

Sr. no	Question	Option A	Option B	Option C	Option D	Answer
1	Cryptographic hash function takes an arbitrary block of data and returns	fixed size bit string	variable size bit string	both fixed size bit string and variable size bit string	none of the mentioned	A
2	ElGamal encryption system is	symmetric key encryption algorithm	asymmetric key encryption algorithm	not an encryption algorithm	none of the mentioned	B
3	Voice privacy in GSM cellular telephone protocol is provided by	A5/2 cipher	b5/4 cipher	b5/6 cipher	b5/8 cipher	A
4	Which one of the following is a cryptographic protocol used to secure HTTP connection?	stream control transmission protocol (SCTP)	transport layer security (TLS)	explicit congestion notification (ECN)	resource reservation protocol	B
5	Which of the following is useful in location of a suspect in a multistorey building	Pitch	Yaw	Band	Azimuth	D
6	During a seizure of a suspected Device the Investigating officer expresses that the suspect has recently logged in and out of his account on the target device, he requests you to help in recovering his password , which of the following would not be the preferred approach	Disconnect the Power from the Device for FSL	Taking RAM dump	Create a forensic Image of Hard Disk	Interrogate the Suspect	C
7	When was the term social networking first used?	1994	1954	2004	1974	B
8	Who founded MySpace?	Tom Anderson	Rupert Murdoch	Will DeWolfe	Marc Andressen	A
9	Facebook has recently announced by launching a cryptocurrency by the name of "Libra". what is the Underlying Asset for this Currency?	Gold Bullions	Bitcoin	Ethereum	United States Dollars	D
10	SD Card is a memory cards used in electronic equipments including digital cameras and cell phones. What does SD stands for?	Secure Digital	Scan Disk	Short Drive	Slot Disk	A
11	Which among the following has the fastest transaction commit speed	Bitcoin	Ethereum	Iota	Litecoin	C
12	In case a System in being pinged using the ping command and the sytem does not have a DNS configuration , which of the following will be the fallback mechanism for address reolution	DnsSec	NetResolve	NetBIOS	SMB	C
13	Among the consensus Mechanism available for the blockchains the most widely used is "Proof of Work" , which is the other consensus Mechanism	Proof of Holding	Proof of Stake	Proof of Commit	None of the above	B
14	What is the sequence of a TCP connection?	SYN-ACK-FIN	SYN-SYN ACK-ACK	SYN-ACK	SYN-SYN-ACK	B
15	Which ports should be blocked to prevent null session enumeration?	Ports 120 and 445	Ports 135 and 136	Ports 110 and 137	Ports 135 and 139	D

16	How is IP address spoofing detected?	Installing and configuring a IDS that can read the IP header	Comparing the TTL values of the actual and spoofed addresses	Implementing a firewall to the network	Identify all TCP sessions that are initiated but does not complete successfully	B
17	Performing hacking activities with the intent on gaining visibility for an unfair situation is called _____.	Cracking	Analysis	Hackivism	Exploitation	C
18	Sniffing is used to perform _____ fingerprinting.	Passive stack	Active stack	Passive banner grabbing	Scanned	A
19	Phishing is a form of _____.	Spamming	Identify Theft	Impersonation	Scanning	C
20	Why would HTTP Tunneling be used?	To identify proxy servers	Web activity is not scanned	To bypass a firewall	HTTP is a easy protocol to work with	C
21	Enumeration is part of what phase of ethical hacking?	Reconnaissance	Maintaining Access	Gaining Access	Scanning	C
22	Which database is queried by Whois?	ICANN	ARIN	APNIC	DNS	A
23	You are working with three networks that have the network IDs 192.168.5.0, 192.168.6.0, and 192.168.7.0. What subnet mask can you use to combine these addresses into one?	255.255.252.0	225.255.254.0	255.255.255.240	255.255.255.252	A
24	Which one is not the Open Source cloud computing platform databases	MongoDB	CouchDB	LucidDB	eCloudDB	D
25	Which of the following is not desired in a good Software Requirement Specifications (SRS) document?	Functional Requirements	Non Functional Requirements	Goals of Implementation	Algorithms for Software Implementation	D
26	Which of the following is not a feature of Anycast addressing in IPv6	Same IPv6 address assigned to multiple nodes	Routing protocol makes the nearest determination	Supports many future potential applications	Provides an any-to-many communication model	D
27	When a host knows its physical address but not its IP address, it can use _____.	RARP	ARP	IGMP	ICMP	A
28	What is the appropriate in the requirement capturing phase of software life cycle?	Module Development and Integration	Domain Analysis	Structural and Behavioral Modeling	Performance Tuning	B
29	Single Sign On (SSO) is depend on	Operting Sytem	Connection speed	Device	None	D
30	Paging increases the _____ time	Waiting	Execution	Context - switch	All of the above	C
31	IPv6 addressclasses doesnt support _____ addressing	Unicast	Multicast	Anycast	Broadcast	D
32	Data mining uses _____ algorithms to discover patterns and regularities in data. Select correct option:	Computational	Mathematical	Statistical	None of these	C

33	Data mining evolve as a mechanism to cater the limitations of _____ systems to deal massive data sets with high dimensionality, new data types, multiple heterogeneous data resources etc	DWH	OLAP	DSS	OLTP	D
34	Execution can be completed successfully or it may be stopped due to some error. If some error occurs, execution will be terminated abnormally and all transactions will be _____	Committed to the database	Updated in the database	Inserted in the database	Rolled back	D
35	A hacker that changes or forges information in an electronic resource, is engaging in _____.	data diddling	sniffing	terrorism	denial of service	A
36	Hackers often gain entry to a network be pretending to be at a legitimate computer.	ID theft	terrorism	IP spoofing	forging	C
37	_____cookies are also known as transient cookies.	Persistent	Session	First-party	Third-party	B
38	What is it called when someone changes the FROM section of an email so that the message you receive appears to come from a person other than the one who sent it	Spoofing	Trapper	Phishing	Spam	A
39	Who conceptualized first to combine telephony and computing. He patented it in 1974. He was the first to introduce the concepts of intelligence, data processing and visual display screens into telephones which gave rise to the "Smartphone"	Theodore G. Paraskevakos	Bill Gates	Larry Ellison	Larry Angelo Gomes	A
40	Write output of following example SELECT SUBSTR('SECURE',3,4) FROM DUAL	SECURE	CURE	SEC	SECU	B
41	Which of the following definitions correctly describes the Dynamic Host Configuration Protocol (DHCP)?	DHCP enables a NIC to determine the MAC address for a given IP address	DHCP enables a NIC to determine the IP address for a given MAC address	DHCP is a technique whereby IP addresses are assigned centrally by a server to each host.	DHCP is a routing protocol run by routers within a network	C
42	Which company is nicknamed "Big Blue"?	TCS	IBM	Microsoft	Bell Laboratories	B
43	USB 3.0 (also known as SuperSpeed USB) has a maximum bandwidth rate of 5 gbps (gigabits per second). That translates to _____ MBps	640	320	64	240	A
44	When the USB is connected to a system, its root hub is connected to the _____	PCI BUS	SCSI BUS	Processor BUS	IDE	C
45	If you want share the data across the all applications ,you should go for?	Shared Preferences	Content provider	Internal Storage	SQLite Databases	B

46	Which of these are not one of the three main components of the APK?	Dalvik Executable	Resources	Native Libraries	Webkit	D
47	Which piece of code used in Android is not open source?	Keypad driver	WiFi? driver	Audio driver	Power management	B
48	Maltego is	Web Server	Open Source Intelligence Tool	Operating System	Web Development Tool	B
49	To hide information inside a picture, what technology is used	Rootkits	Bitmapping	Steganography	Image Rendering	C
50	What is one advantage that HTML5 APIs offer for modern Web design?	They enable users to view Flash content on mobile devices.	They enable developers to create apps without coding skills	They enable older browsers to display any multimedia content	They enable users to view multimedia without plug-ins	D
51	What kind of architecture does mobile computing deploy?	Two layered	Three layered	Four layered	Five layered	B
52	Who introduced a road safety robot named ROADEO?	Hyderabad Traffic Police	Delhi Traffic Police	Bengaluru Traffic Police	Chennai Traffic Police	D
53	Who designed satellite phones NaVIC to fishermen involved in deep sea fishing?	Infosys Limited	Indian Space Research Organisation	Department of Telecommunications India	DRDO	B
54	To sensitize millions of social media users having their accounts on Twitter on prevention and protection against cybercrimes, MHA has created a Twitter handle by the name	@Cyberdost	@CyberCrime	@CrimeMitr	@PreventCrime	A
55	The "Cyber Crime Prevention against Women and Children (CCPWC)" Scheme is being implemented by the MHA for reporting cybercrime against women and children particularly Child Pornography (CP)/ Child Sexual Abuse Material (CSAM) or sexually explicit content such as Rape/Gang Rape (CP/RGR) content. Site can be reached on URL	Cybercrime.gov.in	CCPWC.gov.in	CyberPolice.gov.in	www.mha.com/ccpwc	A
56	What are the maximum number of addresses IPv6 Supports	2 ³²	2 ¹²⁸	2 ⁶⁴	2 ²⁵⁶	B
57	Which cloud service is typically used to provide DNS and DHCP services to an enterprise?	IaaS	DaaS	SaaS	PaaS	A
58	Which of the following is essential information to a hacker performing a session-hijacking attack	. Session ID	Session number	Sequence number	Source IP address	C
59	The address of the next instruction to be executed by the current process is provided by the	CPU registers	Program Counter	Process Stack	RAM	B
60	If a process is executing in its critical section, then no other process can be executing in their critical section. This condition is called	Mutual Exclusion	Critical Exclusion	Synchronous exclusion	Asynchronous exclusion	A
61	Which of the following is the deadlock avoidance algorithm ?	Banker's Algorithm	Round-Robin Algorithm	Karn's Algorithm	Elevator Algorithm	A

62	LDAP provides a mechanism of accessing and maintaining distributed directory information. Which port number it use	389	443	25	110	A
63	ARP (Address Resolution Protocol) represents one of the most important network protocols in TCP/IP-based network environments. What does ARP basically do?	ARP translates the hardware address of a node to its IP address.	ARP replies with the IP address of a particular node to any node that requests this.	ARP translates the IP address of a node to its hardware address.	ARP replies with the hardware address of a particular node to the default gateway.	C
64	A sandbox represents a well-known mechanism that is used for the execution of applets. What is the main function of a sandbox?	It provides a protective area for code or applet execution.	It provides an execution environment for the Java Security Manager.	It guarantees that malware is not able to break out of the sandbox.	It enforces the execution of Java applets.	A
65	Digital certificates represent an important component in any Public Key Infrastructure (PKI). What should never be included in a digital certificate?	The digital signature of the certificate authority (CA) that has issued the digital certificate.	The private key of the party to whom the digital certificate is tied.	The identity of the party that owns the digital certificate.	The start and end date of the period, in which the digital certificate is valid.	B
66	A governmental organization wants to ensure the integrity of information that is communicated between parties. What is needed to achieve this?	Asymmetric encryption	Symmetric encryption	Both hashing and symmetric encryption	Both hashing and asymmetric encryption	D
67	What does Security Assertion Markup Language (SAML) provide?	Authenticate users in enterprise environments.	Authenticate both users and applications in enterprise environments.	Use social networks for authentication ('Use your Facebook account to login').	Secure exchange information in a federated environment.	D
68	Identity as a Service (IDaaS) is one of the emerging service models in Cloud Computing. What does IDaaS provide?	identity governance and authentication for internal users	identity governance and authentication for customers, business partners and other external users	identity governance and authentication for internal and external users	Single sign-on (SSO) for external users	C
69	Logical link control and adaptation protocol (L2CAP) is used by which communication technology	LAN	Remote control	Bluetooth	NFC	C
70	File Transfer Protocol (FTP), uses well-known port 21 is used for control connection and port 20 for the	Data Rate	Data Connection	Data Protocol	Data Congestion	B
71	Find parity bit for 1001011	0	1	2	None	A

72	All of the following accurately describe Hadoop, EXCEPT:	Open source	Real-time	Java-based	Distributd Computing approach	B
73	Facebook Tackles Big Data with _____ Based on Hadoop	Project Prism	Prism	ProjectData	ProjectBid	A
74	_____ is used to convert your application in Web-Application	Struts Services	Web Services	Java Services	Browser Action	B
75	The Basic Web Services platform is generally a combination of _____ and _____	CSS + HTTP	XML + HTML	XML + HTTP	CSS + JAVA	C
76	XML digital signature provides	Authentication	Authorization	Confidentiality	Integrity	D
77	Which of the following are automatically loaded and operates as a part of browser?	Add-ons	Plug-ins	Utilities	Widgets	B
78	A digital signature needs a	Private-key system	Shared-key system	Public-key system	All of them	C
79	One way to preserve integrity of a document is through use of a	Eye-Rays	Fingerprint	Biometric	X-Rays	B
80	A sender must not be able to deny sending a message that was sent, is known as	Message Nonrepudiation	Message Integrity	Message Confidentiality	Message Sending	A
81	SHA-1 produces _____ bit of Hash values	128	160	150	112	B
82	RAID level 5 is also known as	bit-interleaved parity organization	block-interleaved parity organization	block-interleaved distributed parity	memory-style ECC organization	C
83	RAID level _____ spreads parity and data among all N+1 disks rather than storing data in N disks and parity in 1.	3	4	5	6	C
84	One of protocols to provide security at application layer is	Pretty Good Privacy	Handshake Protocol	Alert Protocol	Record Protocol	A
85	Choose the correct default port combinations a)DNS b)SSH c)HTTP Proxy d)squid e)secure SMTP i)587 ii)8080 iii)53 iv)3128 v)22 	a-iii,b-v,c-ii,d-i,e-iv	a-iii,b-v,c-ii,d-iv,e-i	a-v,b-iii,c-ii,d-iv,e-i	a-v,b-iii,c-ii,d-i,e-iv	B
86	Which of the following is not a protocol	DoH	DNS	WWW	BOOTP	C
87	Choose the Odd one Out	Deepmind	Watson	Azure	Wolfram	C

88	which of the following is not possible by forensically copying a SIM Card	Read Messages Stored in SIM	Read Contacts Stored in SIM	Hear Calls made to the SIM	Get IMSI details from the SIM	C
89	The mouse on your computer screen starts to move around on its own and click on things on your desktop , what do you do ? A.unplug your mouse B.call your co-worker over so that he can see C.disconnect your computer from the network D.Call your supervisor E.Turn your computer off F.Run Antivirus G.All of the above 	A & B	B & D	B & E	C & D	D
90	Which of the following can not used to create a forensic image of a disk	Autopsy	FTK Imager	dd	rsync	D
91	Which of the following is the primary Directory listing of the websites hosted on the TOR Network	Eureka	Alacazam	hiddenwiki	oniongrep	C
92	What is i2p	a peer to peer internet sharing service	a peer to peer anonymizer service	a peer to peer concealed anonymized services network	none of the above	C
93	Which of the following a a widely used RAT recently used in online examination scams etc.	PulsarRAT	QuasarRAT	OmegaRAT	KaliRAT	B
94	Which of the following is a search engine for Internet-connected devices	Shazam	IoTgle	shodan	kazam	C
95	In order to perform a passcode sniffing attack on a WPA2 secured network , which of the following mode has to be enabled in the network interface card	Monitor Mode	Leader Mode	Observer Mode	Super mode	A
96	Which of the following is Not an OSINT tool	Jabber	Maltego	Recon-ng	jigsaw	A

97	<p>The below excerpt is taken from TOR website</p> <p> </p> <p>Tor helps to reduce the risks of both simple and sophisticated traffic analysis by distributing your transactions over several places on the Internet, so no single point can link you to your destination. The idea is similar to using a twisty, hard-to-follow route in order to throw off somebody who is tailing you – and then periodically erasing your footprints. Instead of taking a direct route from source to destination, data packets on the Tor network take a random pathway through several relays that cover your tracks so no observer at any single point can tell where the data came from or where it's going.</p> <p>Why is it named as The Onion Router ?</p>	The relays act as the layers of onion and the data packets headers are encapsulated within one another	Each TOR relay acts as an encrypted encapsulator and encases the entire origin packet inside its own encrypted envelop to be addressed	Both A and B	None of the Above	A
98	<p>Arrange the following with Respect to OSI Layers and sniffing techniques</p> <p>1)Application</p> <p>2)Presentation</p> <p>3)Session</p> <p>4)Transport</p> <p>5)Network</p> <p>6)Data Link</p> <p>7)Physical</p> <p>a)TCP Session sniffing/UDP sniffing</p> <p>b)MAC/ARP Sniffing</p> <p>c)Surveillance Sniffing</p> <p>d)User Id Password Sniffing</p> <p>e)IP/Port Sniffing</p> <p>f)SSL/TLS Session Sniffing</p> <p>g)Telnet FTP Sniffing</p>	1-d,2-f,3-g,4-a,5-e,6-c,7-b	1-d,2-f,3-g,4-a,5-e,6-b,7-c	1-a,2-g,3-f,4-g,5-e,6-b,7-c	None of the above	B

99	<p>F -> F is a SHA-256 function
</p> <p>G -> G is a BASE64 function
</p> <p>. -> . is the concatenation operation
</p> <p>A transmission Z of byte array X applied over the functions as per the sequence below is sent across a channel
</p> <p>$Z = F(G(X)).G(X)$
</p> <p>Which is true regarding this transmission Z ?
</p>	transmission is confidential	transmission is encrypted	transmission is non repudiable	none of the above	D
100	withdrawing of money from ATM is the example of (Authentication)	Something they know and something they have	Something they are and something they have	Both are valid	Something they have and something they put	A