भारत डायनामिक्स लिमिटेड BHARAT DYNAMICS LIMITED गच्ची बाऊली, हैदराबाद GACHIBOWLI, HYDERABAD

SYLLABUS FOR MANAGEMENT TRAINEE (CYBER SECURITY)

100 Questions from Subject/Discipline

Module Name	Module Content
Introduction to	Defining Cyberspace and Overview of Computer and Web-technology,
Cyber security	Architecture of cyberspace, Communication and web technology,
	Internet, World wide web, Advent of internet, Internet infrastructure for
	data transfer and governance, Internet society, Regulation of cyberspace,
	Concept of cyber security, Issues and challenges of cyber security
	Cyber security increasing threat landscape, Cyber security
	terminologies- Cyberspace, attack, attack vector, attack surface, threat,
	risk, vulnerability, exploit, exploitation, hacker., Non-state actors, Cyber
	terrorism, Protection of end user machine, Critical IT and National
	Critical Infrastructure, Cyberwarfare
Cyber crime and	Classification of cyber crimes, Common cyber crimes- cyber crime
Cyber law	targeting computers and mobiles, cyber crime against women and
	children, financial frauds, social engineering attacks, malware and
	ransomware attacks, zero day and zero click attacks, Cybercriminals
	modus-operandi , Cyber crimes targeting Computer systems and
	Mobiles- data diddling attacks, spyware, logic bombs, DoS, DDoS,
	APTs, virus, Trojans, ransomware, data breach., Online scams and
	frauds- email scams, Phishing, Vishing, Smishing, Online job fraud,
	Online sextortion, Debit/ credit card fraud, Online payment fraud,
	Cyberbullying, website defacement, Cyber squatting, Pharming, Cyber
	espionage, Cryptojacking, Darknet- illegal trades, drug trafficking,
	human trafficking., Social Media Scams & Frauds- impersonation,
	identity theft, job scams, misinformation, fake newscyber crime against
	persons - cyber grooming, child pornography, cyber stalking., Social
	Engineering attacks, Cyber Police stations, Crime reporting procedure,
	Reporting of cyber crimes, Remedial and mitigation measures, Legal
	perspective of cyber crime, Cyber crime and legal landscape around the
	world, IT Act 2000 and its amendments, Cyber crime and offences,

	Organisations dealing with Cyber crime and Cyber security in India,
	Limitations of IT Act, 2000, Cyber crime and punishments, Cyber Laws
	and Legal and ethical aspects related to new technologies- AI/ML, IoT,
	Blockchain, Darknet and Social media, Cyber Laws of other countries.
Social Media	Introduction to Social networks. Types of Social media, Social media
Overview and	platforms, Social media monitoring, Hashtag, Viral content, Social
Security	media marketing, Social media privacy, Challenges, opportunities and
Security	pitfalls in online social network, Security issues related to social media,
	Flagging and reporting of inappropriate content, Laws regarding posting
E Commone and	of inappropriate content, Best practices for the use of Social media
E - Commerce and	Definition of E- Commerce, Main components of E-Commerce,
Digital Payments	Elements of E-Commerce security, E-Commerce threats, E-Commerce
	security best practices, Introduction to digital payments, Components of
	digital payment and stake holders, Modes of digital payments- Banking
	Cards, Unified Payment Interface (UPI), e-Wallets, Unstructured
	Supplementary Service Data (USSD), Aadhar enabled payments, Digital
	payments related common frauds and preventive measures. RBI
	guidelines on digital payments and customer protection in unauthorised
	banking transactions. Relevant provisions of Payament Settlement
	Act,2007
Digital Devices	End Point device and Mobile phone security, Password policy, Security
Security, Tools and	patch management, Data backup, Downloading and management of
Technologies for	third party software, Device security policy, Cyber Security best
Cyber Security	practices, Significance of host firewall and Ant-virus, Management of
	host firewall and Anti-virus, Wi-Fi security, Configuration of basic
	security policy and permissions
Cyber security	Cyber security Plan- cyber security policy, cyber crises management
Management ,	plan., Business continuity, Risk assessment, Types of security controls
Compliance and	and their goals, Cyber security audit and compliance, National cyber
Governance	security policy and strategy
Data Privacy and	Defining data, meta-data, big data, nonpersonal data. Data protection,
Data Security	Data privacy and data security, Personal Data Protection Bill and its
	compliance, Data protection principles, Big data security issues and
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challenges, Data protection regulations of other countries- General Data
Protection Regulations(GDPR),2016 Personal Information Protection
and Electronic Documents Act (PIPEDA)., Social media- data privacy
and security issues.