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P.E.S. College of Engineering, Mandya - 571 401

(An Autonomous Institution affiliated to VTU, Belagavi)
Seventh Semester, B.E. - Information Science and Engineering
Semester End Examination; February - 2022
Cyber Security

Time: 3 hrs   Max. Marks: 100

Course Outcomes

The Students will be able to:

CO1: *Explain the concepts of confidentiality, availability and integrity in Information Assurance, including physical, software, devices, policies and people.*

CO2: *Explaining important principles, and theories used throughout the field of cyber security.*

CO3: *Applying knowledge in the field of cyber security to analyze real world problems.*

CO4: *Effectively integrating knowledge in the field of cyber security to propose solutions to real world problems.*

CO5: *Identify the legal perspectives in cyber security and challenges to Indian law.*

<u>*Note:*</u> **I)** **PART - A** *is compulsory.* **Two** *marks for each question.*

II) **PART - B**: *Answer any* <u>**Two**</u> *sub questions (from a, b, c) for Maximum of* **18 marks** *from each unit.*

Q. No.	Questions	Marks	BLs	COs	POs
	I : PART - A	**10**			
I a.	Define DOS and DDOS attack.	2	L1	CO1	PO1,2
b.	Define Techno-vandalism.	2	L1	CO2	PO1,2
c.	Define Backdoor.	2	L1	CO3	PO1,2,4
d.	Explain Whaling.	2	L2	CO4	PO1,2,4
e.	List two weak area of the ITA-2000.	2	L1	CO5	PO4,8,11
	II : PART - B	**90**			
	UNIT - I	**18**			
1 a.	Explain cyber security strategy and policy.	9	L2	CO1	PO1,2
b.	Describe the following with respect to cyber security policy:				
	i) Enterprise policy	9	L2	CO1	PO1,2
	ii)Technology operations				
c.	Explain the cyber security counter measures.	9	L2	CO1	PO1,2
	UNIT - II	**18**			
2 a.	Describe any nine cybercrimes that target organization.	9	L2	CO2	PO1,2
b.	Explain the different phases that are involved in planning cybercrimes.	9	L2	CO2	PO1,2
c.	Describe human based social engineering and computer based social engineering.	9	L2	CO2	PO1,2
	UNIT - III	**18**			
3 a.	Define virus and worm. Describe different types of viruses.	9	L1,2	CO3	PO1,2,4
b.	Explain buffer overflow and give example. Describe how buffer overflow can be minimized?	9	L2	CO3	PO1,2,4
c.	Explain key loggers and spywares.	9	L2	CO3	PO1,2,4

UNIT - IV	**18**		

4 a.   Describe any nine types of phishing scams.   9   L2   CO4   PO1,2,4

   b.   Define ID theft and explain human-based ID theft techniques.   9   L1,2 CO4   PO1,2,4

   c.   Explain the following with respect to cyber governance issues:

   i) Net Neutrality   9   L2   CO4   PO1,2,4

   ii) Internet names and numbers

UNIT - V	**18**		

5 a.   Why do we need cyber laws? Explain.   9   L2   CO5   PO4,8,1

   b.   Explain the Indian IT ACT and the section that discuss cybercrimes
        in legal context.   9   L2   CO5   PO4,8,11

   c.   Explain the challenges to Indian law and cybercrime scenario
        in India.   9   L2   CO5   PO4,8,11

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