

**CMR ENGINEERING COLLEGE: : HYDERABAD**  
**UGC AUTONOMOUS**

**III-B.TECH-II-Semester End Examinations (Supply) - December- 2025**  
**FUNDAMENTALS OF ETHICAL HACKING**  
**(CSM)**

**[Time: 3 Hours]**

**[Max. Marks: 70]**

**Note:** This question paper contains two parts A and B.

Part A is compulsory which carries 20 marks. Answer all questions in Part A.

Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b, c as sub questions.

**PART-A**

**(20 Marks)**

1. a)	Name some of the top vulnerabilities.	[2M]
b)	What are the components of information security?	[2M]
c)	State the phases of a multi-phased attack.	[2M]
d)	What tools are commonly used in the reconnaissance phase of a multi-phased attack?	[2M]
e)	What is passive reconnaissance?	[2M]
f)	What are the different types of social engineering attacks?	[2M]
g)	What are the types of password cracking techniques?	[2M]
h)	Define threads.	[2M]
i)	What is integration in ethical hacking?	[2M]
j)	What is attack mitigation?	[2M]

**PART-B**

**(50 Marks)**

2.a)	What are the skills required for ethical hacker?	[5M]
b)	Why ethical hacking is necessary? What do ethical hackers do?	[5M]

**OR**

3.	Explain the process of information security to secure information systems.	[10M]
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4.	Explain the pros and cons of multiphase attack.	[10M]
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**OR**

5.	Summarize the inherent limitations and imposed limitations.	[10M]
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6.	Explain social engineering life cycle and computer based social engineering in detail.	[10M]
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**OR**

7.	Describe in detail about the technical preparation.	[10M]
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8.	Demonstrate how threads and groups are used in exploitation.	[10M]
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**OR**

9.a)	How does a password cracker work? Discuss.	[5M]
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b)	What is enumeration? What is meant by null sessions?	[5M]
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10.	Describe the overall structure of deliverable.	[10M]
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**OR**

11.	What is incident management? What is the purpose of incident management process?	[10M]
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