubes in second-generation computers?
	
	  - *Answer:* **Transistors.**
	
	7. *What does HTML stand for?*
	
	  - **Answer: HyperText Markup Language**
	
	8. *What is the process of converting plaintext into unreadable text called?*
	
	  - **Answer: Encryption**
	
	9. *Q: What type of network connects devices within a limited geographical area?*
	
	  - **A: LAN (Local Area Network)**
	
	10. *Q: Which network provides communication over a large geographic area, often nationwide or worldwide?*
	
	  - **A: WAN (Wide Area Network)**
	
	11. *Question:* Who is often considered the "father of the World Wide Web"?
	
	  - *Answer:* **Tim Berners-Lee.**
	
	12. *Question:* What does HTTP stand for in the context of web addresses?

- *Answer:* Hypertext Transfer Protocol.

13. *Question:* What does ISP stand for?

  Answer: Internet Service Provider.

14. *Question:* Which technology enables high-speed internet access through cable connections?

  Answer: Cable ISP.

15. *Question:* What does DNS stand for?

  Answer: Domain Name System.

16. *Question:* What is the primary function of DNS?

  Answer: Resolving domain names to IP addresses.

17. *Question:* What is the term for the practice of using technology to collect and analyze large amounts of personal data without individuals' consent?

  Answer: Data mining.

18. *Question:* What type of encryption uses a single key for both encryption and decryption?

  - *Answer:* Symmetric

19. *Question:* What is the primary goal of information assurance?

  - *Answer:* Security.

20. *Question:* Which type of malware spreads by attaching itself to other executable files?

  Answer: Virus

EVALUATE	1. Match the following	

List-1	List-II
1.CPU	a. Random Access Memory
2.CU	b.Control Unit
3.MU	c. Memory Unit
4. ALU	d. Arithmetic Logic Unit
5.RAM	e. Central Processing Unit
Answer: 1-e 2- b 3-c 4-d 5-a	

2.Match the following

List-1	List-II
First Generation	a.Transisters
Second Generation	b. Vacuum Tubes
Third Generation	c. Integrated Circuites
Fourth Generation	d. AI
Fifth Generation	e. VLSIC
Answer: 1-B 2-A 3-C 4-E 5-D	

3   Match the following

List-1	List-II
HTTP	a. Simple Mail Transfer Protocol
FTP	b. Transfer Control Protocol
IP	c. Internet Protocol
TCP	d. File Transfer Protocol
SMTP	e. Hyper Text Transfer Protocol
Answer: 1-e2-b 3-c 4-b 5-a	

4. MATCH THE FOLLOWING DNS DOMAINS

List 1	List 2
1) .gov	**A) Government agencies**
2) .org	**B) Network organizations**
3) .edu	**C) Non-profit organizations**
4) .net	**D) Educational organizations**
5).mil	**E) Military**
Answer: 1-A,2-D,3-C,4-B,5-E	

EVALUATE	1. CPU is the brain of the computer or not

Answer: True

2. CU Controls data or not

Answer: True

3. RAM is a volatile memory

Answer: True

4. Mouse is input device

Answer: True

5. Printer is a input device

Answer: False

6.HTTP is a markup language

Answer: True

7.In full duplex, information can be transmitted in both directions

Answer: True

8. A DNS client is called DNS resolver

Answer: True

9. Wildcard domain names start with label $

Answer: False

10. The domain name system is maintained by distributed database system

Answer: True

11. .mil domain is related to millitary

Answer: True

12. Network Security provides authentication and access control for resources.
Answer: True

13. Which of these is a part of network identification userid

Answer: True

14. The process of verifying the identity of a user Authentication

Answer: True

15. An algorithm in encryption is called CIPHER

Answer: True

16. The information that gets transformed in encryption is called cipher text |

	Answer: False 17. Cryptology can be subdivided into two branches. **Answer: True** 18. Google Meet is a video conferencing service by Google. **True** 19. AES does not constitute a cybercrime? **Answer: True** **20.** William Gibson coined the term " Cyberspace"? **Answer: True**

CREATE	1. In 1946, the ENIAC became the world's first fully electronic ____.
	
	  - **Answer: Computer**
	
	2. Tim Berners-Lee's invention of the ____ in 1989 revolutionized information sharing and laid the foundation for the World Wide Web.
	
	  - **Answer: World Wide Web (WWW)**
	
	3. Google was founded in ____, and its search engine quickly became the dominant force in online information retrieval.
	
	  - **Answer: 1998**
	
	4. The development of ____, an open-source operating system, has played a crucial role in the growth of the software development community.
	
	  - **Answer: Linux**
	
	5_____ generation of computer started with using vacuum tubes as the basic components.
	
	Answer: 1st generations computers
	
	6. The set of rules that decide the functioning of a network is called ___
	
	Answer:protocols
	
	7.A LAN can be extended up to a distance of _____ km.
	
	 Answer:1 or ONE
	
	8. A _____ is a computer that provides services to other programs or computers.
	
	Answer:Server
	
	9. DNS stands for_____
	
	Answer: Domain name server
	
	10. UDP stands for_____
	
	Answer: User datagram Protocol

11. ISP stands for_____

Answer: Internet service Provider

12. .com domain is used for_____

Answer: Commercial

13. A network of networks is known as _____

Answer: Internet

14. The unique address of web page on the web is called _____

Answer: URL

15. TCP/IP stands for _____

Answer: Transmission Control Protocol / Internet Protocol.

16. FTP stands for _____

Answer: File Transfer Protocol

17. ____ is the process of communicating confidential information in an unreadable format between legitimate users?

Answer: Cryptography

18.Data Encryption Standard is an example of a _____ cryptosystem

Answer: Conventional

19. _____ is a computer program that replicates itself into other computer programs.

Answer: .Virus

20._____ is a type of software designed to help the user's computer detect viruses and avoid them.

Answer: Anti virus